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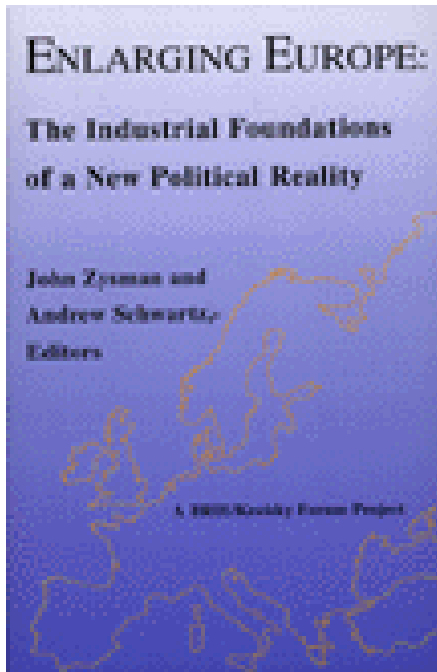
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Enlarging Europe: The Industrial Foundations of a New Political Reality

Edited by John Zysman and Andrew Schwartz

Description:

What are the prospects for integrating the Central and East European countries into the European Union? *Enlarging Europe: The Industrial Foundations of a New Political Reality*, shows that the outlook is surprisingly good. The book challenges policy-makers to seize opportunities offered by emerging regional production networks to stimulate growth, create jobs and strengthen political support for enlarging the European Union. Careful quantitative analyses and detailed case studies demonstrate how European multinationals are forming international production networks that enhance their positions in global markets. Timely and comprehensive, *Enlarging Europe* is essential reading for policy-makers, business leaders and scholars concerned with the future of the European Union, the competitiveness of the European economy, and the political and social development of Central and Eastern Europe.

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ENLARGING EUROPE:
THE INDUSTRIAL FOUNDATIONS
OF A NEW POLITICAL REALITY

John Zysman and
Andrew Schwartz,
Editors

University of California at Berkeley

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PREFACE AND ACKNOWLEDGMENTS

The BRIE/Kreisky Forum Project on Unifying the European Economy, of which this book is one product, began with two observations and a question. The first observation was that the Asian third-tier development was intertwined with regionwide cross-national production networks orchestrated by multinational corporations. Those networks were rooted in the economic heterogeneity of the Asian region and contributed to the region's competitive position in global production. The second observation was that with the collapse of the political wall between East and West, with the beginning of integration of the Central and East European countries and and the former Soviet Union with Western Europe, the relatively economically homogeneous West European region was suddenly a very heterogeneous European region. The evident question, then, was whether the production networks that characterized and facilitated growth in Asia would be come a feature of European growth. With the cooperation of a wide range of colleagues in Europe and the United States, we set out to explore this question. Our answers to that question are argued out in this book.

The undertaking and completion of this project has depended heavily on the support and cooperation of a very diverse group of colleagues and supporters. Our deepest debt is to Professor Oliver Rathkolb, research coordinator, and Margit Schmidt, secretary general, of the Kreisky Forum for International Dialogue. Together they helped both orchestrate the conversations on which this project has rested and arrange the funding that made them possible. Their confidence and support were indispensable and highly valued. Professor Rathkolb, himself a fine historian of contemporary Europe who prepared Bruno Kreisky's memoirs, has become a good friend and intellectual colleague. Our debt to him cannot be fully expressed. The support of the Austrian government, particularly the Federal Chancellery, including Ulrich Stacher, head of department, and his collaborator, Maria Leitgeb, has also been crucial. The president of the Bruno Kreisky forum, former chancellor Franz Vranitsky, both participated in our meetings and extended strong support.

The funding required to bring this work to a broader public audience has been provided by the German Marshall Fund of the United States, the Copenhagen Business School (CBS), and the World Bank. At the German Marshall Fund, Craig Kennedy and Andrea Essler supported the project. Further financial and intellectual backing came from the CBS as part of an ongoing collaboration with the University of California at Berkeley. Our work with Niels Mygind, director of the Center for East European Studies at CBS, has added a Baltic perspective to the undertaking. The Economic Development Institute at the World Bank provided both intellectual support and financial assistance. At the Bank, David Ellerman first took an interest in this effort, along with Xavier Simon, then chief of the Finance and Industry Division. When Xavier Simon stepped down because of illness, his engagement was maintained by Danny Leipziger, whose work on economic development itself contributed to our thinking. Funding for the underlying intellectual work on production networks has been provided to BRIE by the Alfred P. Sloan Foundation; President Ralph Gomery and Vice-President Hirsch Cohen have been strong forces in shaping that effort. Other research funding was provided by the University of California's Center for German and European Studies, whose director, Professor Gerald D. Feldman, and executive director, Beverly K. Crawford, provided assistance.

Many others have provided substantive intellectual support and support for the questions we are asking. Professor André Sapir, president of the Institut d'Études Européennes at the Université Libre de Bruxelles, was an early participant in the discussions leading to this project. The project's original formulation as a study of foreign direct investment in Eastern Europe was written with Laura d'Andrea Tyson before she went to Washington to serve as chair of the Council of Economic Advisors. At the European Commission Stefano Micossi, director general of DG III, has been a constant source of ideas and discussion. Galway Johnson, head of unit, Information Technologies Industries in DG III, encouraged us by insisting that network phenomena were emerging in the European electronics sector. Harald Johansen, vice president of Supply and Distribution of Ericsson; Hans J. Pedersen, vice president of Danfoss; and Humphrey Porter, managing director of Neutronics, likewise provided insight into emerging business networks. A number of colleagues

and collaborators offered significant commentary, helpful suggestions, and incisive criticisms of the papers presented at the conferences held at the CBS in October 1996 and the Kreisky Forum for International Dialogue in June 1997. They include: Jan Annerstedt, Vladimir Dimovski, Eileen Doherty, Gabriel Eichler, Dennis Encarnation, Dieter Ernst, Stephan Haggard, Attila Havas, Joel Hellman, Finn Junge-Jensen, Brian Kick, Bengt-Åke Lundvall, Snejine Mihaylova, Stefano Micossi, Jan Mladek, Julie Pellegrin, Peter Petri, André Sapir, Károly Attila Soós, Sam Steffensen, Richard Steinberg, Lauge Stetting, Tim Sturgeon, Márton Szabó, Jan Turcan, Dean White, and Matt Zook.

The staffs of BRIE, the CBS, and the Kreisky Forum all contributed to the conferences and the meetings. Eureka Endo and Patricia Johnson wrote substantial portions of the briefing books for these two meetings. Their work was of the highest quality. Without their help, those meetings could not have happened. At BRIE, Patricia Johnson participated patiently in the evolution of the undertaking. Dan Adler and Cynthia Berg made major contributions as the project emerged. Cynthia Berg also made substantial intellectual contributions to several of the chapters. Marybeth Schubert and Ann Mine have facilitated the entire effort. At the CBS, Karen Bjerre did the meeting planning, and Professor Sam Steffensen worked with us to make that session possible and to facilitate our discussions in Denmark. In Vienna, Karin Mendel and Melitta Campostrini of the Kreisky forum, as well as Stefan August Lütengau and Ingeborg Hausknot of the Kreisky Archives, made arrangements for our second session.

The shaping of this material into a book required an exceptional effort. Dr. Paul M. Pitman, an historian, made deeply appreciated substantive and editorial contributions. David Szanton and the staff of International and Area Studies Publications at the University of California, Berkeley have done a remarkable job in both preparing the complex manuscript and assuring it would be ready for the meetings hosted by the Austrian Chancellery.

ENLARGING EUROPE: THE INDUSTRIAL FOUNDATIONS OF A NEW POLITICAL REALITY

John Zysman and Andrew Schwartz

Europe's political boundaries are being redrawn by the enlargement of the European Union (EU) and the extension of the North Atlantic Treaty Organization (NATO), while the continent's industrial fabric is being rewoven by myriad decisions about investment and trade.¹ Political imperatives, not calculations of possible economic gains, have dictated the decision to enlarge the EU, but the calculus of interests is reasserted when the particular terms of integration are debated. The Eastern economies poised to join the EU are not large enough to greatly alter the overall development of the European economy (Baldwin, François, and Portes 1997). Similarly, the radically lower wage structures of the Central and East European countries (CEECs) and the Former Soviet Union (FSU) may compel significant industrial restructuring in the West, but in any aggregate sense these industrial adaptations will be limited. They may nonetheless become part of a crucial reformulation of European corporate organization and strategy that ultimately reinforces the competitive position of companies located in Europe.

Just as important, however limited the economic adjustments, the way in which the industrial fabric of Europe is rewoven will certainly have far-reaching political significance. Most economists would contend that the real extent of the probably positive adjustments will be so limited that the appropriate policy is simply to soldier on through the admissions process. Political analysts note that the concentration of the dislocations and the fears they engender among key electorates are giving rise to radical political movements which have the potential to disrupt established political regimes. Those concerned with Europe maintain that the admission of a large number of poorer countries risks disrupting the policy

coalitions and clogging the policy mechanics of the EU. The view presented in this volume, which begins with the industrial developments that have already begun to link East and West, suggests at least the outlines of a future trajectory in which Eastern industrial development fosters Western prosperity and employment. This alternate perspective requires that we begin our discussion by situating Europe's adaptation to an evolving global economy.

The industrial economics of enlargement is not simply about reorganization of patterns of comparative advantage, and hence the adaptation and restructuring of Eastern production units. First, those who will now join the EU gain more than just easier access to the larger and more sophisticated Western market. They also win an imperative and anchor for reforms of the state structures and legal systems required to provide the stable adjudicable rules and a sufficiently neutral administration capable of umpiring a capitalist economy. Second, many of the East European production entities cannot stand on their own, and many that are created will not be able to access global final product markets. Hence, in many cases the critical issues will be how East Europeans will participate in value chains of the main companies of the advanced countries. Effective management and reorganization of the value chain, which is not simply a newer and fancier way of saying the production system, is critical to corporate competitiveness. The industrial reorganization of the East is then very much a question of how the reshuffling of the value chains that comes from including the East Europeans can advantage the competitive position of companies producing in Europe.

This book analyzes the industrial integration of Central and Eastern Europe (CEE) into the broader European economy, a twin process of transformation in the East and structural adaptation in the West. It focuses on the reconstruction of production systems, unlike most studies, which emphasize trade and capital flows. Of course, trade will in part result from such reorganizations and foreign investment will help finance them. Eastern Europe rejoins Western Europe, even as Europe as a whole adapts to an evolving global economy of three regional economic centers and innovative industrial strategies implemented through reemerging or newly restructured International Production Networks (IPNs). Although the character of Europe's reintegration will be a function of these adaptations to the global economy, many of these issues are only now

emerging in Western Europe and have been missing from examinations of the Eastern transition.

Many crucial issues, including the meaning of trade or investment data, can be best understood in a comprehensive framework that places Europe's reunification within the optic of the shifting dynamic of global competition. For two generations the EU has sought to create a single market from the economies of a set of relatively similar political economies, a homogeneous economic space established by a policy-driven convergence of market rules. Compared with Asia, for example, the range of incomes, wages, and skills in Europe is very compressed. Now, with the dissolution of the Soviet Union and the end of the cold war, Europe has become a much more economically heterogeneous region. Certainly, the range of wage and technological capacities has been dramatically extended well beyond even that created by the entry of Spain, Portugal, and Greece. As important, the set of misdeveloped or developing countries entering the club of rich Europeans can either be added to the less advanced regions to create a bloc or can become rivals for resources of the most advanced. In any case, the additional members will complicate European governance in ways that are hardly captured by the arithmetic of qualified majority voting and the suggestions in the form of Europe à la carte or a "variable geometry for Europe" that Europe can no longer advance at a single speed.

A comparison with Asia's recent development helps illuminate Europe's situation. Asia's heterogeneity has long been entrenched in the form of diverse national packages of skills and wages, or diverse production functions, and continuously reinforced by military and political competition. The development strategies of Japan, Korea, and Taiwan, which constitute the first two tiers of Asian development, coupled heavy state intervention and promotion with trade protection. Those strategies have little relevance to the East European group. By contrast, third-tier Asian governments chose to integrate themselves into the production and marketing arrangements of the multinational corporations (MNCs) rather than pursue autarchic development strategies. These networks have served as a vehicle for firms producing in Asian countries to enter international markets on competitive terms and are an ineluctable part of the tale of that entire region's industrial development trajectory and of the development of critical third-tier Asian countries in particular. As

different as they may be from the Asian cases, the most advanced of the CEECs are small-and middle-sized economies which will not be able to pursue autonomous national development strategies, but rather will need to insert themselves into a regional division of labor. Consequently, a key determinant of the future trajectory of these former Communist countries will be how their firms become inserted and where they then fit, not only into the regional division of labor, but also into the IPNs that form part of new industrial strategies. Third-tier Asian development strategies provide a relevant analytic analogy for Eastern Europe.

This introductory chapter presents the book's argument about the nature of EU enlargement as a competitive challenge, reviews the available evidence on the integration of the CEECs into the broader European and global economy, and outlines the policy implications of that argument. Section 1 argues that the competitive conditions to which Europe must adapt are not exclusively European. It sketches how new corporate strategies, hiding behind code words such as "globalism," have changed the terms of industrial competition and induced the rapid evolution of IPNs. Section 2 explores the emergence of IPNs in Europe as a response to the region's new heterogeneity. The review of the empirical evidence on the ongoing CEE trajectory of trade and industrial development shows that CEECs have reached a turning point between an initial pattern of low-cost, low-value-added outward processing trade (OPT) with Western Europe and a more sophisticated and more promising developmental model based on complementary reorganization of production in an increasingly integrated regional economy. Section 3 draws out the implications of these economic developments for Europe's competitiveness in global markets and the political and strategic evolution of the region. The EU's member-states must recognize the necessity of developing coherent strategies for responding to the shifting imperatives of industrial competition in the context of EU enlargement. If they fail to seize this opportunity to build effective IPNs, the process of integration of CEE into the EU will create enormous political and economic difficulties. But if they succeed, they can both improve the competitiveness of EU industry in world markets and reinforce the continent's political stability and regional security.

1. PRODUCTION NETWORKS, “WINTELISM,” AND EASTERN EUROPE’S POSSIBILITIES IN A GLOBAL ECONOMY

At the end of the twentieth century, Eastern Europe is reentering an international economy very different from the one it left just after World War II. The current era is one with multiple economic centers and shifting dynamics of industrial competition. Three regional groupings have emerged in a supposedly global economy: North America, Europe, and Asia (consisting principally of Japan, Taiwan, Korea, and the associated countries that are now forming part of the IPNs that concern us here). For each region “foreign” trade—defined here as extra-regional trade—makes up only a small part of GNP, less than 10 percent. Not only the growth of trade, but also the growth of investment have been concentrated in the region of origin: investors within each region have been the principal sources of investment to that region. MNCs tend to invest in their home regions—that is, it is more accurate to say that French firms have become European than that they have become global.

PRODUCTION NETWORKS AND THE NEW TERMS OF INDUSTRIAL COMPETITION

The first step in the analysis of industrial adjustment in Eastern Europe is to set the current evolution of CEE industrial structures in the broader context of global economic transformation and the emerging form of modern industrial competition. In their contribution to this volume, Michael Borrus and John Zysman explore the significance of two interrelated phenomena, the rise of “Wintelism” and the emergence of IPNs, both with roots in American technology competition. Because these two developments taken together are altering the terms of competition in global markets, they help delineate the strategies that investors in CEE might follow and the strategic challenges that producers in the region must face.

The Strategic Innovation: “Wintelism” is the code word created to suggest the dominance of the Windows operating system and Intel’s domination of the evolution of microprocessors. It signifies the shift in competition away from final assembly and vertical control of markets by final assemblers. The key notion is that the ability

of a firm to exercise market power moves from branding or simple production cost and quality to control over the market through product standards. An important consequence is that product advantage in markets for critical system elements is often held through product standards in the form of intellectual property, not by trade secrets embedded in production, or defended through the very rapid evolution of product. For example, control of the market does not turn as critically on the distinctive internal mastery of the production process and assembly as was the case with Henry Ford's mass production or Toyota's "lean" production innovations. Advantage in the assembly of the final product does not guarantee market control. Factors more essential are speed to market, agility in the adjustment of product features, and the ability to draw on the innovative capacities of particular nodes in the networks. Consequently, a firm can more easily subcontract production with reduced risk that core technology will be competitively developed by contract suppliers.

The Tactical Counterpart: The shift in strategy and competitive dynamics alters how a firm exerts market control and attacks the market. The IPNs are the organizational counterparts to Wintelism. They are relationships among firms that organize, across national borders, the research and development, product definition and design, procurement, manufacturing, distribution, and support services in a given industry. Forms of IPNs evolving recently include large doses of contracted production provided by manufacturing services companies that organize particular activities or often the whole production value chain.

IPNs, whether internally managed by MNCs or animated by contract manufacturers providing a production service, have turned large segments of complex manufacturing into a commodity available in the market. Formerly vertically integrated assemblers such as IBM, Hewlett-Packard, and Apple have disposed of captive production facilities—that is, the facilities they themselves own and operate—and moved to extensive contracting. These moves allow firms to concentrate on design and the reorganization of marketing and distribution operations while conserving capital and gaining production flexibility. Thus, American-based IPNs in Asia have been able to integrate local producers in a complex chain of value creation,

contributing directly and powerfully to the competitive market surge of American electronics firms.

What Is New? Both the *purposes* and the *organizational form* of the IPNs have evolved over the years. The main predicament of internationalization does not merely consist, as was the case in the past, in a competitive urge to tap into cheap factor endowments and remote markets. Increasingly, cross-border firm relationships are evolving to take advantage of a more intricate division of labor. In a first version, the division of labor will aim at creating economies of scale. This first division of labor may result from the political integration of a set of relatively homogenous economies, as with European integration. In a second version, division of labor may result from the linkages among diverse and heterogeneous economies, as is the case in Asia.

The organizational form of the production networks is also evolving accordingly (Sturgeon 1997 and forthcoming). Increasingly, the expansion of IPNs corresponds to a complex portfolio-based management of production organization involving the constant flux of production and responsibility, the mix of equity and contract, and the balance between internal management and outside sourcing. IPNs increasingly rest on the innovative and entrepreneurial capacities of the local nodes. Particular producers or districts, in turn, must absorb technology and skills to alter in any meaningful way their position in the chain of value.

IPNs now touch the core elements of the industrial economy and the most innovative and rapidly expanding sectors. Wintelism and IPNs as a potent strategic combination are most evident in the electronics industry, but the approach is of general importance across a set of industries. The emergence of contract production and cross-national arrangements in consumer durable sectors such as automobiles turns the phenomenon away from one essentially confined to labor-intensive, low- and middle- skill products in mature sectors. It is spreading as an idea, a conception of how to proceed, that is often promoted through popular press versions such as the “virtual corporation” and by the availability of manufacturing service companies that provide production on a contract basis.

THE NATURE OF THE COMPETITIVE CHALLENGE FOR EUROPE

The second step of the argument is to look at what the rise of Wintelism and IPNs as new recipes for industrial competitiveness may mean in a European context. The contribution by Constanze Kurz and Volker Wittke in this volume contrasts two basic ways in which European firms are using Eastern producers as part of their production networks: the least cost and the complementary production strategies. The least cost strategy consists of moving existing production arrangements to a lower-wage location. At the same time, those low-wage nodes in the Višegrad countries have quickly adapted to more expanded roles that take advantage of their skills. In Asia, similarly, even these limited starting points permitted producers—and countries—to learn, invest, and move up market. Transfer to low-wage locations, of course, involves relatively little effort to plan and prepare. It is a relatively straightforward strategy for West European firms faced with high domestic costs. Consequently, these kinds of moves take place first and fastest.

The pools of existing East European skills already permit a second strategy, however. Complementary production draws on the special skills of Eastern producers, or organization of low-cost skilled work to create distinctive industrial capacities. The stated objective for both Skoda (Volkswagen) and ABB is to offer Western quality and technology at Eastern prices. Because developing strategies of complementary specialization requires longer planning and indeed greater operational certainty, the strategy is only now taking full effect. German firms under intense cost pressures have, as a group, made the most extensive use of complementary production to reconsider and reorganize their production strategies. Germany represents the destination for more than 30 percent of the exports of Poland, Hungary, and the Czech Republic and the source of more than 20 percent of all imports for those countries. The geographic proximity matters. As the CEO of Opel said, “Having a new plant on your doorstep is different from having it in Indonesia.” But complementary production is not limited to Germany. For many European firms the Asian experience serves as a guide. Corporations across Europe are moving aggressively to take advantage of the more heterogeneous production environment created by the larger Europe.

Which form of integration will become more prevalent matters greatly for the developmental trajectory of Eastern Europe and the terms of its incorporation into the broader European economy. A relevant analogy here is with the Southeast Asian countries—the third tier of Asian development (Zysman, Doherty, and Schwartz, 1995). These third-tier countries do not have the history of domestic manufacturing that developed indigenously in Japan and that was created through successful learning in South Korea and Taiwan. This lack of historical manufacturing experience renders the Southeast Asian countries more dependent on MNCs for their industrial development. Third-Tier development has been facilitated by, entangled with, and contributed to the development of the new IPNs with their large doses of contract management and has both contributed to and benefited from the Asian region's industrial competitiveness. Like CEE today, the third-tier Asian countries perceived their insertion into a cross-national division of labor as their best development option, and they have embraced a broad range of policies to make their business environment attractive to multinationals. They judged, correctly in our view, that the managerial, technological, financial, and know-how requirements are prohibitively high if the goal is to emerge and compete directly with Japanese, American, Korean, Taiwanese, or European firms. Low labor costs, expanding regional markets, and political and economic stability in Southeast Asia initially lured Japanese, American, and (to a lesser extent) European MNCs. The consequence of the IPNs and the host government policies to support them is that MNCs are playing a critical role in the economic development of the region, fostering technology creation and transfer for Asia's third-tier countries. Local firms on their own simply could not have become competitive on world markets on this scale in the short time since these countries have become independent. Host countries are able to exploit foreign technology while gradually building up their domestic capabilities.

The success of this "regionalized" development strategy depends, ultimately, on the kinds of linkages that are created by local producers with foreign firms. If MNCs merely deploy least cost strategies in their expansion in CEE, they are unlikely to transfer significant technological capabilities to host countries. This would lead to a developmental scenario in which these countries durably become low-wage, low-cost economies. The result might be a

“maquiladorization” effect of low-wage factories and little value-added production—hardly the best route to national industrial development. By contrast, if interfirm linkages create a trajectory that allows local subsidiaries and locally owned suppliers to move up the value-added production chain, the result will be more economic dynamism and beneficial spillovers for host countries.

2. TRANSITION, ADAPTATION, AND PRODUCTION NETWORKS IN EASTERN EUROPE

The East European producers do not have, by and large, the management and technical skills to compete with MNCs; most cannot provide the quality of production and certainty of delivery required to be first-tier suppliers. Moreover, the East European economies for the most part do not have the physical infrastructure (for instance, communications, transportation, financial services) to support effective and rapid development of indigenous world class firms. As argued, the CEE situation in this regard is analogous to that of the third-tier Asian countries. Consequently, their positions in supply networks organized and maintained by European, American, and Asian multinationals may prove critical.

The principal MNCs operating in Europe will drive the regional patterns of production, investment, and venture. Those MNCs will base their strategies on judgments about the capacities of the Eastern political economies to deliver resources in a form that would enhance the overall competitiveness of their production networks. Those judgments, evidently, have evolved as the Eastern transformation proceeds and as Western firms reassess the assets in their neighborhood. Consequently, it is not surprising that the MNCs would be slow to recognize and capture the possibilities inherent in the new networks. Thus while a process of experimentation and development is just beginning, it is improbable that initial developments will be good predictors of final patterns. Nonetheless, the preliminary evidence suggests that the initial elements of at least some form of European IPNs are being put into place. Indeed we must recall that the dense webs of production in Asia that eventually permitted new production systems were built up over years from

OPT contracts and MNC-controlled foreign direct investment (FDI), which together helped to create or transfer the required skills and infrastructure. With that caveat in mind, let us examine the opening patterns and initial strategies.

THE BEGINNING OF NETWORK EXPERIMENTATION AND THE DEMAND FOR NETWORK PARTICIPANTS

The emerging evidence indicates the existence of a steady stream of experiments in network organization, which implies that a steady development toward network-based production is possible.

The Aggregate Trade and Industry Data: Based on the analysis of existing aggregate data, several contributions in this volume delineate the main lines of current evolution for the economies of the CEECs. Michael A. Landesmann shows that recent East-West European trade data indicate a marked increase in vertical intra-industry trade, far greater in fact than the already rapid expansion in regional trade as a whole. Indeed for Hungary, the Czech Republic, and Slovenia, with Poland close behind, indices of intra-industry trade are already higher than in countries like Portugal and Greece. Intra-industry trade is exchange within a supply chain, in which producers representing diverse packages of wages and technical skills form part of the production network. Suggested in a variety of ways—by wage rate differentials, productivity differentials, and unit value of traded goods—such trade flows represent tell-tale evidence of the emergence of complex IPNs.

Beneath these broad aggregate trends for the CEE area as a whole, Paolo Guerrieri finds divergent patterns of export and production specialization among the CEECs. Some countries, such as the Czech Republic, Hungary, Poland, and to some extent Slovakia have engaged in substantial restructuring of their economies, while others are much less advanced on the path of reform. To a varying degree, however, all the CEECs still clearly lag behind the West European pack, as shown by their lack of competitiveness in both specialized suppliers and science-based goods.

Discussions of East-West trade have focused on OPT arrangements which are, in fact, often a step that leads toward complex, capital-intensive IPNs. OPT is the export of a single (usually) labor-

intensive portion of MNC internal supply networks and a simple version of vertical intra-industry trade. In Asia, outward processing initiated the complex adaptation of third-tier development based on insertion into MNC production networks. European OPT typically operates under a tariff regime that allows an EU firm to import processed or assembled products while avoiding regular tariffs as long as the parts to be processed or assembled by the outside subcontractor are supplied by an EU principal. (In the United States we often refer to “301 production,” citing the relevant section of the tariff code.)

As Françoise Lemoine shows in her contribution to this volume, in the early 1990s OPT drove CEE exports, accounting for nearly 20 percent of total EU imports in 1992. In that year, OPT from Hungary, the Czech Republic, Slovakia, Poland, and Slovenia totaled 45 percent in leather and shoes, 85 percent in clothing, and (interestingly) 43 percent in electrical machinery. Movement in the direction of more complex networks with more extensive local technological contribution is underway in the more advanced CEECs. As a result, OPT has been dropping there since 1992. Hungary and Slovenia, the two Eastern countries with the highest wage rates, are driving this adjustment. At the same time, the Balkan countries, Romania and Bulgaria, have been making up the difference, especially in labor-intensive sectors.

Lemoine suggests that in the future, the comparative advantage of the CEECs lies in capital-intensive and natural-resource-intensive sectors rather than in labor-intensive sectors. Indeed, FDI in capital-intensive industries such as automobiles, machinery, and chemicals has displaced OPT. Much of the FDI has been geared toward export-oriented businesses, including intermediate products such as machinery, electrical equipment, and transport equipment (Hunya 1997; Zemplínerová and Benacek 1996). Lemoine concludes from an analysis of FDI data that Hungarian industry is already substantially internationalized, while internationalization is well underway in Poland and the Czech Republic. In short, the data on both FDI and trade indicate that IPNs, though still in their infancy, are increasingly becoming a part of the reconstitution of the European economy.

Considering Iberia, which, like the third-tier Asian countries (and CEE), consists of small- and middle-sized economies entering a regional division of labor, clarifies East European prospects. Barry

Eichengreen and Richard Kohl note that the lack of rapid accumulation and a state capable of guiding the process of economic development will prevent Eastern Europe from following the development path of the East Asian countries. They then ask under what circumstances Eastern Europe may succeed in developing and converging with Western Europe and what forces will drive that process. They find that although export competitiveness for the whole region has not improved, it has risen for individual countries and for sectors associated with high levels of FDI and OPT. They argue that, like Spain and Portugal, the CEECs can use FDI and OPT to gain foreign finance, market access, domestic profits, and technological knowledge helpful for closing income and productivity gaps toward the West. Indeed, Eastern Europe should be able improve on the performance of Spain and Portugal by avoiding some of the mistakes made in those countries, especially the adoption of social market policies which induce economic rigidities. Miracle growth as in Japan, Korea, and Taiwan will not result, but one can hope for convergence with the West at Spanish and Portuguese rates.

Industry Case Studies: From a different vantage point, the reorientation of trade away from the Council of Mutual Economic Assistance (CMEA) is intertwined with a reorganization of Western production chains and Eastern entrance into them. Sectoral analyses uncover the logic of the networks that lie behind the trade data.

In their case study of the auto industry, Winfried Ruigrok and Rob van Tulder depict the reorganization and reconsideration of the value chains through a mix of least cost production, transfer of existing production to lower-cost sites, and what Kurz and Wittke call “complementary specialization.” As important, West European auto companies are increasingly developing products for an East European market that will serve the bottom end of the global market. This is a shift away from the tendency simply to adapt for the East models that have been phased out in the West. Moreover, Western firms are now encouraging suppliers to move East with them.

In textiles and apparel the move East has been led by the Germans and Italians. With the emphasis on low-wage production, OPT arrangements initially played an important role, but FDI has begun to be favored for the Višegrad countries. In his examination of Italian firms’ OPT and FDI in the textile and clothing industry, Giovanni

Graziani shows that OPT arrangements have been moved further East as wages have risen. Italian clothing manufacturers are starting to revise their perception of local subcontractors, acknowledging the improvement in their quality level through learning, and increasingly relying on them for the supply of complex and high-quality products. A similar process of creating custom extended workbenches in the East for low-wage/low-technology activity is evident in the furniture and upholstery industries, where 50 percent of German production now comes from German factories in Poland.

In electrical equipment, appliances, and electronics, the processes of reorganization have been slower. But major European companies such as Philips, Siemens, ABB, and Ericsson, as well as American firms such as IBM and GE, have steadily rethought production using Eastern suppliers. Greg Linden's study of the electronics sector in this volume suggests that in most cases advanced engineering is kept in the West while skilled production, albeit lower-wage skilled production, is moved East. Moreover, there are hints that nodes of local activity are emerging. System clusters of related activities have emerged, including PCs in the Czech Republic, hard disk drives and audio-visual equipment in Hungary, and televisions in Poland. In the electrical sector, Hungary has strong export capabilities in lighting equipment and refrigerators, while Poland is developing clusters in washing machines and batteries.

Finally, in the agriculture and food sectors, IPNs are also developing between West and East European producers. Timothy Josling and Stefan Tangermann argue that contrary to the fears of the farm sector in Western Europe, the comparative advantage of Eastern agriculture is not in raw materials that are in oversupply in the West. Thus, West European FDI tends to concentrate in highly processed foods with low raw material content. Investment and linkages in the Eastern food processing sectors can therefore indirectly benefit the Western farm sector by fostering more consumer-responsive markets in the CEECs.

Distinctive Features of European Networks: In sum, the empirical evidence suggests that ongoing organizational experimentation will generate networks in Europe. Speculating on the precise form the networks will take remains premature. But certainly the European experience will not follow Asia's trajectory. Let us list some of the

reasons that the development of European networks will follow a new path.

- 1) The core European companies have strengths in different sectors than the American and Japanese firms that first orchestrated these production arrangements in Asia. The lead sectors will be different—automobiles and mechanical engineering rather than electronics.
- 2) The CEECs that are being first drawn into West European production networks are misdeveloped, rather than underdeveloped with a low-wage workforce. They developed to incorrect price signals; they are, by contrast, characterized by inexpensive but relatively skilled labor. There are pools of trained skilled workers and engineers in the East whose talents have been applied to the wrong undertakings. Furthermore, the remarkable results scored by CEE students in international comparisons of math and science secondary education underscore these countries' potential to become important pools of highly skilled labor in the near future.²
- 3) The national base, and hence the strategic logic of the lead MNCs, will be different. Evidently, European MNCs will be far more involved in the development of CEE than they were in Asia.
- 4) Production will likely be targeted *for* Europe rather than, as in Asia, for export out of the region.
- 5) European transportation will principally be by land. By contrast, the network nodes are linked in Asia by water and air, which allowed any country to facilitate its initial entry into cross-national development by investment in its own ports. The extensive development of Europe-wide rail and road infrastructure makes each country dependent on the investments of its neighbors. In the meantime, Eastern countries that border on Western Europe—the Czech Republic, Hungary, Poland, Slovenia, perhaps Estonia and Slovakia—will have relative advantages.
- 6) The fundamental policy stance in Asia and Europe is radically different. Asian countries have used an effective state to promote and protect industry, even when they have followed ex-

port-oriented market strategies, while the former Eastern bloc countries began with the political goal of dismantling a corrupt state economy, leaving themselves with a strategy of aggressive liberalism as the only available alternative.

What Is the Potential Supply of Network Nodes? Since we are at the beginning of a trajectory of development, the question is not simply the current extent of such arrangements. Rather it is how significant their role can become. Assume that a broad mix of European, American, and Asian companies decided to develop these production networks. Would there be a supply of “production nodes” in the East sufficient to satisfy the demand? At this point, there is no evident answer.

To begin with, there is a great variation across the region. Three distinct subregional patterns are emerging: a) delayed development in the FSU; b) the early stages of transition in countries such as Romania and Bulgaria; and c) sustained restructuring in a core group of CEECs including Poland, Hungary, Slovenia, and the Czech Republic. As Landesmann remarks, “The potential for and speed of catching up is relatively high in the CEECs precisely because of the inherited unbalanced nature of assets (such as good stocks of engineering skills, insufficient capabilities/capacities in design, marketing, communication infrastructure, etc.)” Indeed, the processes of restructuring in each of these four CEECs are themselves very different, but overall development in the Eastern economies has increasingly meant involvement in complementary production.

As a group, the CEECs may not in themselves be a large enough source of production nodes to alter the way in which European business as a whole is organized and to affect its competitive position in global markets. Perhaps as firms in CEE begin to extend production networks further East, producers in Eastern Europe and the FSU may join in. Such a development would follow the examples of Korean and Taiwanese production networks, which have drawn third-tier countries into the regional industrial system. But up until now the primary networks that have emerged in the FSU are survivalist or predatory rent-extracting arrangements that too often take criminal form. As we argue in the sequel to this volume, Russia remains stuck in a “tunnel at the end of the light”—after attempting a utopian and eventually very painful experiment of market-building without

first fulfilling the fundamental political and institutional requirements of market-driven economic growth (Cohen, Schwartz, and Zysman, eds. 1998).

3. THE POLITICAL REORGANIZATION OF THE EUROPEAN REGION: WILL A UNIFIED ECONOMY BE COMPETITIVE, POLITICALLY STABLE, AND SECURE?

Including CEE firms in a European division of labor will be painful, often forcing difficult and socially costly industrial adjustments. Certainly, East European demand for higher quality consumer goods, food products, and industrial equipment can act as a significant boost to the Western economies that supply them. But one political question is whether the industrial adjustments with their inevitable dislocations can be managed or will create enduring political reactions that undermine governments and indeed challenge the European project. The third part of this volume considers both the context of relative political confusion that presently characterizes the enterprise of EU enlargement to East European countries and the question of how the costs of industrial adjustment are likely to be borne by European countries.

IPNS AND EUROPEAN COMPETITIVENESS

One version of the story of industrial adjustment is that Eastern Europe is a huge pool of low-cost labor, often low-cost *skilled* labor, that consequently threatens both Western jobs that might move East and wages of Western workers who must compete with Eastern production. Seen as market rivals that force economic adaptation or require subsidy, the East European producers represent threats to Western interests that raise the political costs of creating a new regional architecture for Europe. Ours is a second, alternative, version of the story. Examining IPNs suggests that Eastern producers may become complements to Western production, permitting the competitive reorganization of European production that defends market position and jobs in global markets. Will the new, more heterogeneous European architecture, representing a different framework of

incentives and constraints on firms, alter the regional competitiveness of Europe? Will it augment the capacity of firms to sustain market position in competition while sustaining productivity increases?

We must distinguish this new heterogeneity from the traditional expansion of an ever more homogeneous European market. The creation of the Common Market fostered the expansion of intra-European trade by dismantling barriers between national markets. The Single European Act facilitated an expansion of intra-European investment as well as trade by means of a commitment to a sufficient convergence of domestic rules and an arrangement in which national regulatory structures did not in themselves constitute obstacles to trade and investment. The process of West European integration created an ever more homogeneous economic space, one that sought along a range of dimensions to compress the differences among national economies. The drive toward a homogeneous single economic space has allowed firms to capture scale economies, which in turn fostered the consolidation of a large number of national players into a limited number of groups.

Will the evolution of a dense and diverse web of production networks help firms based in Europe compete with firms based in North America and Asia? Networks may play such a positive role by providing market agility (that is, the ability to introduce new products and reorganize production rapidly); creating a more complex, nuanced division of labor within the region; and inducing innovation in product and process. If operations that would otherwise move to Asia stay in Europe and if production presently in Asia moves back to Europe, then the gains could be substantial for the region as a whole and particularly for some segments of higher-value-added production that will locate in Western Europe. In a product such as a VCR, a whole range of components and subassemblies could be produced cost effectively in Eastern Europe. But when final assembly shifts from Europe to Asia, many of those parts will be procured locally from Asian suppliers. So even if Eastern Europe represents only a pool of low-cost labor, it may because of proximity serve to maintain higher wage jobs in Western Europe. Of course, if Western companies, as one set of German firms is already doing, draw on the low-cost skilled labor to develop distinctive *complemen-*

tary, production capacities, they may be able to develop distinctive and ever more competitive product and market strategies.

What we now know is that CEE trade advances seem to have come at the expense of Asian producers, especially second-tier NIEs (Singapore, Hong Kong, South Korea, and Taiwan). From 1988 to 1995 Central Europe accounted for half of the increase in EU imports of industrial manufactured products from emerging regions outside the OECD; the corresponding import share of those newly industrializing economies (NIEs) remained unchanged. According to Lemoine, the major gains were in clothing, leather and shoes, wood and paper (including building materials), and engineering. The critical question for our analysis is whether over time the Asian production displaced will be simply low labor-cost standard product or whether it will be part of the emergence of alternate production networks in Europe. The case studies to which we refer above suggest that at least some of the production is staying in Europe as part of the emergence of complex IPNs.

There are different risks for East and West in this interpretation. One question for “Eastern Europe” is whether in the short term the production and employment gains from complementary specialization—gains that result from keeping production in or recapturing production for Europe—have caused losses to Eastern Europe. A second question for “Western Europe” is whether the return of production to the region will generate a technology trajectory of product and process innovation that will allow European-based companies to create market advantage. The evidence, as we read it, does not yet answer these questions. Nor does it tell us whether policy can influence the outcome.

IPNS AND THE OPPORTUNITY FOR A NEW EUROPEAN BARGAIN

If IPNs permit East European producers to be portrayed as economic complements rather than rivals, then we speculate that the political reconstruction of a stable Europe will be simplified. After World War II, economic instruments such as the European Coal and Steel Community and the Common Market were used to accomplish a security purpose. Successful economic reconstruction and development contributed to anchoring Germany in the West and creating

the national political stability on which the Western alliance rested. Steve Weber and John Zysman argue that the situation today differs from the postwar architecture of Europe, which rested on a well-understood and vividly depicted European bargain. A contrast of the European and Asian experiences suggests that each region's *internal "architecture,"* as defined by security arrangements and economic institutions, shapes the choices of the countries and firms within each region. The European region has been a political creation aimed at developing an ever larger and more homogeneous market. The distinctive architecture of the Asian region, with its economic heterogeneity and political rivalries, has facilitated—indeed encouraged—innovation in the organization and application of contracted IPNs. The post-cold-war architecture of Europe, the new architecture, is now being constructed. But the external threats against which it would protect are ambiguous, and the domestic strategies for growth that it might facilitate are unclear. As important for our purposes, the complementarity of security and economic means and objectives has come to an end. There are now visible economic prices to pay for security objectives.³

Certainly Europe's objectives toward the East will be more modest than Germany's toward its own reintegration and, hence, less costly. Nonetheless, the gap is enormous. There is a radical divergence between rich Europe and its less developed partners that would now join the community. Jean Pisani-Ferry's and Helen Wallace's contributions to this volume consider the important challenges of EU enlargement in the coming years. As Pisani-Ferry points out, radical disparities in incomes and development levels create costs that will be felt directly in the budget of the EU through, for example, structural fund expenditures. Those disparities will also be expressed through the market pressures of wage-based migration and policy tensions of significant disparities of interest on matters such as environment and social policy. In absolute terms, measured by percent of GDP, the costs of the disparities may at first glance appear low. But the costs press immediately on the budget of the EU and more generally contribute to the sense of "global" dislocation that mobilizes political resistance. Certainly the disparities also complicate the governance of the EU.

One consequence of incorporating significant disparities within the Community would be abandoning the notion that, except for

temporary delays, the European countries would move forward together. Drawing an analogy between EU enlargement and the emerging geometry of economic and monetary union, Pisani-Ferry sets out the possibility of a “Europe au menu,” wherein the member-states will be able to pick and choose their preferred pace of integration based on a restricted menu of options and a common understanding that each country has a vocation to eventually graduate to the next level of integration. Wallace’s chapter suggests, however, that although the “deep” integration model apparently prevails over the “shallow” model in European discourse, it will probably be extremely difficult to construct the political and economic bargains necessary to implement the adjustments demanded by “deep” integration.

Thus, both Pisani-Ferry and Wallace would concur with Weber and Zysman that variable geometry risks an endless series of ad hoc arrangements that ultimately fragment the overall European bargains. Now Europe must decide what economic prices (in forms such as market access and subsidy) to pay for security. After World War II the United States supported the development of political allies through relatively open markets and development assistance. Western Europe is being called on to do the same. However, Europe must do so not in the golden era of growth but in an era of high unemployment and demands to reduce state budgets. Again, the problem is not simply the difficulty of defining a security doctrine in the absence of a single clear threat, but rather that there is no clear policy solution to the economic problems and no clear coalition to support it. As a result, the question of costs, both direct budget costs and the indirect costs of accelerated economic adjustment, have become central to the debate on the reintegration of Western and Eastern Europe.

In the meantime, misguided strategies on the part of EU governments are likely to persist. In this volume, Alain Henriot and András Inotai review several telling examples of this confusion. They note that the spectacular increase in trade flows between the EU and the CEECs since the beginning of the 1990s has fueled a highly politicized debate over industrial delocalization, especially in France and Germany. The sensitivity of public opinion about this issue has made it difficult to facilitate access to EU markets for CEE products. If we take the example of agriculture, CEE producers have

been unable to compete with the system of assistance to agricultural exports in place as part of the EU's Common Agricultural Policy. This could affect production and the specialization structure for a long time, which would be detrimental to rural labor and could endanger the modernization of the CEE agricultural sector.

The risk for the East in this story is equally clear and, in fact, symmetric to that faced by Western Europe. Production organized by Western companies may remain limited to a series of Eastern enclaves isolated from the rest of Eastern economies, rather than the foundations of broad and sustainable growth. As Ellen Comisso demonstrates in her contribution to this volume, the national variations in basic strategies for privatization, stabilization, price and trade liberalization, and industrial growth constitute "implicit development strategies" that will account for different market outcomes, including patterns of attachment to the West. The fate of the Eastern economies almost certainly will depend on the choices of their several governments to provide infrastructure, skill development, and above all stable, predictable, and evenly enforced market rules.

On the positive side, there are important reasons for hope. There is growing evidence of transition and network experimentation in complex manufacturing that goes beyond OPT arrangements. Although most of it remains concentrated in a handful of the Eastern countries and is being conducted most extensively by German firms, Niels Mygind's contribution suggests that countries on the periphery of CEE, such as the Baltic economies, are also beginning to experience economic internationalization. Finnish and Swedish investors in particular are in the process of establishing IPNs, especially in Estonia.

If we view the East European countries as a source of migrants or products that accelerate the pressures of structural adjustment in the West, then the tradeoffs between economics and security will be accentuated. But the Eastern countries also represent an opportunity to orchestrate a finer division of labor that would contribute to the competitive position of the European region as a whole. The division of labor possible as a result of the heterogeneity provided by the East may not only help keep production in Europe, but also permit new production that might not have been considered. In this case, the conflicts between economics and security posited above would be

muted. Thus *the very disparities that create or at least amplify tensions among Europe's regions may also represent a heterogeneity of production functions that contribute to their solution*. Much then turns on the character of the transition away from socialist economic systems and the adaptation and reorganization they bring—that is, how the CEE firms become inserted into the European division of labor. In this way, the framework of IPNs in a new industrial competition allows us to address not only the question of economic adaptation, but also the political adjustments within the new Europe.

NOTES

1. This introduction draws on Zysman and Schwartz (forthcoming), which, in turn, draws on the other contributions to this book.
2. See, for example, "World's Top Test Scores Not Enough for Czechs," *San Francisco Chronicle*, 21 April 1998.
3. Note that the North-South conflict over how to allocate the budgetary impact of enlargement has now emerged as a major stumbling block in the negotiations. See Buckley, Preston, and Barber (1998) and Barber (1998).

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GLOBALIZATION WITH BORDERS: THE RISE OF WINTELISM AS THE FUTURE OF INDUSTRIAL COMPETITION

Michael Borrus and John Zysman

This paper proposes that two interwoven developments with their roots in American technology competition—namely, “Wintelism” and International Production Networks (IPNs)—are altering the terms of competition in many global markets and shifting the structure of many industries. The new strategies change what companies must do to win in the market, and by so doing, change the number and type of firms in the industry, the activities each undertake, and industry and firm boundaries. Competition is shifting away from final assembly and vertical control of markets by final assemblers toward a struggle over setting and evolving de facto product standards in the market, with market power lodged anywhere in the value chain, including product architectures, components, and software.¹ “Wintelism” is the code word that reflects this shift, created by linking the names of the two most evident major victors of the new standards competition: Microsoft Windows (the software operating system) and *Intel* microprocessors. Those constituent system elements—from components and subsystems through operating and applications software—become separate and critical competitive markets with the potential to control competition in the industry as a whole. The Wintelism thread of the story is drawn from, but by no means limited to, the emerging electronics sector. Wintelism is not just a story of the ineluctable competitive elaboration of the interior logic of new technology. Rather, this particular thread has been spun out principally by American firms responding to international competition within the confines and logic of the American market and its particularly defined political rules. In turn, Wintelism is now influencing the economies and politics in which it has emerged.

The second thread is the production organization counterpart to Wintelism, IPNs. IPN is a label we apply to the consequent dis-integration of the industry's value chain into constituent functions that can be contracted out to independent producers wherever those companies are located in the global economy. IPNs permit and result from an increasingly fine division of labor. They permit firms to weave together the constituent elements of the value chain into competitively effective new production systems while facilitating diverse points of innovation. But perhaps most important, IPNs have turned large segments of complex manufacturing into a commodity available in the market.

Although Wintelism and IPNs are most prominently evident in electronics, the electronics case suggests developments of general importance across a set of industries. Consequently, the metaphors and optics we use to interpret advanced industrial societies must be reconsidered. The era framed by mechanical and electro-mechanical processes is giving way to an era framed by digital electronics. If the mechanical era was best embodied under the Fordist rubric, then Wintelism should be the code word of industrial competition in the present digital era.

THE ARCHITECTURE OF GLOBAL

The "global" economy in which Wintelism and IPNs have emerged has become an emblem of dramatic change. The hyperbole in the media and popular novels that suggests a whirling era of giant companies, shifting money, and hapless governments often hides the distinctive features of changing markets. The fact of expanding market ties is not itself in question; at issue is the character of those ties, the pattern they form, and their significance. While the intensity of interconnection—the volumes of trade and investment as a percentage of GDP—has grown dramatically since World War II, we are only now returning to the intensities of 1914, which were disrupted by two world wars and a trade-shrinking Great Depression.² Nonetheless, 1996 is, quite evidently, a very different era than 1914. The character of the economic connections among countries and firms in 1914 and 1996 is quite different as well.³

What distinguishes the present era that has been code-named “global” from earlier eras that were code-named “international” and “multinational”?⁴ When “international” firms first sold abroad, their era, the period of British industrial preeminence, was one of trade. By contrast, “multinational” firms produced abroad in a variety of locations, defining an American era led by Foreign Direct Investment (FDI). In each case, the British international era and the American multinational era, a single dominant style of production organization spread out from a single dominant core country. Firms in other countries imitated, adapted, or struggled to cope with the advances of their competitors in the lead country.

The present “global” era, to use that often deceptive label, has a distinct logic and feel. This is a world economy of multiple centers, each with a distinct capacity for innovation and development. As a consequence, in contrast to its predecessors, this era lacks a dominant style. It is distinctively diverse and uncertain. It is not just that the terms of corporate competition have been altered. Rather, a multiplicity of corporate and national strategies compete to capture advantage in volatile markets. Speed, product differentiation, networking, and an emphasis on intellectual property all join the necessities of price and quality to mark the new phase of competition.

This global era’s variety is deeply rooted. Innovation and competition come not just from varied corporate strategies, but also from multiple geographic directions. There are new competitors, and the position of established players has been reshuffled. From that vantage, the global era began when, driven by extraordinarily rapid domestic growth that induced the building of excess capacity, Japanese firms made dramatic competitive entries into a long list of sectors in Western (principally American) markets (Pempel 1978; Tyson and Zysman 1989). Globalism, seen in this fashion, is the arrival of the Asian challenge—Japan’s success followed by the extraordinary rates of Asian growth in the second development tier (especially Korea and Taiwan), the third development tier (Thailand and Malaysia, among others), and now parts of China. Asia’s growth has been premised on a distinctive asymmetry in trade and investment, a seemingly permanent trade surplus with the West. This era is thus one in which an increasingly global market coexists with enduring national foundations of distinctive economic growth trajectories and corporate strategies. Globalization has not led to the elimination of national systems

of production. National systems endure, but they are evolving together in a world economy that increasingly has a regional structure. Three regional groupings have emerged: North America, Europe, and Asia (consisting principally of Japan, Taiwan, Korea, Southeast Asia, and parts of China—the countries that provide the principal nodes of the IPNs that concern us here). Together the three regional groups constitute about 75 percent of the world economy. Increasingly the internal “architecture” of each region—defined by its political/security arrangements and economic institutions—shapes distinctive regional market dynamics that influence national options and corporate strategies (see Borrus and Zysman 1994; Zysman, Doherty, and Schwartz 1997; for elaboration, see Weber and Zysman 1997).

In sum this global era is characterized by:

- Expanding cross-national market interconnections (trade, financial flows, etc.);
- A multiplicity of distinctive corporate and national competitive strategies;
- Enduring national foundations for those strategies which result in distinctive growth trajectories; and
- A regional economic architecture.

The global economy is, as a consequence, a complex and often contradictory story of global markets, national development strategies, regional dynamics, and competing corporate strategies. Again, two interconnected elements of this story of the global economy concern us: the emergence of Wintelism and IPNs. The pattern suggested by these interwoven threads helps to sort out the confusion of the present era. Together they have already altered the terms of competition in electronics and promise to change the way a broader range of sectors operate.

LOCATING WINTELISM: FROM ASSEMBLY TO COMPONENTS, STANDARDS, AND ARCHITECTURES

The current diversity of strategies and the competition among them provide the context for locating the place of Wintelism as a new competitive form. The automobile industry has for much of this

century defined our understanding of the industrial foundations of advanced society from the logic of work organization to the requirements of macroeconomic policy. So let us begin there.

THE AUTOMOBILE SECTOR AND INNOVATION BY ASSEMBLERS

In the auto industry, competition remains centrally a battle among the assemblers such as Toyota, General Motors (GM), and Renault, who design and integrate the final product. That competition has been dominated by production innovation and marketing. Early on, a high-volume, mass-production strategy, often labeled Fordist, became the emblem of modern times. Its production principles became a model for all competitors in the industry to emulate. Thus pioneering American firms entered the European market and established enduring positions on the basis of innovations in mass production. There were significant European product innovations in response, but the European market consisted of stable oligopolies or national monopolies, with competition largely revolving around marginal product developments and marketing (Womack et al. 1991; also Altshuler et al. 1984).

By the mid-1970s, however, another fundamental innovation in production, labeled flexible volume production, or “lean” production, provided Japanese firms the capacity to enter and alter markets in North America and later Europe. Lean production enabled Japanese firms to compete on the basis of newer price-performance packages and shorter product cycles than traditional mass-production techniques could deliver. In effect, firms like Toyota established new market entry points and rapidly expanded them into significant product segments via the advantages that their distinctive production organization permitted (Womack et al. 1991). Again there was a competitive response, this time by European and American firms. In particular, European luxury car producers like Mercedes and BMW innovated in products, while American and European mass producers closed the production cost/quality gap through selective adoption of “lean” techniques. And after their formidable initial success, some Japanese producers like Honda proved to be less adept at product development than production, and all recently have faced higher costs resulting primarily from the increased value of the yen.

In their turn, then, each set of production innovations—first those at Ford and then those at Toyota—altered conceptions of best practice in organization, technology, and management, and indeed they even influenced our understanding of the political requirements of sustained growth. Ford’s innovation was the implementation of mass production; Toyota’s innovation was a reorganization of mass production to create flexibility with volume. Both innovations created decisive market advantage. Perhaps more significant, both influenced production strategies and organization in a broad range of other industries, especially consumer durables. More broadly, each deeply influenced general thinking about market competition and shaped the character of advanced industrial society.

ELECTRONICS AND THE MOVE AWAY FROM ASSEMBLERS

In the new era, we believe that the electronics and information technology industries are beginning to play a similarly influential role. In electronics over the last decade, by contrast to the auto industry, the terms of competition have shifted away from final assemblers and the strategy of hierarchical (i.e., vertical) control of technologies and manufacturing. The character of the shift in market power is popularly suggested in the advertisements of PC producers like IBM, Toshiba, Compaq, or Siemens-Nixdorf, whose systems are nearly identical and who emphasize components or software that have become de facto market standards—“Intel Inside” or “Microsoft Windows installed”—rather than unique features of their own brands. In our view, Wintelism is the code word that best captures the character of the new global electronics era because Intel and Microsoft pioneered many of its dominant industrial and business practices and are now leveraging their market dominance to alter the terms of competition in other informatics markets.⁵

The pre-Wintel electronics industry was dominated by assemblers—i.e., systems producers who designed, marketed, and assembled the final product with a structure and strategy similar to the auto industry’s. Early postwar American producers like GE, RCA, and IBM prospered with quite traditional advantages of scale, vertical integration, and, for some products, mass production. Starting in the 1960s, American semiconductor and consumer electronics firms created off-

shore assembly platforms in Asia to reduce labor costs in their domestic competition.⁶ But in that competitive phase, the competition, critical market, and product development were all principally American. Limited off-shore assembly was really a conservative attempt by American firms to preserve with cheap foreign labor an existing production system. That attempt, of course, failed. On a similar model of vertical control, IBM dominated the computer segment of the electronics industry and extended its franchise into Europe and Asia in pursuit of new markets. Similar strategies produced dominant players like Western Electric and Siemens in the telecommunications segment of the market.

Also starting in the 1960s, in the course of attempting to emulate IBM in structure and strategy, Japanese producers like Matsushita and Hitachi began to overturn established American positions in the consumer electronics market. Much as Toyota and other Japanese auto companies, they did so by applying the lean production principles in order to innovate in traditional consumer electronics products with all solid-state televisions. As in autos, adoption of lean production techniques enabled Japanese electronics firms to create new and distinctive market segments by the late 1970s with the Walkman, VCR, and camcorder, and by the early 1980s to challenge U.S. leadership in semiconductors. Here too, however, the dominant market position still lay with the final product assemblers, who controlled consumer product definition and usually both the supply and distribution chains. Their competitive strength was the ability to manufacture high quality at consumer price points with some degree of product variety.

By the early 1980s, essentially all electronics product markets were dominated by large-scale producers such as IBM, Siemens, Matsushita, NEC, and Toshiba. They produced fully proprietary systems whose key product standards—i.e., the technical specifications that describe the system architecture and enable the pieces of the system to interoperate as a whole and with each other—were either fully “open” or fully “closed.” A fully open standard is one in which the technical information necessary to implement the standard is in the public domain—i.e., fully available on a nondiscriminatory and timely basis to anyone. This was the case with most consumer and many communications interface standards like TV or fax broadcasting. With the relevant technical information in the public domain,

products built to such open standards, like TVs and radios, became commodities in which scale, quality, and cost were the defining features of competition in highly contested markets.

By contrast, telecommunications and computer firms built to closed standards, in which the relevant technical information was owned as intellectual property and *not* made available to anyone other than through legally permissible reverse engineering. IBM's mainframe computers epitomized such proprietary, closed systems. Here, too, vertical control over technologies and manufacturing was essential, especially in the early stages of competition, when new systems were introduced. But once these were established in the market, competition centered on growing an installed base of customers who could be locked into a firm's product line. Lock-in was possible because—unlike in the open standards case, where all products were built to implement the same standard so that users could seamlessly switch among them—the costs of switching between closed systems could be very high indeed (requiring, for example, rewriting an existing base of software and retraining all users). Large installed bases were essentially decisive over time in these competitions—as all of IBM's competitors discovered—because those who had them would almost always have lower per-unit costs for succeeding generations than the competition since such costs (e.g., of development or marketing) could be amortized over more locked-in users. In sum, then, *with both closed and open systems, vertical control over technologies and manufacturing was the key to market success. It was necessary to capture closed system rents and lock customers into proprietary standards or, in the case of open systems, to compete on implementation, quality, and price.*

This era of proprietary systems built to open or closed standards lasted until the early 1980s. Throughout it there were shifts in market structure, attacks on established incumbents, a myriad of new entrants, and, not least, significant policy interventions that helped to shape market outcomes (e.g., through protection, antitrust, or procurement). Some of these changes—like the policy-induced emergence of merchant component suppliers—began subtly to undermine the logic of competition rooted in scale and vertical control of technology. They created the evolutionary ground for the emergence of Wintelism.

THE ORIGINS AND CONSOLIDATION OF WINTELISM

Just as the lean production that has so dramatically altered strategies in the consumer durables industries could perhaps only have emerged in Japan, so the origins of Wintelism are fundamentally rooted in the United States.⁷ The semiconductor, which was to create an information technology industry and transform electronics, emerged in a vertically integrated, regulated communications monopoly, AT&T. Military R&D and procurement provided the initial launch market for the new technology at lucrative premium prices. As costs fell with large-scale military procurement, initial commercial applications spun off into the computer industry, which, as recounted above, was dominated by IBM. American policy (especially antitrust) prevented both AT&T and IBM from monopolizing the technology to dominate all of electronics, and in fact helped to set an industrywide pattern of technology cross-licensing. Through licensing and labor mobility (which resulted from typically flexible U.S. labor market policies) both AT&T and IBM became technology pumps, widely spreading to start-up and established producers and users the basic technological innovations on which the chip industry was built.

In that way, policy helped to foster the emergence of “merchant” chip firms, whose primary activity was selling semiconductor components to producers of final products and whose marketing strategy was inherently one of diffusion of the new technology. Very likely, the merchant industry structure could not have emerged except under cover of the unique U.S. policy umbrella.⁸ In turn, the significance of the merchant producers for the emergence of Wintelism cannot be exaggerated. Because their basic role was to diffuse chip technology as widely as possible, they fostered the coming-into-being of other specialized producers throughout the electronics value chain who could take advantage of it. In effect, they pioneered and instigated the gradual process of vertical dis-integration throughout the American electronics industry. Final assemblers needed no longer to be vertically integrated into component production on the IBM/AT&T model. Instead, they could focus on system definition and assembly. Specialization in one part of the value chain bred specialization in other parts. Through the 1960s and 1970s, specialized producers of semiconductor equipment and materials

emerged, as did producers of software and systems integrators higher up the value chain. The whole process was accelerated by the competitive entry of Japanese producers, who helped to eliminate traditional vertically integrated players from the U.S. market.

In the policy-induced struggle to break loose from IBM's dominant model and to react to the Japanese ascent, new product strategies emerged within the logic of the dis-integrated U.S. industry structure and the possibilities afforded by digital, microelectronics-based systems. The pioneering product was, of course, the PC. But the extraordinary pace of technical progress and ever-improving price/performance soon made the underlying microelectronics technologies increasingly pervasive, transforming just about everything from telecommunications switches through automobiles and hearing aids.

By the mid-1980s, new electronics product markets began to converge on a cost-effective, common technological foundation of networkable, microprocessor-based systems (of which the PC is emblematic). Such systems enabled a dramatic shift in the character of electronics products—from the prior era's proprietary systems built to fully open or closed standards to the Wintelist era's "open-but-owned" systems built to "restricted" standards.⁹ In the new systems, key product standards, especially the interface specifications which permit interoperability with the operating system or system hardware, are owned as intellectual property but made available to others who produce complementary or competing components, systems, or software products. Hence the systems are open-but-owned.¹⁰ The relevant technical standards are licensed rather than published, with either the universe of licensees, the degree of documentation of the technical specifications, or the permissible uses restricted in some fashion. Very often, changes can be made unilaterally by the standard holder in ways that affect availability and timing of access to the interface specification—as Microsoft is routinely accused of doing by its licensee-competitors. In essence, open-but-owned systems combined competitive elements from both product types of the prior era—the standards are licensed in order to create commodity-like competition around system elements chosen by the licensor (e.g., around assembled PCs built to Intel processor architecture standards), while remaining restricted in order to build installed-base and locked-in customers.

The shift to open-but-owned systems was accelerated by two factors that helped to spread and consolidate Wintelist business strategies. First, from the supply side, the increasing cost and complexity of continuing innovation made it increasingly difficult for any one company, even IBM, to maintain ownership and control over all of the relevant technologies. Second, and by far more critical, major industrial users made increasingly strident demands for increasing interoperability of complex systems purchased from multiple vendors.¹¹ As major business users moved their business operations onto information networks that became increasingly central to the implementation of business functions and strategy, they wanted control over their management and operation. Again, American public policy set the context. Over three decades, from the 1950s to the 1980s, U.S. policy gradually deregulated AT&T and introduced competition into the domestic U.S. market for communications services and equipment. That, in turn, provided the communications facilities and services from which industrial users would piece together their information networks. Industrial demand stimulated a burst of innovation in both development and usage of network equipment and services, creating broad new market opportunities.

We must here distinguish between *user-driven networks* and *provider-supplied networks*—really networks with their origins in voice telephony and provided by the once monopolist national providers. The user-driven networks have largely been private corporate data networks developed to use digital information to create competitive advantage in the user company business.¹² Provider-supplied networks are defined and controlled by the network company, which provides a set of services or possibilities to its customers. User-driven networks are at least in part defined and controlled by the user, who designs them to fulfill specific functions. These user-driven networks, which characterize the American deregulation, generate a competitive market for the constituent equipment and software. Often the technology used to implement the data networks has been clearly different from that used to implement the traditional voice networks. Traditional suppliers to voice networks or even traditional mainframe-based computer systems have generally not been players in these new network technologies. When we look at the data on the growth of communications networks, the Europeans keep pace in public network equipment but not in the

explosively expanding private network equipment (*Enabling the Information Society* 1997). In our view that divergence between success in public provider network equipment, rooted in the old telephony, and a more limited success in the new private markets reflects the limited European experience with user-defined networks based on data. The American success, including a firm such as Cisco, reflects the expansion of user-driven networks in the United States that established a deconcentrated market for the equipment. The user-driven networks and the equipment that implemented them turned on the particular form of deregulation. The American deregulation gave to users access to the control layer of the telecommunications network, while European deregulation has emphasized competition among providers and still has not fully opened the public network to user definition of privately designed networks.

In sum, American users, but not European or Japanese, could pick and choose among the most innovative equipment and services from multiple vendors to knit together their information networks. But the pieces from multiple vendors had to fit together—they had to be open enough to enable end-to-end interoperability of the corporate communications infrastructure. Suppliers responded with open-but-owned systems: open at the interface to permit interconnection of systems from other vendors, but owned to reap a return from innovation. In short, users demanded highly functional and interoperable systems, U.S. policy stimulated provision of them, and both further encouraged the value-chain specialization with open-but-owned standards that are the hallmarks of *Wintelism*. Once again, these developments were unlikely to have emerged in other national settings like Europe or Japan, where policy fostered communications monopolies and user reliance on single-vendor closed systems.

The move to open-but-owned systems and value-chain specialization was legitimized, as perhaps it only could have been, by IBM with the IBM PC.¹³ In order to get to market fast and exploit a market window opened by Apple (who had adopted a quite traditional proprietary systems strategy), IBM pieced together the first open-but-owned PC using its own proprietary basic input-output system (BIOS) and a variety of components and software from numerous third-party vendors. It invited cloning to establish the market. Once firmly entrenched, IBM intended to bring the product back in-house and make

it increasingly proprietary. It presumed that a traditional strategy of unsurpassed scale and vertical control of technology and manufacturing would fend off the clones. It was wrong. Unfortunately for the computer giant, it permitted key standards in its PC to be owned by others (especially Intel for the microprocessor architecture and Microsoft for the operating system), who innovated at the furious pace that focus and specialization permitted. Gradually, they took control of the evolution of the PC's key standards. In concert with the clone-makers, Intel and Microsoft wrested control of the PC itself from IBM. Strategies to set and control the evolution of de facto standards were developed. Business speed (e.g., rapid product cycles, fast time to market) was rewarded. Wintelism was born.

THE NEW TERMS OF COMPETITION

In this new epoch, firms located anywhere in the dis-integrated value chain can, potentially, control the evolution of key standards and in that way define the terms of competition not just in their particular segment but, critically, in the final product markets as well. Market power has shifted from the assemblers such as Compaq, Gateway, IBM, or Toshiba to key producers of components (e.g., Intel), operating systems (e.g., Microsoft), applications (e.g., SAP, Adobe), interfaces (e.g., Netscape), languages (e.g., Sun with Java), and to pure product definition companies like Cisco Systems and 3COM. What these firms have in common is that from quite different vantage points in the informatics value chain, they all own key technical specifications that have been accepted as de facto product standards in the market. Each beat out rival standards. In winning, each created a universe of licensees who produce to the standard and add value to its use—just as applications software firms like WordPerfect, PC assemblers like Compaq, peripherals producers like Canon, or content providers like Grolier all produce to Microsoft's Windows operating system standards. Each standard owner maintains a growing installed base of customers who use the products that conform to the standards. Each has been careful to evolve the standards by adding incremental improvements in performance, functionality, features, quality, or costs within product generations and dramatic improvements between generations (while remaining backwardly compat-

ible with past versions). In that way, each has effectively locked in a customer base in the sense explored above—that is, given the customer's investment in all of the conforming products and in how to use them effectively, s/he will normally be unwilling to switch to competing standards unless they offer truly radical and compensatory improvements in price-performance-functionality. Switching will not occur, that is, unless it is even more costly to stay put.¹⁴

Such Wintelist strategies effectively attenuate the link between market power and the *ownership* of the assets of production that characterized the prior era of competition, and at the extremes, as with a firm like Cisco Systems, can completely decouple control of final markets from ownership of manufacturing assets. For Wintelist firms the ownership and manipulation of de facto standards are considerably more effective barriers to entry than the barriers of scale and vertical control over technology and production in the prior era because they are far harder to duplicate. But production and scale do not vanish from the story; they are still significant (a point elaborated below). Indeed, relevant production know-how still facilitates continuing product and process development in most industry segments. And, in many cases, traditional assemblers can use their additional advantages of scale and vertical control to decisive advantage in playing the Wintelist game. For example, Hewlett-Packard (HP) has been perhaps the most successful traditional systems assembler to adjust to the Wintelist era. In PC printers, HP drivers are the laser and inkjet operating system standards (and printers are consequently the chief source of HP's profits). In Unix workstations, HP's open-but-owned Precision Architecture has been one of the three principal contenders for market leadership (with SUN and IBM). Even where it does not own the relevant standards, as in PCs, HP has successfully adjusted its business model to emphasize speed and continuous innovation over manufacturing scale and vertical control.

In sum, the electronics industry, now the driving and expanding industry group, has entered a new era which we call Wintelism. In this Wintelist era, competition has moved away from assembly to the rapid evolution of the constituent elements of the system being assembled—that is, to the system architecture, its components and subsystems, its operating system, languages, and applications—and to the creation and evolution of restricted de facto market standards

in all of those areas.¹⁵ Simultaneously, systems products have moved away from stand-alone proprietary systems toward open-but-owned systems that are meant to be interconnected with (or integrated into) digital information networks. In practice, the core functionality of final systems—and even of the networks they comprise—is often owned and controlled by the independent companies who supply or define the constituent elements. They, rather than the final assemblers, often control both the pace of technical advance and the availability of critical system elements. As a consequence, product rents accrue to them rather than to assemblers. The creative use of intellectual property rights and associated licensing strategies define defensible market position more than manufacturing scale as the basis of competitive advantage. In this era, even competition at the assembler level over system platforms is as much about standards as it is about production. The desire of Sun to widely license its Java language to other assemblers, or of Oracle to define and widely disseminate the architecture for a “network computer” (NC) tailored for Internet functionality, really represent as many efforts to supplant the market dominance of standards and architectures controlled by Microsoft and Intel.

In this Wintelist era, manufacturing and production do not vanish in significance; rather they shift location in the story. It remains true that you cannot control what you cannot produce (Cohen and Zysman 1987). But the ways of implementing and controlling production have changed. As we argue next, Wintelism has an organizational counterpart, a distinctive system of production which we call the IPN.

THE CONSTRUCTION OF IPNs

The strategic importance and hence the organization of production have changed as competition and value-added have moved away from assembly. As argued in the last section, Wintelism’s defining shift has been to the rapid evolution of the constituent elements of the system being assembled and the creation and evolution of de facto market standards. IPNs and contract production services are the organizational counterparts of that shift.

IPNs are more than the continuation of forms of outward processing trade (OPT) that have existed throughout the postwar years, more important in some industries than in others.¹⁶ Rather, they are a distinct stage in the evolution of networked production. Once in existence they enable Wintelist strategies while at the same time being shaped by the needs of Wintelist producers. To stylize slightly:¹⁷

OPT, branch plant production: In this first phase, firms established two types of production. With OPT, firms established production units or contracted with production units for narrowly defined activities that required extensive low-cost labor. Branch plants were established to jump walls of protection to gain access to local markets.

Contract factories and original equipment manufacture (OEM): Firms were created by local or regional entrepreneurs and governments to perform a range of tasks and produce a range of components or subsystems defined by multinational corporation (MNC) final product producers. These firms are continuously striving to extend the range of production and to integrate forward and backward from specific assigned points in the production chain.

Classical MNC production networks involve the rationalization of largely owned affiliates.

IPNs are relationships among firms that organize, across national borders, the research and development activities, procurement, distribution, production definition and design, and manufacturing and support services in a given industry. These networks are evident in two forms that are now rapidly evolving:

Turnkey Production Network Services: Production network intermediaries such as Solectron arise who can manage the entire manufacturing network for a customer by providing turnkey production networks.

Regional Production Networks: These networks involve the reweaving of the varied individual activities into entire production systems that exploit local specializations throughout the region.

While these network forms evolved sequentially, it is awkward to refer to them as stages. Empirically, they overlap in time, in particular countries, and in the experience of particular MNCs that are initially at the core of the process. While each step required MNC, indigenous firm, and host country capacities that were created at least in part in the prior step, the emergence of the more elaborate arrangements did not replace the earlier ones. Rather, the several forms coexist, representing possibilities for different corporate production strategies.¹⁸

IPNs comprise a clever division of labor in which different value-chain functions are carried on across national boundaries by different firms under the coordination of either a lead MNC for its own production or a Production Service Company (PSC), which manages the production value chain for clients. Equally important, IPNs express the reduced need for companies to control production through ownership or direct management of each piece of the value chain. To be more specific, by a firm's IPN we mean:

the organization, across national borders, of the relationships (intra- and increasingly inter-firm) through which the firm conducts research and development, product definition and design, procurement, manufacturing, distribution, and support services. As a first approximation, such networks comprise a lead firm, its subsidiaries and affiliates, its subcontractors and suppliers, its distribution channels and sources of value-added product or service features, its joint ventures, R&D alliances and other cooperative arrangements (like standards consortia). In contrast to traditional forms of corporate organization, such networks boast a proliferation of non-equity, non-arms-length, cross-border, inter-firm relationships in which significant value is added outside the lead firm and entire business functions may be outsourced (Borus forthcoming).

Such networks *have evolved to exploit an ever more intricate division of labor based on increasing local technical specialization in Asia.*¹⁹ They are not principally about lower wages as such or access to markets and natural resources, although these objectives often motivated initial investments. Rather, they are about the emergence of locations that can deliver different mixes of technology and production at different cost-performance points. That is, countries represent particular

mixes of capabilities and costs: if a country did not have capability and had only low-cost labor or had a particular capability at too high a cost, firms would seek alternate locations. Nor is there a parallel to the production reorganization and networks that emerge when relatively homogeneous economies integrate. When a region such as Europe began to generate a single market or when the United States and Canada reduced auto barriers, firms sought to capture newly possible economies of scale. Rather, the Asian story is about the linkages among diverse and *heterogeneous* economies. East Asia, within which these networks emerged, is a story in which the regional—that is, cross-national—dynamic of economic development built complex divisions of labor among economies with very different technical and economic capabilities at very different stages of development. On top of this base, the networks formed from intra-sectoral trade and investment that links together the diverse production functions across national borders to create complementary production arrangements which individual producers and nations would be incapable of maintaining independently. For example, to create a PC, a firm might use specialist producers of computer displays in Japan, printed circuit boards assembled in China, disk drives from Malaysia, digital design and final assembly services in Taiwan, software from Bangalore, and process development in Singapore. While these networks have some characteristics of earlier arrangements, the industrialists creating them believe they are doing something new and innovative precisely because they are using a new kind of production system in a new kind of competition.²⁰

The relationships that comprise a given firm's IPN run the gamut from short-term supply contracts to very long-term joint R&D. The predominant relational form varies with the task at hand. Consider the range of tasks: technology development—such as the IBM-Toshiba joint venture, Display Technologies Inc. (DTI), formed to jointly develop flat panel, liquid crystal display technology—requires longer-term alliances with more intimate involvement and greater “trust.” By contrast, procurement of existing product technology, such as a disk drive, where leadership will shift abruptly among suppliers, is likely to be product-by-product or one product-and component-generation at a time.

IPN relational variations also appear to depend on the national home base of the core company or core contract agent. Japanese production networks, for now, are dominated by the core company with extensive use of dominated local subsidiaries (see Ernst 1994). These arrangements—which have their origins in the particular sequence that spread Japanese production across Asia—have proven rigid, slower, and less open to local innovation. American networks are more open and more agile. The supply portion of the American IPNs appears to be almost pure contract networks, largely managed from the United States, consisting of short-term bargains, not longer-term alliances. Indeed, contract manufacturers and their customers seek to limit dependence on each other. Some even use formulaic conventions, such as no more than 20 percent of business from any single client. In some cases, depending upon the purpose of the relationship, these are treated as short-term bargains; in other cases, as a series of longer-term arrangements or even as semi-permanent alliances. The wide range of relationships that define the IPN is thus likely to remain broad and fluid over time, contingent on the specific needs, structures, and strategies of individual firms.

The new IPNs, we argue, represent a step in the evolution of networked production. Let us summarize their distinct features. First, they represent the connection of very different and distinct nationally separate industrial districts that constitute specific production functions with particular cost/performance points.²¹ They represent, therefore, a division of labor based on varied industrial capacities. The Italian districts, by contrast, are represented as horizontal linkages among roughly equivalent firms operating under equivalent legal and market conditions with roughly equivalent technical skills that continuously swap roles, from suppliers to final designers. Indeed, it is precisely the variety of nationally distinct production functions and cost points that provide to the IPNs flexibility and innovative capacity. Second, these networks are constructed with a mix of contract and FDI and a balance of internal and external management. They are, therefore, quite different from traditional MNC production networks, which rested, and often still rest, heavily on direct investment and control. At an extreme a particular firm can construct its IPNs by contracting with turnkey service companies, thereby eliminating for itself either FDI and/or direct managerial oversight. Third, these networks increasingly rest

on the innovative and entrepreneurial capacities of the local nodes. Particular producers or districts must absorb technology and skills to alter in any meaningful way their position in the value chain.

These complex production networks have emerged most clearly in Asia, but they are used by American and some European firms. Consequently, they are of competitive significance to all. As important, they are not confined to Asia. They are being replicated in North America. Whether or not Europeans organize them in Europe, they are likely to be put in place there by Asian and American producers to serve their own strategies. Below we tell the Asian story in some detail to give a sense of reality to what would otherwise be an abstract analysis.

ASIA'S DEVELOPMENT AND THE EMERGENCE OF IPNs

Postwar development and politics have driven Europe toward regional homogeneity. Or at least that was the story until Western Europe abruptly regained its past. That European past consists of a set of countries that are dramatically less developed than the core of Europe and which must now reorient and restructure their production. By contrast, Asian development occurred in a series of tiers that created heterogeneity. Enduring political rivalry has entrenched and preserved it. In brief outline, four developmental tiers have emerged in Asia:

Tier 1: Early Late Industrialization. The case of Japan and its nineteenth-century industrialization. Modern Japanese politics is a story of the political creation, in relative international isolation, of a market system intended to assure continued political autonomy (Samuels 1994).

Tier 2: Cold War Late Industrialization. Taiwan, Singapore, Hong Kong, and Korea—the original newly industrializing tigers who jumped to the advanced industrial frontier using strategies of technology catch-up and export-led growth.

Tier 3. Late Late Industrialization via IPNs. Includes the major Southeast Asian countries of Indonesia, Malaysia, Thailand, the Philippines, and the coastal provinces of mainland China, along with potential newcomers like Vietnam and Myanmar. The defining char-

acteristic here is the central role of IPNs. These countries do not have the local domestic manufacturing that developed indigenously in Japan and was created through successful learning in the second-tier countries. The lack of indigenous manufacturing experience rendered Southeast Asian countries more dependent on MNCs for their industrial development (Barnard and Ravenhill 1995: esp. 195–200). Increasingly, their development strategies revolve around insertion into the regional division of labor defined by partially overlapping or competing cross-border networks under the control of Japanese, U.S., Korean, European, Taiwanese, and other overseas Chinese MNCs.²²

Tier 4: Large-Scale Late Developers. It is likely that India and especially China, the enormous, populous late developers, will be able to follow largely indigenous strategies rather than the export-led and network-led development of Tiers 2 and 3. Their entry will dramatically alter the region's competitive dynamic—as China already has in drawing FDI away from Tier 3 developers.²³

In sum, four tiers of development in this region riven by political and military rivalry have created a heterogeneous production environment. In turn, Asia's highly articulated regional production networks emerged over time from this heterogeneous production environment in the several steps sketched above.

Such arrangements were, of course, used prior to their adoption in the electronics industry. For quite some time, in industries like garments, footwear, furniture, and toys, it has been established practice for “brand name” companies to depend on IPNs for essentially all of their manufacturing requirements:

For example, U.S. brand name apparel and footwear companies have been utilizing a disaggregated industry structure to create non-equity-based production networks on a world scale since the 1970s. By contrast, disaggregation and production outsourcing did not begin in earnest in the electronics industry until the mid-1980s, a trend that has increased dramatically as the 1990s have progressed (Sturgeon forthcoming).²⁴

The emergence of contract production and international arrangements in consumer durable sectors such as electronics and now perhaps automobiles as well turns the phenomenon from one of

marginal interest to one of real significance. Instead of being confined to essentially labor-intensive, low- or middle-skill products in mature sectors, IPNs now touch the core elements of the industrial economy and the most innovative and rapidly expanding sectors.

The new production model is increasingly pervasive in electronics. Its scale and pace of development are suggested by the rapid growth of the most visible manufacturing network service companies. They have grown over the last decade from a marginal to significant industry segment accounting for over \$40 billion in sales in 1995.²⁵ The top ten firms grew last year by over 56 percent to almost \$10 billion. Some estimates suggest that such firms now represent 10–20 percent of total product-level electronics manufacturing (up from less than 5 percent in 1982) and 40–50 percent of highly volatile electronics industry segments such as PCs and modems. Firms that provide global scale manufacturing services, such as SCI Systems and Solectron, now produce on the scale of the MNCs themselves and are growing extraordinarily quickly, in part by purchasing customers' formerly captive (i.e., vertically integrated) facilities.

In 1986 Solectron generated \$60M in revenues and had all of its production capacity in Silicon Valley. By 1995, the company had grown to more than \$2B in revenues and had plants in North Carolina, Washington State, Texas, Malaysia, Scotland, France, and Germany (Sturgeon forthcoming).

Conversely, former vertically integrated assemblers like IBM, HP, and Apple have disposed of captive production facilities and moved to the new IPN model. By 1994, 50 percent of HP's 20 million circuit boards and 11 percent of its 4.5 million final products were being assembled by contract manufacturers, as was fully 50 percent of Apple's production.²⁶ And some of the newest and most successful systems companies own no internal manufacturing at all. Examples include Dell (PCs), Silicon Graphics (workstations), Cisco Systems (networking), Diebold (automatic teller machines), Digital Microwave (communications), Telebit (modems), LAM Research (equipment), and Octel (communications).

In all of these cases, the move to IPNs and contract production services permits system firms to concentrate on Wintel product definition and market strategies while conserving capital and gaining production flexibility. The implications are that while Wintelism

creates a whole range of market opportunities in sectors that were previously dominated by giant assemblers playing in controlled oligopolistic markets, the new IPN possibilities provide small producers with a cost-effective production strategy to exploit the new market opportunities. In short, as Sturgeon (forthcoming) concludes, to the extent that network production structures have emerged in a wide range of localities, are highly capable, and have developed an open, “merchant” character, an infrastructure for the implementation of global production strategies without FDI has been put in place.

SCALE AND CONTROL OF PRODUCTION IN IPNs

Wintelism and IPNs have implications for all firms, large and small. Together they separate product development from production and radically minimize the capital requirements and the range of in-house production skills needed for volume production and mass market strategies. They also provide a merchant, open-market source for many of the critical elements of systems, making them available for distinctive final product development. In principle—and in fact—this has opened new business opportunities for firms operating at much smaller scale than traditional vertically integrated assemblers. For example, for some small firms, the skill at developing sophisticated products for niche markets opens the possibility that they can aim at larger volume markets by applying niche market product development skills to volume markets and contracting out volume manufacturing. This is to emulate what a firm like Gateway is doing in computers, but to apply the strategy to upper market segments of consumer durable businesses, in effect using the niche market as a prototype for volume entry. Or a small firm may sell to a larger firm seeking to fill a spot in its product offerings what for lack of a better term may be called an entire product system—that is, a product already beyond the prototype stage, along with a system of production arrangements ready to deliver that new product to the market rapidly. That small firm could act as a contract product development operation.

But many of the constraints associated with scale will remain despite such new opportunities. We are not entering an era of small

and flexible firms. Rather, over time, significant imperatives of scale are emerging in different parts of the value chain, notably in production, product development, the dynamics of standardization, and distribution. For example, efficient semiconductor production now requires billion-dollar-plus production facilities. So long as chip design firms remain small, they can contract out for capacity with so-called chip foundries. But as demand for their products becomes sizeable, it gets increasingly difficult to find adequate production capacity. Then, even small firms need to invest in or buy into large-scale production facilities in order to ensure themselves of adequate production capacity, just as smaller firms like Actel have recently done in acquiring stakes in new Taiwanese fabrication lines. Similarly, standards do not rest simply on the domination by a single producer of a particular market. Very often, they require a painstaking knitting together of a large-scale standards coalition composed of other producers and suppliers who add value around the standard, major users, and even competitors. SUN has created just such a coalition in seeking to standardize its version of JAVA in the face of efforts by Microsoft to take control of the new programming language with a proprietary MS-JAVA version. Even more significant, as argued above, in standards competitions lock-in and installed base—i.e., *scale in use*—are critical to enduring market success. Creation and maintenance of standards coalitions and installed bases take time and large-scale resources. And the larger the market, the larger the requisite effort.

This holds true for pure product development firms as well. They can be small as new market entrants, but they must engage in increasingly large-scale investments to maintain a dominant position, once achieved, in a fast growing market. A good example is Cisco Systems, which has grown through acquisition of an increasingly broad array of complementary technology and product companies as its market grew from hundreds of millions to billions of dollars. Finally, in many market segments, maintaining competitive advantage over time rests in large-scale investments in distribution and marketing rather than in technology development. Wintelism and IPNs thus shift the location in the value chain of scale investment (here, from production to distribution) but not its necessity. In sum, while Wintelism and IPNs fragment or dis-integrate the value chain, they do not imply that we are headed to an era of small-scale

specialty firms becoming dominant within each market segment of the value chain. The advantages of scale are redistributed but not eliminated.

In a similar fashion, the logic of the necessity for control over production changes, but is not eliminated, in the Wintelist era, where IPNs make production itself into a commodity. IPNs mean that, in many cases, supply and quality can be assured as much by external contract as by internal ownership. But that does not mean that manufacturing no longer matters for the firm. The proper question is under what circumstances does outsourcing seriously undermine the capacity of a firm to control the direction of product development, market response, and industry evolution? Indeed, under what circumstances must a firm manage the outsourcing internally as an alternative to internal production, and when can a firm safely outsource the outsourcing—that is, engage a manufacturing service firm like Solectron to manage the external relationships? In our view, it remains true that firms cannot control what they cannot produce, but the meanings of production and of control must be reconsidered. We believe that one critical link is between product development and production, but its tightness and texture vary considerably from one product market to another. For example, American disk drive firms own prototype development and pilot production facilities. Some then contract out volume production. For them, control over prototype and pilot production is sufficient to control evolution of their market position. But, as mentioned above, HP, despite extensive use of contract network arrangements, vertically integrated into production of the ink jet printer, its key component technologies, and some of the underlying manufacturing equipment. It developed much of that technology internally, integrated to maintain control over it, and moved aggressively to drive prices down in a Japanese-style entry. In laser printers, however, where it does not control key components—and in fact is dependent on a rival, Canon, for the laser engine itself—it chose instead to maintain only a modest internal development project to track evolution of laser engine technology in order to increase its maneuvering room in negotiations with Canon over price and availability. In sum, the corporate strategy questions change. A critical question becomes how to manage supply networks to assure the internal learning required to sustain product and process development.

In short, there is no single answer. Answers turn on unique characteristics of both the product market and the contract production services in question—on such issues as the structure and openness of potential contract production markets, or the extent to which opportunities arise to reap additional returns through owning complementary assets, or the degree to which production know-how influences not just the cost of today's products but the design of tomorrow's products and product lines. To take the latter issue, for example, the Japanese ability to shrink the VCR into a consumer product or create products such as the Walkman turned on their creation and mastery of mechatronics technology and production systems. By contrast, hands-on management of production does not necessarily enable a company to anticipate production revolutions that alter market positions. Indeed, American automobile and consumer electronics producers missed the Japanese lean production revolution and avoided facing its consequences precisely because their internal bureaucracies sustained a production status quo. In those cases, contract producers might have followed developments in production innovation more closely and been less resistant to change. In short, the only certainty is that the question of how much to control what is produced via contract or via ownership, and how to manage in either case, must be asked and answered by each individual firm in an era of elaborate IPNs.

HOW WINTELISM AND IPNs ALTER THE TERMS OF COMPETITION IN GLOBAL MARKETS

Wintelism and IPNs are shifting the character of competition in a range of global markets starting with, but not limited to, electronics.

THE ELECTRONICS STORY

Wintelism and IPNs have mattered mightily to the outcomes of competition in the electronics industry.²⁷ They were the principal means by which the U.S. electronics industry recovered from its mid-1980s nadir in competition with Japanese firms to reemerge as the global technical and market leader by the mid-1990s. In the mid-

1980s, Japanese firms dominated consumer electronics and semiconductor memory, materials, and equipment, and looked entirely capable of repeating the feat in computers, office systems (e.g., copiers, faxes), and customer telecommunications equipment. There was the danger, widely debated in the industry, that U.S. producers of the latter systems would become dependent, as had their consumer counterparts, on their competitors in Japan for supply of the underlying technologies, processes, and manufacturing capabilities that went into their products. The danger was that such competitive dependence would be, as it was in consumer electronics, a first step toward market exit.

That did not happen, however. As described above, Wintelism shifted the industry's product market strategies away from final assembly and toward the distinctive value-added products backed by standards strategies in which American innovations and entrepreneurial companies were strong. Simultaneously, the American IPNs created an alternative supply base in Asia—an alternative to reliance on Japanese competitors for underlying component technologies and manufacturing capabilities.²⁸ At the same time, the networks helped to lower production costs and turnaround times while keeping pace with rapid technological progress. In the bargain, the networks spawned Asian-based direct competitors to Japanese firms in several of their stronghold markets (e.g., memory chips, consumer electronics, and displays). In effect, taken together, Wintelism and IPNs enabled U.S. firms to pioneer a new form of competition in electronics that grew out of the distinctively American market environment and was adapted to overseas opportunities. It is, as we have stressed above, a form of competition in which "core assets" are the intellectual property and know-how associated with setting, maintaining, and continuously evolving a *de facto* market standard—a process that requires perpetual improvements in product features, functionality, performance, costs, and quality. And a core managerial skill is orchestrating the IPN—that is, managing the continuously changing sets of external relationships and melding them with the relatively more stable core of internal activities in order to access relevant technologies; design, develop, and manufacture the products; and get them from product concept to order fulfillment in minimal time.

WHY WINTELISM AND IPNs MAY BE MODELS IN A BROADER RANGE OF SECTORS

To consider how widely Wintelism and IPNs will diffuse, and by way of summary, we recap here the key propositions of our argument:

I. *Wintelism*: In this era in which the electronics sector is now the expanding and driving industry group in the economy, Wintelism is the code word we use to reflect the shift in competition away from final assembly and vertical control of markets by final assemblers. Competition in the Wintelism era, by contrast, is a struggle over setting and evolving de facto product market standards, with market power lodged anywhere in the value chain, including product architectures, components, and software. The foundations for the technological trajectory of Wintelism rest with the emergence of the merchant semiconductor firms in the United States and user-driven data/communications networks, both developments framed if not unintentionally induced by U.S. policy.

II. *IPNs* and contract production services are the necessary organizational counterpart of Wintelism. These networks evolve to take advantage of a more intricate division of labor. They are not principally about lower wages or access to markets and natural resources. They have emerged in successive phases from off-shoring internal products to contracting for full-blown production networks. Manufacturing continues to matter, but the strategic problem of production is changed for companies.

III. *Changed Terms of Competition in Electronics*: Wintelism and its counterpart IPNs have already significantly altered competition in the electronics industry, affecting which home-based companies have advantage and altering opportunities and strategic problems for large and small firms alike.

The last issue is how far these developments will diffuse. Stated as a fourth proposition, we believe

IV. Wintelism and IPNs are likely to be broad features of the international economy that reach well beyond electronics.

Electronics may be the originating sector, the development test bed, for the new approach to competition and production.²⁹ But the

enormous possibilities for creating distinctive products and new product segments, and for increasing the functionality of existing products, suggest that the new approaches will diffuse more widely to other industries. The course of diffusion of the new organization and practice is unpredictable, but there are clear channels through which it can flow.

First, as argued above, digital microelectronics is transforming products and processes in a wide range of sectors. Some, such as telecommunications, have been converted from electromechanical to electronic processes. In others, such as automobiles, electronics is capturing a substantial portion of the product value-added. The more evident automobile entertainment packages are not the significant part of the story. Rather, every major subsystem in the modern automobile from brake, suspension, and power train controls through keyless entry, seat memories, and lighting controls (and soon navigation systems) is increasingly premised on microelectronics. The increasing value of electronic components means that cars will be built around electronic systems, thus offering the customers more features at lower cost. Firms that effectively cope with the new technologies will be the winners. As a recent *Economist* article concluded, few products will be immune to this revolution.³⁰ As microelectronics pervades the consumer durable, professional goods, and capital equipment sectors, transforming their products and processes, Wintelism and IPNs will become increasingly viable strategic alternatives—perhaps indispensable—in those sectors.

Second, as argued above, “best practice” models of corporate organization and strategy tend to spread well beyond the firms or sectors of their origin. Indeed, ideas about mass production dominated thinking in many industrial and service companies even when, in retrospect, Fordist notions were wildly inappropriate. Wintelism and IPNs are similarly likely to be imitated and to spread into models of best practice, to be taught and diffused widely.³¹ In fact, we believe that as the ideas spread, they will be found applicable in sectors such as automobiles, which were organized on a centrally controlled, vertical model in earlier periods. The Japanese auto sector, in its hey-day in the 1980s, and Japan’s consumer durable sectors more broadly suggest the possibilities of assembler-controlled “virtual” vertical integration within a single country. The possibilities of IPNs in consumer durables will likely spread with the off-shore investments of the

Japanese and Korean firms and now the emergence of third-tier auto producers in Asia explicitly organized on a network model.

Third, firms that might never have developed IPN approaches to production can soon, if not already, buy them in the market and concentrate their own efforts on Wintelist product opportunities. Simultaneously, the manufacturing service firms capable of providing turnkey networked production systems will certainly attempt to spread their message in order to expand their business. And clear demonstration effects will be provided by the success of high-profile early adopters, perhaps especially traditionally large, integrated companies like IBM, which migrate to the new models, and newer Asian producers like Korea's Daewoo, which succeed in Western markets with IPN-based strategies. Indeed, the networks, and the Wintelist strategies that empower them, are likely to spread widely beyond Asia as MNCs bring the new approaches to other markets. We believe, for example, that the new approaches are likely to be an essential feature of the integrated European economy as the former Eastern Europe returns to the Western marketplace.³²

Fourth, automobiles and other traditional consumer durable industries are being pushed in the direction of Wintelist competition. A series of new "assemblers" rooted in newly industrializing countries are entering and planning entrance into global markets. Often they are third-tier Asian firms trying to extend from initial entry in components to a position in final markets. These companies can assemble the final product but can neither produce indigenously critical components and subsystems from electronic controls to engines and gearboxes nor provide the production equipment from machines through robotics. Initially, they can provide low-cost labor for assembly functions and some engineering talent. The demonstrated ability of Western auto firms to implement advanced plants with radically improved productivity in places such as Mexico that they themselves often failed to implement at home suggests that these new entrants may find an enduring place in the market. Hyundai or Kia, the Korean producers that provide products that often were simply repackaged Japanese or American designs built with critical imported parts with foreign-based equipment, are thus only precursors of a new auto sector competition. Those new producers that are not so vertically integrated as their European, American, and even Japanese (virtual integration) predecessors may create a com-

petitive market for components and subsystem competition. In turn, competitive position in the markets for the particular constituent elements of the product need not evolve into standards-based competition reminiscent of the electronics sectors, but in some segments that is indeed likely to happen. Finally, the competitive practices depicted here have already proven that they can diffuse across sectors. As mentioned above, they have already moved from precursor sectors like the textile/apparel complex into electronics.

There would appear to be few constraints on the continued diffusion of Wintelism and IPNs now that they touch the core of modern industrial economies. Rooted in the American industrial adaptation and policy choices, they comprise a distinct, nationally founded story with global implications as a model of industry and a new dynamic of competition.

NOTES

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1. By vertical control we mean both *vertical integration* from inputs through assembly to distribution, as in the case of American auto producers, and the “*virtual*” *integration* of Asian enterprise groups, as when Japanese producers of consumer durables effectively dominate market relations with semi-independent suppliers through the *keiretsu* group structure. See Aoki (1988, 1993); Aoki and Dore, eds. (1994); Gerlach (1992).
2. This is presented by Hirst and Thompson in several places (1992, 1995, 1996).
3. As Raymond Vernon remarked at the BRIE Working Meeting on Globalization, 8 March 1996, the character, pattern, and significance of the international ties pre-1914 were vastly different than those developed today—much more the result of European colonial rule and preferences.
4. The material in this and the following paragraph is drawn from Borrus, Cohen, and Zysman (1991). See also Gilpin (1975).
5. For example, Intel’s powerful reach was illustrated the week of 9 February 1997, when the stock price of information network equipment powerhouse 3COM fell by 25 percent in one day. The cause was an announcement of declining margins on key 3COM products as it responded to Intel’s unexpected market entry.
6. For the classic account of competition in this era, see Tilton (1971).

7. For the argument on lean production, see Tyson and Zysman (1989); for the account on the emergence of merchant chip producers as the origins of Wintelism, see Borrus (1988) and Braun and MacDonald (1978).
8. Contrafactual arguments are always difficult, but there are few significant merchant firms outside the United States; most of the major semiconductor firms in the rest of the world are parts of large integrated companies—Siemens in Europe, Samsung in Korea, NEC in Japan.
9. This account of the development of open-but-owned systems is drawn from Borrus (forthcoming).
10. The “open-but-owned” rubric was first suggested in conversations with Robert Spinrad, Vice President of Technology Analysis and Development at Xerox.
11. This point and the following account are drawn from Bar and Borrus (1989).
12. Particularly relevant is *ibid.*
13. There are numerous accounts of this period. Representative are Chposky and Leonsis (1988) and Cringely (1992).
14. For a more detailed and technical discussion of all of the aspects of standards competitions outlined above, see Bar, Borrus, and Steinberg (1995) and the myriad sources on the economics of standardization cited there.
15. The shifting character of competition is not simply a matter of the emergence of software, of the virtual corporation, or the reorganization of production labeled post-Fordist manufacturing. Flexibility based on digital codes in an era of “virtual” private information/telecom networks has a different meaning than that flexibility rooted in general purpose machine tools. Problems of scale in software-rooted competition are completely different in character and kind from that in the complex assembly of consumer durables with machine tool makers struggling between flexibility and the low cost of long production runs.
16. Our thanks to Suzanne Berger for the comment that forced us to rethink our argument and the language, which we have borrowed.
17. This discussion is drawn from the work of and discussions with Tim Sturgeon, a BRIE research associate completing his dissertation in Geography (Sturgeon forthcoming).
18. One question, not addressed here, is which types of firms adopt which form for which purpose. Sturgeon (forthcoming) addresses this. See also Stopford (1996).
19. For an extensive discussion of this point and elaboration of such networked production structures, see the introduction in Borrus, Ernst, and Haggard, eds. (forthcoming); see also Zysman, Doherty, and Schwartz 1997.
20. Comments of William Miller, professor emeritus, Stanford University, and former president of SRI, at BRIE Working Meeting on Globalization, 8 March 1996.

21. For an extended critique of the literature on production systems, see Zysman (1997).
22. For a description of the potential for developmental insertion, see Ernst (1994).
23. On the impacts of China's scale, see Cohen (1997); on China's impact on FDI in the region, see Encarnation (forthcoming).
24. Sturgeon (forthcoming) cites Gereffi and Korzeniewicz, eds. (1994). In this industry, fabric is produced, often in highly automated plants, in one place; it is cut and processed in another and stitched and assembled and finished in still others. Many "assemblers" are simply product definition and marketing companies who provide design, distribution, and (above all) brand names like Nike. Why not call this practice "Nikeism"? Textile/apparel innovation is basically limited and does not generally define the broader texture of the industry as a whole. There is much less room for the constituent suppliers to capture market rents and semi-monopoly positions.
25. The material in this paragraph has been prepared with Sturgeon and is based on his dissertation and the relevant data sources cited there.
26. According to Gilbert Amelio, Apple's new CEO, the company's strategy is to outsource production to companies such as SCI in order to reduce some of Apple's manufacturing overhead and inventory carrying costs while positioning Apple to concentrate more intensively on marketing and design (*Electronic Buyers News*, issue 1001 [8 April 1996]: 8).
27. This section is drawn and quotes extensively from Borrus (forthcoming).
28. The story of how the U.S. firms built their IPNs and constructed the alternative Asian supply base is told in detail by Borrus (forthcoming).
29. In fact, some would argue that the electronics story is itself simply a subset of developments grouped under a variety of labels including post-Fordism, flexible specialization, and volume-flexible manufacturing. We strongly disagree. In fact, however, resolving that debate is not crucial to our analysis here since at worst we are highlighting specific, underappreciated features of a new production paradigm.
30. Report on "The Electronics Revolution in the Motor Car Industry," published by the Economist Intelligence Unit.
31. For example, *Business Week's* famous issue on the "Virtual Corporation" is one such effort to diffuse similar ideas, although we think it misconstrues essential features described above.
32. For an extended discussion of the potential for IPNs in that regard, see Zysman, Doherty, and Schwartz (1997).

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USING INDUSTRIAL CAPACITIES TO AS A WAY OF INTEGRATING THE CENTRAL AND EAST EUROPEAN ECONOMIES

Constanze Kurz and Volker Wittke

INTRODUCTION

The political breakdown of state socialism has done more than initiate far-reaching economic and social changes in Central and Eastern European countries (CEECs). The transformation from centrally planned to market economies is associated with an opening of societies which before were largely separated from the world market. Since the beginning of the 1990s the CEECs have been accessible for companies from capitalist industrial countries not only as a market for sales, but also as a location for manufacturing. Particularly for West European manufacturers, this provides new options for using and integrating Central and East European (CEE) capacities into the industrial division of labor. The quantitative aspect of this integration—as far as trade and direct investment are concerned—has been developing quickly during the 1990s, with the most dramatic changes in the Višegrad states. Our assessment thus focuses on developments in Poland, Hungary, and the Czech Republic, where the ongoing integration into Western structures is particularly evident.

When one examines the options for Western companies in these countries and what consequences will arise for the industrial division of labor between Western and Eastern Europe, two alternatives are discussed: manufacturing location and sales market. These alternatives hold different implications with regard to social development in the transformation countries. The first alternative relates to the fact that European industry—like its competitors in Japan and the United States—now has access to a large labor force and industrial capacities in its immediate neighborhood which produces un-

der different conditions and social standards ("Mexico in your backyard"). In this view, export achievements of the CEECs result primarily from low labor costs. A full utilization of these capacities presumes an economic development for the CEECs which is primarily export-based, with little emphasis on private consumption. The second alternative primarily assumes new market opportunities, partly based on spatial proximity as well. In this case, the "emerging market" promises higher dynamics of growth than elsewhere and brings in companies from Western Europe, particularly from Germany.¹ This path of integration, however, requires a rapid growth of demand, including spending power, thus assuming a different social development from the first alternative.

This discussion, however, does not do justice to the complexity of the situation. It disregards the fact that the integration of the CEECs does not mean a simple expansion of Western production and marketing strategies. Our key argument is that the increasing integration must be seen as part of a *fundamental reorganization of the Western model of production*. Transformation in CEE took place during a period of drastic restructuring of European (particularly German) industry. In the beginning of the 1990s German original equipment manufacturers (OEMs) were forced to restructure their internal work organization and external value chains and simultaneously rearrange their production capacities on an international scale. Not only did this lead to an increased "internationalization" of core production, but it also initiated efforts to increase international activities of the (German) supply industry. More and more suppliers followed OEMs abroad or even led the way (Deutsche Bundesbank 1997). In addition to South America and the United States, locations in CEE increasingly gained from the spatial rearrangement of supply networks and the reorganization of "core factories" that went along with it.

The integration of industrial capacities in CEE is embedded in this reorganization in the West. The development can thus be described as a twin process of transformation in the East and structural adaptation in the West. At present, this process is in full swing, and the end is not in sight. Despite the temporary character of the activities thus far, one thing is already clear: Western approaches to reorganization do not follow a uniform pattern; they vary considerably. Structural causes for problems of competitiveness are being tackled with different strategies, and these strategies of internal and external

restructuring in the West constitute two main paths of integrating CEE into the Western division of labor. The main differences are in the way industrial capacities are used.

The *least cost approach* cuts cost by using the wage-cost differential. A rearrangement of domestic (i.e., internal) functional and production structures is almost entirely excluded in this approach. Restructuring is limited to transferring the production of standardized, labor-intensive parts and product groups. An alternative approach aims at *complementary specialization* of industrial capacities in East and West. Here also cost-cutting plays a certain role; however, low costs are not achieved simply by “transferring the problems,” which may be considered typical for the least cost approach. Wage-cost advantage is an important aspect too, but it does not sufficiently explain commitments in the East. Rather, the fundamental reorganization of all processes provides the basis for improved efficiency. In the end, complementary specialization leads to a strategic rearrangement of all tasks and functions within the value chain. The industrial capacities of CEE are integrated in Western value chains on a long-term basis.

The least cost approach and complementary specialization both face an experienced labor force, on the one hand, and historically developed technical and organizational structures on the other. Unlike low-wage areas in the back yard of Japan or the United States, transformation in the CEECs marks the end rather than the beginning of industrialization. Although there were many differences among Hungary, Czechoslovakia, and Poland, their economies were already industrialized before 1989. Structures of production and in the industrial sectors were the result of a specific developmental path which differs completely from that of OECD countries. An important aspect in this regard is the dominance of raw material and capital goods industries and a complementary underrepresentation of consumer goods industries, particularly those which have been typical for the West since 1945: cars, household appliances, electronics. Another aspect is the type of specialization within the Council of Mutual Economic Assistance (CMEA) and the notorious deficits in the area of innovation (Nove 1977; Kornai 1980; Conert 1990). All in all, it was the very path of industrialization in the CEECs, with its structural blockades of modernization, which contributed to the crisis and the end of the centrally planned economies.

The two strategic approaches have a different way of dealing with this “legacy of the past.” The least cost approach does not merely continue traditional patterns of development and specialization, which today are considered insufficient. By concentrating on the wage-cost advantage, it may lead to a “regressive specialization” of industrial capacities, which would limit production to labor-intensive, low-tech/low-cost items. Considering that low wages in CEE are likely to be a short-term advantage during the transition period, this approach has problematic consequences in the middle-range perspective (Porter 1991; Transition Report 1997). On the other hand, a strategy of complementary specialization could induce a sustainable development of industry in the transformation countries, thus providing a far more future-oriented perspective. The question is, however, how far the reindustrialization process launched by Western companies will go. As far as can be seen at present, the weak spot is a gap between “new” (emerging through Western commitments) and “old” (CEE) elements of industrial structures. Advanced strategies of Western companies concentrate on the use of a qualified labor force in new production sites, which have weak or no connections with existing domestic production and supply networks. If this pattern persists, modern industrial structures will remain mere islands within CEE; the process of reindustrialization would remain fragmentary.

Our argument follows two steps. First, we want to clarify the speed and extent of integration of industrial capacities in CEE using data on East-West trade and foreign direct investment (FDI). Second, we will sketch different paths of integration as they appear to be evolving. It should become clear how the integration of Eastern production sites in the (Western) industrial division of labor works and how deep the break with traditional structures and patterns of industrialization really is.

TRADING WITH NEIGHBORS: REGIONAL PATTERNS OF INTEGRATION

As noted, since 1989, the economic development of the CEECs, in particular the Višegrad states, has gone through dramatic

changes. The states that were considered economically developed in the West (most of all the former Czechoslovakia, but Poland as well) experienced a massive decline in production. Until 1992, industrial production fell by double digits annually. In 1991, production in the Višegrad states had dropped by about 30 percent as compared to 1985 (Habuda et al. 1996). The duration of this recession came as a surprise not only to Western experts, but also to those in charge of reform in the respective countries. A whole bundle of exogenous factors (the breakdown of traditional internal and export markets in the East, economic slowdowns in the West, growing fiscal and budget deficits) aggravated the effects of structural modernization blockades and accelerated industrial decline. Initially, CEE economies did not appear to be competitive enough to survive under world market conditions. This destructive development was followed by a remarkable process of recovery, starting in 1992–93. Poland, where signs of a slight recovery of industrial production could be seen in 1992, led the way. Industrial output rose for the first time by 4.2 percent, adding 6.2 percent in 1993 and a remarkable 12.1 percent in 1994. In the Czech Republic and Hungary, economic development became more stable and showed positive growth rates not only for the GDP, but also for industrial production.

These dramatic ups and downs in industrial production were accompanied by similarly drastic changes in foreign trade structures. Within a few years, the CEECs grew out of their traditionally strong ties to patterns of trade and specialization within the CMEA and prepared for integration into Western markets. Early in the transformation process, the overall volume of exports fell rapidly—just like industrial production—but by 1994 it had reached 1988 levels again (Hoekmann and Djankov 1996). The consolidation of export volumes was accompanied by a rapid rise of foreign trade with Western countries. After the dissolution of the CMEA, the Višegrad states managed a reorientation to Western markets, particularly the EU, within a few years. In the case of Poland, the share of EU exports rose from 41.5 percent of foreign trade in 1989 to 70.1 percent in 1995. During the same period the respective figures in Hungary rose from 39.1 to 62.7 percent, and in Czechoslovakia, from 32.7 to 55.2 percent.² While trade expanded between the CEECs and the West, trade among the CEECs and with the states of the former Soviet Union (FSU) showed a considerable decline.

A more detailed look at CEE trade with the West reveals clear regional priorities. The neighboring countries have become *the* most important trade partners. Germany in particular has become the trade partner for the CEECs, for imports as well as exports. (Since many Austrian firms are subsidiaries of German companies, their involvement has to be assessed beyond what an analysis based on countries alone could yield.) In 1995, 38.5 percent of Polish exports went to Germany, followed at a huge distance by exports to Russia (5.6 percent) and Italy (4.9 percent). Nearly 30 percent of Hungarian exports went to Germany, while 10.7 percent went to Austria and 8 percent to Italy. Germany was just as important for the Czech Republic as for Poland: 36.6 percent of all its exports went there; a smaller percentage went to its former partner in the federation, Slovakia, and a mere 6.2 percent went to Austria. With slight differences, the structure of imports looks very much like that of exports. Germany is the most important supplier for Poland (with a 26.6 percent share of all imports), followed by Italy (8.5 percent) and Russia (6.7 percent). In Hungary, the German share of all imports is 23.5 percent followed by Russia (12.3 percent), whose high level of supply is based mainly on fuels. Austria is in third place, with 9.7 percent. For the Czech Republic, the German share of imports (30.3 percent) is considerably higher, followed by Slovakia (just below 10 percent), Russia (7.3 percent), and Austria (6 percent). Obviously, regional proximity has a strong effect on the restructuring of trade relations in the transformation countries. This evidence is supported by the fact that Southeast European countries, not having a common border with the West, have developed much weaker trade relations with the EU. (In Bulgaria, for instance, only 38.3 percent of exports and 38.1 percent of imports go to or come from the EU.)

Foreign trade shows similar shifts for the Western countries. In the foreign trade of their capitalist neighbors, the CEECs, especially Poland, Hungary, and the Czech Republic, have attained considerable importance within a few years. Since 1993, German exports to the CEECs have gone up rapidly by 30 percent, reaching a level of DM 60 billion in 1995. More than half went to Poland, Hungary, and the Czech Republic. Today trade with the CEECs has reached 8.2 percent of German exports, thus exceeding the level of trade with the United States. Imports from the CEECs have developed even

faster during the last few years: at DM 58 billion, they were almost 50 percent above 1993 levels.

These developments can only be appreciated in light of the fact that the increases in trade volume with the West were *not* achieved at the expense of rising disparities in the goods structure of imports and exports. The high growth rates cannot be explained by a simple enforcement of the old patterns of trade between East and West, whereby raw materials were traded for industrial products. Quite the contrary: in the course of opening and integration of the CEECs into Western markets, (raw) material-intensive goods, just like agricultural products, have lost some of their importance in CEE exports. The rapid increase in trade with the West has been accompanied by an increase of intra-industry trade. With the Grubel-Lloyd Index as a measure of intra-industry trade, the index scores of Hungary, the Czech Republic, and Slovenia are higher than those of EU countries like Portugal or Greece; the scores for Poland are still somewhat lower (Hoekmann and Djankov 1996).

The growing relevance of intra-industry trade provides evidence for an increasing integration of CEE in the industrial division of labor in Europe. These figures, however, say little about what role the industrial capacities of Poland, Hungary, and the Czech Republic play within this division of labor. The category of intra-industry trade comprises quite different product groups: work-intensive, low-value-added products, *as well as* (relatively) capital-intensive, demanding products with a high degree of differentiation. Foreign trade statistics show an increase in both product groups, with a strong emphasis on the first. If end products (SITC group 8) can be seen as an indicator for labor-intensive, low-value-added products, then these products have contributed significantly to export growth since the beginning of transformation. This trend is particularly evident in Poland, where the share of group 8 items—here mainly clothing and furniture—rose from 6.7 percent (1989) to 20.8 percent (1995) of total exports. The respective export share in Hungary rose from 10.7 percent (1989) to 17.9 percent (1995). Clocks and optical and photo items had growth rates above average, while those for clothing declined. In the Czech Republic, the share of group 8 items more than doubled between 1989 and 1996, rising from 6.2 to 14.9 percent of total exports.

The growing share of group 8 products shows that the CEECs have increasingly concentrated on the production of labor-intensive industrial goods.³ This increase is primarily based on the fact that Western companies use CEE locations for outward processing trade (OPT). The extent and significance of OPT, however, have to be estimated far higher than the rates for the product group “end products” suggest.⁴ The Hungarian foreign trade statistics, for instance, show an OPT share of 26 percent of total exports. There, 94 percent of all exported clothing was produced on an OPT basis. OPT also represents relevant shares of light industry production. Its share in machine manufacturing was 33 percent, in metallurgy 14 percent, and in the chemical industry 9 percent. In machine manufacturing, 51 percent of the exported machinery and equipment was manufactured under OPT. In Poland, OPT made up for 23.5 percent of total exports in 1995. Like in Hungary, the export of clothing is almost entirely based on OPT, which is used most intensively by Germany (Herberg 1997). The main focus lies in Poland and Romania. Textiles and clothing account for by far the largest share of total trade volume. Currently, the German clothing industry is transferring considerable volumes from Southeast Asia to the CEECs. Leather and furniture industries also show high rates of OPT. For instance, 80 percent of total German imports from Poland are based on OPT. In this regard, Hungary and the Czech Republic are comparatively insignificant (Kaufmann and Menke 1997).

It is unlikely, however, that exports of these products will be extended any further in the course of market integration—at least not for Poland, Hungary, and the Czech Republic. Rising labor costs in these countries should lead to a situation in the foreseeable future where the important comparative advantage of the CEECs will not last. This is true particularly because countries located further East are likely to provide better conditions for these footloose industries.

As noted, in the course of the 1990s, the CEECs have not specialized exclusively on labor-intensive, low-tech products, as growing exports of machinery, equipment, and vehicles to the West show. SITC group 7 can be taken as an indicator. Figures show that the share of this export sector for Poland, Hungary, and the Czech Republic—which used to be very strong during the CMEA—is still far below the rates before 1989.⁵ This, however, is caused by a radical structural change: there was a steep decline of trade in machinery,

vehicles, and equipment within the CMEA. For the Czech Republic, the share of these products exported to the EU rose from 14 percent (1989) to 24 percent (1995). In Hungary, the respective figures rose even more sharply during the same period: from 13 to 27 percent. Only in Poland was the growth limited, showing a modest rise from 12 to 17 percent.⁶

The growing rate of exports to the West is only partly due to the fact that traditional products, which formerly had gone to CMEA partners, are nowadays sold on Western markets for dumping prices. It is more important that the profile of goods and exports is characterized by innovations in the traditional segments and increasingly by new products: "Export growth is either in products that were not exported at all to the CMEA, or comprise 'traditional' export items that have been substantially upgraded or differentiated" (Hoekmann and Djankov 1996: 26). Between 1992 and 1994, Hungary and the Czech Republic in particular showed remarkable improvements in product quality in mechanical engineering and reached international standards. Moreover, both countries report substantial growth rates (though starting from an extremely low level) in new products in telecommunications, home entertainment, electric machinery, electric devices, and—most of all—vehicles and vehicle parts (Transition Report 1997: 70; Kraft and Pahl 1997).

Starting at a very low level, Hungarian exports of cars rose tenfold between 1991 and 1995.⁷ The export of devices and parts—often included in SITC group 7—showed similar dynamics: "Between 1992 and 1995, parts manufacturing increased two-and-a-half times, the output of vehicle electric devices rose fivefold, and their combined sales revenues exceeded HUF 73 billion in 1995. In 1995, more than 60% of vehicle parts and more than 86% of car electric articles were exported" (CSO 1998). The Czech Republic too showed a remarkable growth in parts and components exports. Components exports grew from virtually nothing in 1991 to an estimated \$350 million in 1996 (*Business Monitor* 1998). The developments in Poland are quite similar. The share of vehicle production in total exports still runs at a relatively low 3 percent; on the other hand, exports are remarkably dynamic, growing by 26 percent between 1994 and 1996. This growth reflects the increasing relevance of the automobile industry within the Polish economy.⁸

This export growth shows that the CEECs are increasingly involved in intra-industry trade, which is based on an exchange of similar products. The use of industrial capacities in Poland, Hungary, and the Czech Republic by Western firms is an important driving force for this development. Industrial products are being exported to Western Europe—end products as well as parts (manufacturers in the East supply the Western manufacturers of the end product). The goods structure shows a certain shift from labor-intensive, low-input products to more demanding supply parts and end products, though the priority still lies on the first group.

With a growing share of total production and with more input, industrial capacities of CEE are being included in the supply chains of Western manufacturers. This integration is expressed by growing imports of equipment and other supplies. To put it more simply, because locations in the East are increasingly being integrated into Western value chains, CEE exports and their imports of parts and components are growing simultaneously. Hungarian imports show the highest growth rates in the area of components (vehicle parts as well as standard parts for machine building); developments are similar for Poland and the Czech Republic. Import-export relations are likely to keep shifting considerably during the next few years as CEE integration into Western networks continues.⁹

FDI

Data on the development of FDI provide further evidence for the argument that the reorientation of foreign trade in Hungary, Poland, and the Czech Republic is based to a large extent on the use of industrial capacities in these countries by Western manufacturers. FDI in the CEECs increased almost fourfold between 1993 and 1996, particularly in the states of the Central European Free Trade Area (CEFTA), which attracted almost 90 percent of FDI in 1996 alone. In the overall picture, strong disparities between the littoral states of the East, on the one hand, and other CEECs on the other become evident. Among the Baltic states, Estonia gains from its proximity and affinity to Finland, Latvia is in mid-field despite strong traditional Western ties, and FDI commitment in Lithuania is rather limited (DIW 1997a).

Just like with trade relations between East and West, FDI is concentrated in the “pioneer states” in the reform process: Poland,

Hungary, and the Czech Republic. In the initial phase, Hungary in particular was considered an outstanding investment site and drew 40 percent of the overall stock in 1996. In Poland, development started later but has accelerated enormously during the last three years; in 1996, the Polish share of FDI was at 25 percent, rising considerably in 1997 too. In contrast, the commitment of Western investors in the Czech Republic (its share leveling out at around 16 percent) went down a bit.

A look at where FDI comes from emphasizes that the integration of CEE industries takes place at arm's length from the former iron curtain, although the predominance of Western neighbors is not quite as pronounced in FDI as in foreign trade. In Hungary and the Czech Republic, German companies were the most important foreign investors between 1990 and 1996, holding a share of close to 30 percent. Only in Poland are U.S. investors leading, with a share of almost 25 percent; they are followed by German (12.7 percent) and Italian (10.2 percent) investors. In the Czech Republic, U.S. (14.5 percent), Dutch (15.3 percent), and Swiss (12.7 percent) investors hold substantial shares. In Hungary, however, the U.S. share has shown a downward trend since 1995. Note that the assignment of investors to countries of origin in the FDI statistics is somewhat biased: in the case of the automobile industry, for instance, Ford or Opel/GM are counted as U.S. investments, although Opel projects were carried out by the company's European branch. Despite this distortion, it remains quite clear that CEE is a manufacturing location for not only West Europeans.

The integration of CEE locations into Western value chains is based primarily on the fact that in the course of the transformation process the spatial dimension of economic activities has been fundamentally reassessed since 1990. A look at distances makes clear how close "old" locations in the West and "new" ones in the East actually are: for example, the distance between Szekesfehervar (Hungary) and Vienna is 200 km. Within the CEECs, Western preferences for certain locations induce shifts between regions—e.g., in favor of "easy transportation" sites close to the borders at the expense of traditional industrial sites.¹⁰

The distribution of FDI by sectors shows two areas of concentration. Close to 30 percent of foreign capital goes into large projects in telecommunications, energy, and services.¹¹ Aside from finance

and trade, which account for about 12 percent of FDI, Western investors concentrate on manufacturing industries (Sugar 1998). Industrial production draws 50 percent of FDI. Food, semi-luxury industries, consumer goods, and transport equipment attract large and even growing shares of foreign capital (*Business Monitor* 1998; Ufer 1997). Western companies are particularly evident in the building up (Hungary) or restructuring (Czech Republic and Poland) of industrial capacities in the automobile industry, where Western OEMs and supply industry have invested on a large scale and are considering further investments. Hungary has Ford Hungaria, Opel Hungary, Audi, and Magyar Suzuki. In Poland, Daewoo has purchased the FSO car manufacturing plant in Warsaw for \$1.1 billion and has announced further investments of \$340 million over the next five years. Isuzu has set up engine production for \$250 million in Katowice, an area with special economic and tax conditions. In the Czech Republic, the automotive sector has seen the most significant growth in FDI since 1993. This is owing to not only the involvement of VW with Skoda, but also the activities of Daewoo at Avia to develop a new truck and engine to Euro II standards. In Hungary, the OEMs Audi and Daewoo are particularly active, as are Daewoo, Opel, and Fiat (FSM Bielsko-Biala) in Poland; the last has a long tradition and is by far the largest investor. With regard to the supply industry, many companies are active: Bosch, Siemens, VDO, ITT, Lucas Varity, Knorr Bremse, Ferodo (T&N), Magna International, Johnson Controls, TRW, Petri, and Hayes Wheels. The last has a \$70 million joint venture in Ostrava (Czech Republic) with the north Moravian steelmaker Nova Hut for the production of wheels. More than one-third of the top European automotive components suppliers already have manufacturing or assembly operations in the Czech Republic. The same firms are active—on a different scale and with different intensities—in Hungary and Poland too.

Beyond the automobile industry, the manufacturing of parts, components, and sometimes even end products under Western supervision includes household appliances and consumer electronics. In the Czech Republic, there are large investments by Motorola, Matsushita (Panasonic), and Kyocera; in Poland, Thomson Consumer Electronics (TV tubes and sets). In Hungary, significant FDI over the past few years included (for example) IBM hard disk manufacturing (\$24 million) and a Philips VCR plant (\$20 million). The most signifi-

cant industrial investments in 1996 were being implemented by Sony (audio and video sets, \$20 million), Philips (monitor plant, \$20 million), and most of all by IBM (expansion of hard disk manufacturing, \$100 million). With regard to capital goods (machinery, equipment, and plants), which has not attracted much capital so far, the involvement of ABB in Poland and Hungary stands out. FDI activities may vary, but they contribute to export growth and changes in the structure of industrial goods. In several sectors of production, foreign companies play a vital role for the modernization of industry, thus for the process of reindustrialization in CEE as a whole.

Normally, FDI activities are conducted in several steps. The Deutsche Bundesbank gives an appropriate description of the process:

In the beginning, the company starts to export goods abroad; the erection of distribution, warehousing, and service facilities follows; then perhaps licenses are given to local suppliers, and finally, with enough experience with the respective market, assembly and manufacturing plants are set up which are largely dependent on the parent company at first, but later on often develop to become independent subsidiaries (1977: 67).

In effect, the influence of FDI on the process of integration and the readjustment of the industrial division of labor take effect with a certain time lag. While small-scale activities were characteristic of investment strategies in the beginning of transformation, large-scale projects by large companies began to determine development and statistics (Kraft and Pahl 1997). Obviously, in the beginning Western manufacturers avoided overly binding commitments with regard to their expected or actual involvement in CEE. Their initial approach was mainly to establish options. In order to gain market access (which is the beginning of the process), they started with joint ventures (with minority holdings), thus utilizing the production capacities of their Eastern partners (e.g., Skoda in the case of VW). In a second step, a majority holding is established under the control of independent subsidiaries, as in the case of Audi in Győr. During this stage, considerable capital flows from the West. The range of options, however, is still flexible. In the case of VW, promised investments were cut by half due to problems at home and abroad. On the other hand, Audi gradually extended its commitment in Győr

(including investments) because the production worked better than expected and new assembly tasks emerged.

USING THE INDUSTRIAL CAPACITIES OF CEE: DIFFERENT APPROACHES OF WESTERN COMPANIES

Trade and FDI have accelerated the integration of CEE during the last years, mainly through three distinct ways of utilizing CEE industrial capacities. What common starting points do they share, what are the differences, and which long-term effects can be expected for the developmental dynamics of industrial restructuring in the East and the West? These questions will be examined more closely below.

GAINING MARKET ACCESS THROUGH PRODUCTION

New market opportunities arose particularly in areas where state socialism had been deficient—infrastructure (especially in telecommunications, which were far behind the standard of developed capitalist countries) and consumer goods. There was an undisputed need to catch up, not only with regard to notoriously poor items like cars, consumer electronics, or household appliances. Food and semi-luxury items (e.g., chocolate, cigarettes, soft drinks) also seemed to provide good opportunities for Western manufacturers to gain market positions which were as dominant as they already held in the capitalist countries.¹² In any case, potential markets in CEE were a largely unstructured area for Western manufacturers at the beginning of the transformation; with very few exceptions, none of the Western companies had held a relevant market position in any of the reform countries before 1989. Under the new political conditions, gaining quick access to the Eastern markets was a key issue, and local manufacturing activities are an important means of doing so and of keeping away competitors. As the managing director of Opel Hungary put it, “A local presence is essential to building goodwill” (*Financial Times*, 13 February 1997).

The CEECs had pressed for domestic demand to be satisfied by domestic production. Imports from the West were impeded by cus-

toms policies while investments for building up domestic production sites were supported by tax credits.¹³ Such a policy was intended to avoid imports based on foreign currency. In addition, bringing in foreign industries—particularly automobile industries—could give a boost to reindustrialization. If Western manufacturers wanted to gain from the new markets, building up production capacities in the East was crucial; local production appeared to be more promising than export strategies.

Accordingly, the big capitalist manufacturers of soft drinks, cigarettes, cars, washing machines, and TV sets have joined in local production sites or have built their own plants. In cases where companies did not come to far-reaching cooperation agreements with local manufacturers, they started to build final assembly plants in the 1990s. In the automobile industry, Fiat, VW, Daewoo, Opel, Suzuki, Ford, and Peugeot established completely knocked-down (CKD) assemblies in Hungary and Poland. In electric household appliances, Whirlpool, Electrolux, and Bosch-Siemens have built up assembly capacities, as have Philips, Samsung, Daewoo, Sony, and Thomson Multimedia in consumer electronics. It looks likely that companies like Siemens, Ericsson, and ABB, which want to modernize Eastern infrastructure in telecommunications and energy supply, will do the same. Here too local production (in this case of equipment) is necessary to gain access to CEE markets.

These production activities, which are directed at market access, were not based on the fact that production in the East is cheaper than in the West but rather that local production is more reasonable than export because of trade barriers. This is why assembly plants often had little input. Even the car manufacturers (in the case of CKD assembly) did not employ more than a few hundred workers in CEE. Since the reason for the strategy was to gain access to new markets, this type of production activity did not cause much irritation in the West.

NEW INDUSTRIAL DIVISION OF LABOR IN EUROPE

Building up and using production sites in CEE served not only to open new markets in the East, but also to reorganize companies in the West. Many European, particularly German, industrial com-

panies were under heavy cost pressures. The strategy of escaping international cost pressures by moving into high-priced segments with technically advanced, high-quality products had clearly reached its limit in the course of economic decline in 1992–93. Companies have reacted with a broad bundle of measures: acceleration of innovation, new definition of production portfolios, improving production efficiency, etc. Within these measures, the reorganization of value chains is of great importance. During the last few years, companies increasingly have *organizationally* excluded production activities from existing structures (mainly by outsourcing to suppliers), and they have *geographically* excluded production from traditional industrial centers.

In this context, the availability of industrial capacities in CEE is an option for reorganization strategies for two reasons. One is the wage differential between West and East, which makes local production in Poland, Hungary, and the Czech Republic attractive from a cost-cutting point of view—all the more so since the very countries which are seen as high-wage economies even in an inner European comparison (Germany, Austria, the Scandinavian countries, and northern Italy) surround the CEECs, which means that the wage gap is particularly large between immediate neighbors. The other is that spatial proximity reduces logistic problems and efforts toward the integration of Eastern locations in production and delivery combines, particularly in cases where the time factor plays an important role. Often locations like Szekesfehervar and Győr (Hungary), Mlada Boleslav (Czech Republic), or Gorzów (Poland) are only 150–400 km apart from Western plants within the same value chain. Accordingly, the centers of production are the western regions of Hungary, Poland, and the Czech Republic. Together with other factors, this option probably has contributed a great deal to the comeback of several European industrial companies—for instance, the German car manufacturers—at the end of the 1990s.

As a result of reorganization strategies, the industrial division of labor within Europe—especially along the former border between “East” and “West”—has changed and continues to change. The Western companies, however, do not follow a common strategy, so this new division of labor also does not follow a common pattern. One strategy is to have Eastern producers specialize in labor-intensive, low-wage goods, while other strategies emphasize capital-in-

tensive, state-of-the-art production. Plants in the East are treated as an “extended workbench” by some firms, while others upgrade local production by the transfer of know-how and the integration of development and engineering activities.

One has to consider development over time. Typically, less demanding, low-tech production can be transferred relatively easily. Alternative strategies are usually the result of longer-term planning, which includes a consideration of local experience. Quite frequently, companies start with labor-intensive, low-tech production while developing demanding production (in terms of technology and qualifications). Another strategy is to upgrade existing plants over time by transferring additional engineering functions or sometimes sales and marketing.

THE LEAST COST APPROACH

A frequent reaction of Western manufacturers to the economic decline of the early 1990s was cost cutting within existing supply chains (i.e., the range of products and variants was largely left untouched). Great efforts were made to improve the efficiency of existing production; outsourcing became more important, and suppliers were put under high cost-cutting pressure. In this context, transferring certain production activities to the CEECs seemed to guarantee short-term efficiency—mainly for labor-intensive parts manufacturing and subassembly, which could be done by using standard technology. Quite often, the transfer of production to the East took place *instead of* reorganization (technology, labor organization, or product upgrading) in the West.

This kind of transfer is not really new, but the opening of CEE allowed access to industrial capacities close to existing locations in the West. Often, CEE production capacities—plants or segments of production within plants—could be used, providing short-term benefits. The short distance to Western companies facilitated preparation, as well as the management of production activities in Poland, Hungary, and the Czech Republic. The exploration of possible sites and partners was relatively uncomplicated—due to short traveling distances—and the risks of production transfer could be minimized by quick reactions by the Western company. This included manage-

ment functions as well as engineering resources (for instance, manufacturing problems in the East could be solved by fire-fighting from the West). These aspects are of particular importance for firms lacking experience with transnational networks (i.e., small and medium manufacturers). For them, becoming involved in “low-wage locations” in CEE is very attractive—as it used to be with Southeast Asia or even with EU locations like Portugal, Spain, or Greece:

Factor cost incentives, and in particular lower labor costs, are found to be more important for small firms, and firms from neighboring countries such as Germany and Austria. . . . German firms also appear to use OPT contracts relatively more frequently, so as to exploit the differential with domestic costs of production (Estrin et al. 1997: 13).

The least cost approach serves primarily as a substitute for production in the West. An increase of production and employment in the East usually corresponds to a decline in the West. The CEE plants deliver mostly to Western customers—often within the same firm. Also, intermediates often come from Western plants. Such transfers were particularly far-reaching in the German clothing industry. This branch, mainly consisting of medium-size firms, had an OPT share of 60 percent in 1995. In the same year, fabric and related products worth DM 7.7 billion were manufactured abroad, representing 70 percent of clothing manufactured on OPT terms within the EU. For the German clothing industry, OPT has been a cost-cutting strategy. In the course of the opening and integration of the CEECs, traditional cooperation was developed further—for example, with Romania (where approximately 70 percent of total clothing production capacity is OPT) and Hungary (50 percent OPT). Such activities are at the expense of Asian countries, as well as some EU countries like Greece. Low labor costs in a business line that counts wage minutes instead of hourly wages, the low technical levels of production (Western machines to produce “Western quality”), and the spatial proximity of the CEECs provide custom-made workbenches. Similar production transfers can be seen in the furniture industry. By now, every other piece of furniture sold by German companies in Germany comes from German-Polish factories. The Polish subsidiary of the German upholstery manufacturer Steinhoff, for instance, em-

employs 4,000 workers in eight Polish plants (*Süddeutsche Zeitung*, 12 January 1997).

Low labor costs in CEE are an incentive for a transnational rearrangement of value chains in the metal and electrical industry as well. The automobile industry, for instance, has transferred mainly labor-intensive components assembly to CEE locations. This process is most extensive for the assembly of wire harnesses, where independent as well as internal suppliers of the large car manufacturers have transferred production capacities on a large scale. Companies like Leonische Drahtwerke, Temic, Siemens Automotive, AMP, United Technologies Automotives, Lucas SEI, GM Delphi's Packard Electric, and Volkswagen Bordnetze (a joint venture of Volkswagen and Siemens) produce wire harnesses in Hungary, Poland, the Czech Republic, and Slovakia—some in several factories and in different countries. These factories export mainly to West European final assembly plants, where product and process development—and to some extent mechanized manufacturing—remain.¹⁴

The new division of labor in consumer electronics follows a similar pattern. For instance, Philips, the largest European manufacturer of these products, has massively transferred labor-intensive assembly to CEE (mainly Poland and Hungary) during the last five years. While increasing employment in Poland to 6,000 (in 1996) and in Hungary (where Philips now owns twelve plants) to 5,200 (in 1997), it reduced employment in Western Europe by several thousand. This mainly affected Germany, where Philips heavily reduced employment in the Grundig company, completely giving up its stake early in 1997. While final assembly (of VCRs, TV sets, and audio devices) and component assembly was transferred almost completely to Hungary and Poland, Philips concentrated the capital-intensive manufacturing of tubes (for TV sets and computer monitors), mechanized production of components (mainly for VCRs), and boards assembly in Germany and Austria. Philips makes a clear distinction: capital-intensive production stays in Austria, labor-intensive assembly goes to Hungary. The production of scanners and disk drives and boards assembly, which is partly mechanized, still take place in Austria. The final—manual—assembly is completely in Poland or Hungary. Thus production in CEE is largely export-oriented: "Over 90% of our production is exported" (Willem van der Vegt, chairman and CEO of Philips Hungary) (*Financial Times*, 9 December

1997; *Warsaw Voice*, 19 May and 20 October 1996; *Süddeutsche Zeitung*, 15 November 1996).

The transnational ABB provides a good example of one company following different strategies. ABB extended production very early and very much to the East. In 1996 it had seventy companies in CEE with some 30,000 employees. For one thing, ABB wanted to be present on CEE markets (particularly in building and modernizing power stations); in addition, ABB used qualified production workers and engineers in Poland, Hungary, and the Czech Republic. On the other hand, ABB has used locations in CEE to reorganize value chains and to transfer labor-intensive (but not particularly high-skill) parts of the production process out of Western Europe. Along with this strategy, ABB has used plants in CEE as a production platform for internally used intermediate products which are exported to ABB's Western companies.¹⁵ While ABB created 46,000 jobs in Asia and Eastern Europe, it has reduced staff in Europe by 54,000 (*Süddeutsche Zeitung*, 29 February 1996; *Frankfurter Allgemeine Zeitung*, 4 March 1996).

In general, investments for least-cost-approach involvements—the “sunk costs”—are rather low. In low-tech productions, few qualifications are expected from the labor force. If the least cost approach was the dominant strategy of Western companies in Poland, Hungary, and the Czech Republic, it would result in a reorientation of their industries toward low-skill products and OPT. In this case, reindustrialization would be combined with a new—and probably regressive—specialization. Human resources in CEE would not be used in a comprehensive way. On the contrary, qualified personnel would be downgraded to the level of unskilled labor.¹⁶

This raises the question of to what extent the low-wage strategy is characteristic of Western companies in CEE. Their experiences thus far are not likely to keep them from pursuing this strategy, although there have been some problems, such as underestimating the difficulties of a commitment in the East. In addition to administrative obstacles (legalities and technical norms) and uncertainties in the general set-up (for instance, a sudden rise in tax and energy costs), there are problems of coordination and logistics; some companies have complained about quality issues and delivery deadlines. Because a mere consideration of wage costs is insufficient in regard to these difficulties, some manufacturers have transferred produc-

tion back home (*Die Zeit*, 24 October 1997; *VDI-Nachrichten*, 8 July 1994). However, the expectations of most manufacturers have undoubtedly been met, as the results of firm-based surveys indicate—particularly in arrangements that are not time-sensitive: “In the reform countries, work commitment, quality consciousness, reliability, and skill levels of employees are obviously satisfactory. . . . Cost savings for investors who became involved in CEE were higher than expected” (Beyfuss 1996: 30 ff.).

Another question is whether the transfer of production to CEE, which was mainly motivated by the wage-cost differential, will continue at the same pace in the future. There are good reasons to doubt it. Because it took relatively little effort to plan and prepare the present arrangements and because existing plants and companies were taken over, much has already been transferred during the last seven years. Moreover, it is uncertain how long the current conditions—in particular the low wage level—will last in the countries which are now the preferred locations for the least cost approach. Rising wages would threaten the compensation of the productivity gap. Then labor-intensive production could be transferred to countries further East, where wage (and development) levels are behind the Višegrad states.¹⁷ The question is, however, to what extent the workbench option can be moved further to the East because advantages of spatial proximity are likely to diminish. All this indicates that the least cost approach may be of a temporary nature after all.

ALTERNATIVE STRATEGY: COMPLEMENTARY SPECIALIZATION

More recently a third strategy in addition to market access and the least cost approach has emerged. This approach is based on a fundamental reorganization of value chains within and across companies—readjusting intra- and interfirm divisions of labor while taking account of the specific capabilities of CEE locations. Because of the longer planning period it usually takes to implement the strategy, complementary specialization did not take full effect until the end of the 1990s. The production sites in the East are complementary because their products supplement the bottom part of the product range of the manufacturers. The CEE manufactures are thus directed

toward local markets as well as a growing segment of West European markets.

Of course wage levels play a certain role as an initial incentive for this strategy. As compared to mere cost cutting, however, the strategy aims at developing complementary potentials in the CEECs. Local production activities are not on the lowest level of the value chain, and they cannot easily be replaced, nor are the jobs unskilled and easily transferable; labor force experience with relevant manufacturing and assembly processes plays an important role. Production sites in CEE are attractive to Western manufacturers because they have access to a well-trained labor force at comparably low wages. Unlike for the least cost approach, for the complementary strategy the wage-cost differentials of blue-collar workers as well as those of well-trained engineers are of interest.¹⁸

The relevance of wage costs, however, is considerably reduced in capital-intensive projects, which include a more long-term commitment as compared to extended workbenches. In these cases, Western investors pay wages well above the country average. Moreover, in a medium-range perspective, investors anticipate an adjustment of wages, not necessarily to the German level, but to that of other developed Western countries.

The strategy of complementary specialization also raises the question of whether all relevant functions of a company will be represented at CEE locations. While the least cost approach results in dependent plants with little vertical integration and without competences and resources of product and process innovations, the alternative strategy implies an upgrading here, too. In some cases, Western companies give sites in CEE full business responsibility (including sales and marketing), even though this may be the exception rather than the rule at present.

PRODUCTION FOR THE LOW-PRICE SEGMENT

Within this alternative strategy of complementary specialization one important motive behind locating manufacturing activities in the CEECs is an attempt to (re)gain access to the low-price segments, which German manufacturers in particular have neglected or even given up in the past by their concentration on “differentiated

quality production.” The objective is to produce Western technology at Southeast Asian costs.¹⁹ To achieve this lower level of costs, however, existing production lines, already suffering from cost problems in the West, are not simply transferred. Western technology applies not only for the products, but also for the production processes. The alternative strategy aims at establishing capital-intensive production, too, in Poland, Hungary and the Czech Republic. Accordingly, (Western) investments per workplace are higher than in the least cost approach. For this reason, mainly large companies with sufficient capital pursue complementary specialization. CEE production sites are located within an already industrialized environment and close to other plants within production and supply networks. Being close to other production plants is particularly essential for the automobile industry with its complex, interdependent, just-in-time supply networks.

Undoubtedly the automobile industry has been the trailblazer for this strategy. With regard to the end product, this strategy means not simply to assemble cars which—as in the case of CKD assemblies—had been built in Western Europe for quite different purposes and had been produced there for quite some time. Phase-out models from the West are no longer produced in the East. Instead newly developed cars are being manufactured which are designed specifically for CEE needs but which also attempt to cover similar market segments in Western Europe or even worldwide. For instance, VW (Skoda) in the Czech Republic aims at more than local production so that it can be present on CEE markets. With the development of the Octavia, based on the A3/Golf platform and a design developed by Skoda engineers in the Czech Republic, VW aims at worldwide access to a market segment in which it is not yet present, thus supplementing the product range in the lower segments. A prerequisite for this strategy is to move toward a value-for-money ratio which VW could no longer offer in Europe.²⁰ For low-cost production, CEE sites are crucial. Because the Octavia is not exclusively for CEE markets, platform-based economies of scale are used, and the production of the Octavia is integrated into the internal value chain of VW. As with other VW models which are produced in Western Europe or Latin America, a considerable share of the production is exported.²¹

Fiat—which was present in Poland long before the breakdown of state socialism—has similar plans. With the Palio, the Italian car

manufacturer has developed a “world car” which is aimed particularly at emerging markets. Production started in 1996 in Brazil; an improved version will be produced in Poland in the near future. Opel plans to produce the Astra, developed for and introduced in Western markets, in a new plant in Gliwice (Poland). For the middle range it plans to cooperate with Suzuki to develop a subcompact which will also be in the low-price segment.

FUNDAMENTAL REORGANIZATION OF VALUE CHAINS

New arrangements of product portfolios and the international division of labor among production locations are not limited to final assembly in the automobile industry. They include the whole value chain. With regard to the reorganization of supply chains, too, CEE locations are used not only as extended workbenches, but also increasingly for complex and capital-intensive production processes—by internal as well as independent suppliers. Especially since the mid-1990s, manufacturers such as Audi or Opel/GM have set up plants for the production of key components—mainly engines.²² Moreover, the large suppliers, too—like Delphi, Lucas Varity, Bosch, Sommer-Allibert, Continental, and Michelin—are using CEE as a supply base for their European activities. They have thus followed the OEMs to the East. The latter have tried to attain a high share of local supply and have encouraged Western suppliers to become locally involved; with some exceptions, the traditional local suppliers are not included.²³ Foreign suppliers have also used the CEE option to rearrange their internal supply chains, along with an international redistribution of functions, which includes locating in CEE. The output of plants in Hungary, the Czech Republic, and Poland is also but not exclusively directed toward local assembly plants. Their location enables them to deliver to important locations in Europe. Typically the export rates of suppliers are significantly higher than those of OEMs.

In other industrial sectors, too, there are indications that CEE production sites are gaining a strategic position in fundamentally reorganized European or worldwide value chains. In the computer industry, for instance, IBM is developing its Hungarian plant in Szekesfehervar to become a cornerstone for the worldwide production of its storage systems division. In this case, too, plant functions

were extended step by step. After starting with the assembly of hard disk drives in the mid-1990s, the plant is now benefitting from the company's strategy to make it a leading OEM supplier of hard disk drives for mobile and server market segments. With considerable investment, production capacities have expanded threefold, and the plant has become a worldwide center for notebook hard disk drive manufacturing.

CEE AS AN EXPERIMENTAL STAGE FOR NEW PRODUCTION CONCEPTS

OEMs can use CEE locations to try out new factory concepts. The lean "core factory" is at the center of the new concepts, an alternative to a highly integrated Fordist model. The latter typically concentrates most production and related service functions under one manufacturer in one location. This implies a large numbers of employees (Arbeitsgemeinschaft Sozialwissenschaftliche Technikforschung Niedersachsen 1993). The core factory concept is also associated with broad outsourcing processes of manufacturing and of services to external suppliers. At the same time, it is important to integrate suppliers as closely as possible (in terms of time management and functions) in the production process. Volkswagen-Skoda probably has the most far-reaching approach in the new final assembly plant for the Octavia. The Audi plant in Győr, too, has outsourced numerous functions—including maintenance—to local firms, and Opel/GM plans to transfer the internal test case for the core factory concept to the new assembly plant in Gliwice.

EFFECTS OF USING INDUSTRIAL CAPACITIES

Our argument is that the utilization of CEE industrial capacities goes beyond a mere transfer of manufacturing capacities. Eastern locations are being modernized for this purpose or even newly set up. At the same time, Western companies not only provide capital, but also transfer technology and know-how, and they create sales markets for the products manufactured. Thus the integration of CEE in the European industrial division of labor can doubtlessly be considered a contribution to the reindustrialization of these countries.

It is evident that the different paths of integration we have described affect the direction and structure of the integration process. The least cost approach boils down to a regressive specialization in low-tech/low-cost segments, letting the available human resources fade away. In contrast, the alternative approach of complementary specialization brings complex, high-skill processes to CEE. In this approach not only would manufacturing processes be assigned to CEE, but so would functions of engineering, marketing, and innovation. In other words, from the perspective of sustainable industrial development, complementary specialization has much more to offer for the transformation countries than the least cost approach.

What the final outcome of reindustrialization will be obviously depends on the significance attached to each path of integration. Still this does not describe the effects sufficiently. Even in cases where complementary specialization is applied, it is not certain what the effects will be on the modernization of domestic industries—that is, in which ways is reindustrialization still embedded in the industrial environment shaped under state socialism? And what effects will this embeddedness have for the long-term development of this approach?

WESTERN “BROWNFIELDS” AS ISOLATED ISLANDS WITHIN REGIONAL ENVIRONMENTS

Obviously the integration of CEE capacities into Western supply chains requires far-reaching technological and organizational rearrangements. Typically structures which meet the new requirements have not been created through a reorganization of existing companies and production sites but—and this is important in our view—by the establishment of new companies and the building of new plants. This is true not only for projects like the Audi engine plant in Győr or the IBM hard disk facility in Szekesfehervar. Even in places where Western companies have started joint ventures with Eastern manufacturers (like VW and Skoda), new plants have been built to manufacture newly developed products (like the final assembly of the Octavia).

These companies or plants are not real “greenfields” because they are usually located within traditionally industrialized regions and their employees (both blue-collar workers and engineers) have earned their qualifications and experience in those industries. Nev-

ertheless, new companies and plants mark a clear organizational break with old CEE industrial structures and traditions. Often this break is intentional: companies thus try to get rid of the legacies of the *ancien régime* which are widely seen as problematic. By taking over existing companies and plants, they fear they would be confronted with ancient production technology and problematic product portfolios. Moreover, organizational continuity could make it harder for engineers and technicians to abandon accustomed but no longer practicable development trajectories. Finally, work practices from state socialism could prove to be all too persistent. Just because many Western companies use CEE as an experimental platform for new strategies, they prefer a new organizational start. Western strategies thus may have paradoxical implications by treating old industrial regions as “new industrial spaces,” which describes an environment that is attractive particularly because of the absence of old industrial influences (Scott 1988; Storper 1986).

This break of continuity relates to not only core production, but also supply chains. Western companies which have started joint ventures with existing plants have largely cut off traditional supplier relations. And the companies or plants newly set up by Western investors thus far have had very few dealings with regional suppliers. This has hardly been affected by the trend toward local sourcing initiated by the large car manufacturers. This trend mainly attracts large Western suppliers, their local plants being of the same “brown-field” type as those of the OEMs. This means that local, regional, or cross-company networks for production and innovation in CEE essentially involve cooperation among Western actors on CEE ground. In particular, the most far-reaching transfer of activities (production *and* innovation tasks) has not led to a connection between imported know-how and the traditional regional environments.

This indicates that an industrial dualism is developing in the CEECs: the new companies and plants set up by Western companies stand detached from traditional industrial structures which were formed in the era of state socialism. Neither the old structures nor the existing industrial clusters are used or transformed by Western strategies. Western interest focuses mainly on the labor force from the old structures.

Certainly this dual structure could become unstable in time. New local actors (spinoffs of the old combines or domestic startups)

providing institutional links between “old” and “new” industrial structures could contribute to a loss of stability. If such “institutional bridges” did not come up, however, Western production sites could indeed become “islands of modernization.” Not only would this limit the positive effects of brownfields on the modernization of CEE industry, but it would also have a reciprocal effect on the long-term perspectives of Western value chains in which these brownfields are integrated. This is because local sourcing also provides the basis for local learning and is thus an important condition for technological and organizational development in the CEECs. Without it the possibilities of upgrading CEE locations are probably very limited. It is thus possible that in the long run, a deficient regional integration could counteract the potential benefits of complementary specialization.

NOTES

1. All estimates agree that CEE is an emerging market. The most important indicator is the GDP, which had positive growth rates for the whole of Eastern Europe in 1997. While Poland had already passed the 1989 level, in the real GDP of the Czech Republic, Slovakia, and Hungary is at 90 percent of the 1989 level (Transition Report 1997).
2. DIW (1997b). In the last case, the 1995 figure is for the foreign trade of the Czech Republic.
3. Basically, the same holds true for “manufactured goods chiefly classified by material” (SITC 6). These comprise intermediates with relatively low input which are highly labor-intensive and partially capital-intensive (leather, wooden articles, textile threads, but also rubber, iron and steel, and metals). The export share of these products is relatively high; however, the increase has been much smaller than that of groups 8 (labor-intensive products) and 7 (capital-intensive products such as machinery and transport equipment). In the Czech Republic the share of SITC group 6 items in total exports rose from 22.4 percent (1989) to 28.8 percent (1996). In Poland, total export of group 6 goods rose from 19 percent (1989) to 27.6 percent (1995). Thus, the export of these goods became the largest item in Poland and the second largest in the Czech Republic, after machinery and transport equipment. Unlike for these countries, the share of group 6 goods in total exports has remained almost constant at 17 percent since 1989, even showing a slight decline. The relevance of this product group for the dynamics

of exports—unlike the great remaining absolute relevance—has to be estimated as lower. Even in Poland, this group contributed a mere 11 percent to export growth between 1989 and the mid-1990s. The respective figure is only 7 percent for the Czech Republic. Hungary even reduced its exports of these products (see Kraft and Pahl 1997; Trabold and Berke 1997).

4. Foreign trade statistics are somewhat misleading in that regard because while OPT is most prominent in product groups 8 and 6, group 7 also includes shares of OPT. According to Hoekmann and Djankov (1996), the share of OPT in total exports of the CEECs lies between 10 and 18 percent. Most of the processing occurs in leather/footwear (20–30 percent of total exports) and textiles/clothing (60–80 percent). Other industries where it is significant include electrical machinery (10–16 percent) and furniture (16–20 percent).
5. In Czechoslovakia/Czech Republic, the share decreased from 44.4 percent (1989) to 32.7 percent; in Poland, from 33.6 percent (1989) to 21.1 percent. In Hungary, too, exports, dropped considerably at first but went up again to a little more than 25 percent, thus coming relatively close to the initial level.
6. This category contributed to growth largely via exports to Germany: 41 percent in Hungary, 30 percent in the Czech Republic, and close to 20 percent in Poland.
7. In 1991, total exports reached a volume of 625 million forints and rose to 6,089 million forints in 1995.
8. Between 1995 and 1996, the production of automobiles and trucks went up by 38.7 percent (PAIZ 1996).
9. The DIW (German Institute for Economic Research) sums up as follows: “Starting from an extremely low level, comparative disadvantages of Poland, Hungary, the Czech Republic, Slovakia, Bulgaria, and Romania in industrial sectors with high R&D intensity and a high degree of product differentiation have considerably diminished, and the relevance of intra-industrial trade has increased. Therefore one can assume a gradual adjustment of structural prerequisites—at a different speed in different countries” (DIW 1997a: 228).
10. In Hungary, for instance, the Budapest metropolis draws by far the largest share of FDI (45 percent), but the western regions close to the border (Northern Transdanubia) already draw a share of close to 30 percent (Sugar 1998).
11. In the Czech Republic in 1995, selling 27 percent of SPT Telecom to the Dutch-Swiss consortium Tel Source alone accounted for \$1.3 billion. At the end of 1995, 49 percent of the Czech oil refineries Kralupy and Litvinov were sold for \$170 million. Without these two large transactions, the volume of FDI would have reached only \$1 billion in 1995 (Ufer, 1997).
12. Unlike for consumer durables (such as automobiles, washing machines, or TV sets) producers of food and semi-luxury items find markets in the East

which have a demand at least comparable to that in the West. The tobacco company Philip Morris, for instance, assumes that in Eastern Europe more cigarettes will be smoked annually than in Western Europe or the United States. "The competition for global market leadership will be decided in Eastern Europe," according to British-American Tobacco Industries (BAT) (*Süddeutsche Zeitung*, 20 February 1996).

13. For instance, car manufacturers with production sites in CEE may import other cars out of their portfolio than the ones produced there free from customs. To some extent the CEECs try to win Western manufacturers by establishing areas with special economic and tax benefits.
14. Leonische Drahtwerke, for instance, went down from 2,100 employees in four West German plants to 400; they now employ 1,400 in two facilities in Slovakia (*Süddeutsche Zeitung*, 6 May 1996). In 1993, Volkswagen Bordnetze had 1,100 employees for wire harness assembly in Gorzów, Poland; they export 100 percent to the company's German sites. Together with a second plant set up in Turkey in 1990–91, Volkswagen Bordnetze now employs 2,300 workers abroad. While employment and production volume increased in foreign locations in the mid-1990s, in the Berlin plant employment went down by 700 from the originally 1,000 jobs (Estrin et al. 1997: 193–205). In both cases, product and process development remains concentrated in the German sites. The great reductions in the West did not hit the suppliers but the car manufacturers themselves. In the course of the 1990s, in-house assembly of wire harnesses was reduced by 80–90 percent.
15. "[ABB's plants in CEE] produce relatively cheap components for ABB's global markets, but their full potential will only be realized when the demand for power generating equipment really takes off in the Central and East European and Central Asian markets" (*Financial Times*, 19 June 1997).
16. There is some evidence of regressive specialization. In the Czech Republic, for instance, employees changing jobs in 1991–92 experienced qualification downgrading. Almost half of them (41 percent), took jobs with lower skill requirements (Keilhofer 1995).
17. FDI figures from Poland, Hungary, and the Czech Republic to other CEECs indicate that the three countries are becoming active in this regard.
18. ABB calculates a rate of DM 3.80 for an engineer-hour in the Czech Republic and DM 75 in Germany. Productivity in Germany cannot be far enough ahead to compensate for that difference, says von Koerber—in particular because the hand-picked East European engineers are "better than many of my German managers," (von Koerber in *Fortune; Manager Magazin*, November 1994).
19. "We are offering new European technology at Asian prices," says Detlef Wittig, Skoda's sales and marketing director (*Financial Times*, 1 October 1996). The formula for the future is "quality standards of the West and costs of the East" (*Manager Magazin*, November 1994).

20. "The Octavia is priced below comparable but outdated Korean vehicles and undercuts anything similar from Japan, as Skoda attempts to offer new European technology at Asian prices" (*Financial Times*, 14 May 1997).
21. Of all cars produced (350,000 in 1997), Skoda sells one-third on the domestic market. One-third is exported to Western Europe and another third to other countries.
22. A typical example for this strategy is the Audi engine plant in Győr, which shows the step-by-step approach of the Western investors. Audi has gradually increased the capacity of assembly, reaching 600,000 engines a year in 1997. The results, which exceeded expectations, convinced Audi to expand. Győr is integrated in the worldwide VW group, produces engines for the VW Passat and the Skoda Octavia, and is more and more considered a trump card in the Audi strategy. There are plans to develop the plant into a center of engine production (with a capacity of 1 million engines a year by the year 2000) and to increase the range of tasks (assembly of a small numbers of roadsters). By 1999, Audi will have invested a total of DM 840 million in Győr. The Opel/GM engine plant in Szentgotthard (Hungary) developed in the same step-by-step manner and will reach full capacity (460,000 engines a year) in 1998. Like in the Audi case, the range of tasks was extended over time, in this case with a cylinder head plant which was recently built.
23. Fiat-FSM and Volkswagen-Skoda have started joint ventures with highly vertically integrated manufacturing: FSM and Skoda each had numerous suppliers of their own. Fiat-FSM and Volkswagen-Skoda have followed a strategy to break up this vertical integration. The establishment of plants of well-known Western suppliers in Poland and the Czech Republic was massively supported—e.g., by selling them existing plants. Simultaneously, old supply relations were terminated.

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WHAT FUTURE FOR THE INTEGRATION OF THE EUROPEAN UNION AND THE CENTRAL AND EAST EUROPEAN COUNTRIES?¹

Alain Henriot and András Inotai

Economic relations between the European Union (EU) and Central and East European countries (CEEC) have intensified rapidly since the beginning of the 1990s.² This is true in both trade and direct investment, and much progress has been achieved in the way of economic interpenetration between the two regions. Back in the early 1990s, despite all the optimism that followed the collapse of the Berlin Wall, few observers would have predicted such an evolution. This study analyzes the evolution of trade and direct investment, examines the role of the association agreements signed by the EU and the CEEC in the increasing integration of the two regions, and closes with some considerations regarding future developments.

TRADE BETWEEN THE EU AND THE CEEC

OVERALL TRENDS

Trade flows between the EU and the CEEC have increased spectacularly since the beginning of the 1990s. Between 1989 and 1996 EU exports to the CEEC (in current dollars) quadrupled, while imports from these countries trebled. Trade between the EU and the CEEC has really taken off since 1991, at which point the EU started running a large surplus with the CEEC. This imbalance, although moderate at first, grew very noticeably between 1993 and 1994 and reached about \$9 billion in 1995. In 1996, according to preliminary estimates, it reached almost \$16 billion, EU imports from the CEEC

having nearly stagnated while purchases by the CEEC grew vigorously once again.

The growth of bilateral trade between the EU and the CEEC has, of course, far outstripped the overall progression of EU trade. Between 1989 and 1996, the EU's overall exports (in dollars) increased by only 70 percent, and its overall imports by 60 percent. Yet in 1995 trade between the two regions represented less than 1 percent of world trade, up from 0.4 percent in 1989. Moreover, the importance of each side in the overall trade of the other is greatly asymmetrical. Thus in 1996 the CEEC accounted for only 2.5 percent of the EU's total trade (1 percent in 1989), while the EU accounted for over 60 percent of CEEC trade (35 percent in 1989).

One of the immediate consequences of the EU's growing importance in the CEEC's exports is that the business cycles in these countries will tend increasingly to resemble the West European economic cycle (if, of course, one can identify such a cycle beyond the specificities of each country). Thus the stagnation of CEEC exports to the EU in 1996 apparently resulted from the low level of activity in most West European countries. Using an extremely simplified estimate, one can already consider that a 10 percent increase of EU imports leads, *ceteris paribus*, to an extra 1 percent growth in the CEEC's GDP.³ The real impact is probably greater because of the multiplying factors of the macroeconomic circuit, not taken into account here. This relationship suggests a partial explanation for the slowdown of growth experienced by the CEEC in 1996 (European Commission 1996). Of course, CEEC imports exercise much weaker influence on the EU economy. One can estimate that a 10 percent increase of the CEEC's imports directly induces the EU's GDP to grow by only 0.05 percent in static terms. This does not mean that the development of the CEEC will have no impact on West European economies. If their growth continues steadily in the medium run, this can only have a demonstration effect likely to increase the EU's potential for growth. This was already the case in 1992–93, when a strong increase in CEEC imports helped attenuate the recession in Western Europe.

Aside from trade flows, two other types of mutual influences between the two zones bear mentioning. First of all, in some sectors, Western firms have established production sites in the CEEC by means of subcontracting, outward processing trade (OPT), and for-

eign direct investment (FDI). As a result, the impact on trade flows of an initial increase in final demand is all the greater since the trade of intermediate goods is multiplied. The more high-value-added steps of the production cycle are performed by these sites (supplying a large market—often the entire European continent), the more economic interdependence among the various countries is reinforced. This is indeed the case within the EU and will increasingly apply in the future to the relations between the EU and the CEEC (see Henriot 1997 and Table 1). A consequence of this type of industrial organization is that the CEEC could become more dependent on the EU's demand for intermediate goods than on its final demand. This would make the CEEC even more sensitive to the EU's business cycle since business cycles in the intermediate goods sector are usually more marked than in industry as a whole (and, a fortiori, the overall economy). Another consequence of the growing share of the EU in the CEEC's foreign trade is that the latter must pay greater attention to their competitiveness, in terms of relative prices, in particular with regard to the evolution of the currency. Greater interdependence in matters of trade flows also means an increased need for convergence of economic policies.

GEOGRAPHIC STRUCTURE

The main feature of trade between the EU and the CEEC is a very high degree of concentration. Within the EU, Germany clearly comes out as the main trade partner of the CEEC, accounting for nearly 50 percent of the trade between the two regions. Italy (with 10 percent of the trade), Austria, and France lag far behind. This geographic structure has not changed much since these same countries were already the CEEC's main partners at the beginning of the decade. This suggests a very high intensity of trade relations between the CEEC and Germany since the latter weighs much more heavily in the EU's trade with the CEEC than in its overall trade. The same can be said of Austria because of its strong relations with Hungary; countries like Belgium or the Netherlands (and France, in a way), on the contrary, show a low intensity of trade with the CEEC.

As regards trade balances, the largest surpluses derived in 1995 from trade with the CEEC have been ascribable to Italy, Austria, and

France (\$1 billion). It seems that Italy's performance resulted from the favorable lira exchange rate, which maintained price-competitiveness until the spring of 1995. The weakness of Germany's trade surplus, on the contrary, points to the degradation (until recently) of German industry's price-competitiveness.

Among the CEEC, Poland is the first trading partner of the EU, followed by the Czech Republic, Hungary, and Slovakia. In recent years, however, the share of Poland and Hungary has tended to shrink, probably partly as a result of an unfavorable evolution of their prices relative to export (de Boissieu and Henriot 1995). All the CEEC have a trade deficit with the EU, but the imbalance is much more pronounced for the Czech Republic and Poland.

SECTORAL BREAKDOWN

The sectoral structure of the CEEC's trade is difficult to analyze because of the various changes that have affected it in recent years. These range from the structural upheavals in these economies to the changes in the final demand, both in the CEEC and the EU, tied to macroeconomic trends. Certain conventional indicators, such as indices of comparative advantage, turn out therefore to be of limited interest since inherited factor endowments are less and less useful in explaining the structure of trade. A dynamic analysis is therefore in order.

Manufactured goods account for 85 percent of the EU's exports to the CEEC and 75 percent of the EU's imports from the region (see Table 1). However, the share of agricultural products in Hungary's exports to the EU remained at 20 percent in 1993 before falling to 14 percent in 1994, and energy and agricultural products account for a quarter of Poland's exports to the EU. Textiles and chemical and mechanical engineering products are the main goods exported by the CEEC to the EU. The increasing importance of the latter category points to a gradual emergence of a specialization that is no longer in low-value-added goods alone but also in goods with greater technological content. A more detailed analysis suggests that clothes are the main products sold by the CEEC on West European markets—an interpretation supported by more recent data. Other products, such as furniture, electrical products, leather, and shoes, also occupy a

significant place in the CEEC's exports to the EU. Similarity indices reveal considerable resemblance among the CEEC's export structures. This similarity among the CEEC is even greater than that found among the trading countries of Southeast Asia or North Africa (Lemoine 1994), which suggests that a high degree of competition among the CEEC can be expected.

Textiles, chemical products, and capital goods are the main goods imported by the CEEC from the EU, and within the textile sector, threads are the main imported good. The share of textiles is also preponderant in the CEEC's sales to the EU, which points to the emergence of intrasectoral trade (understood here in the broadest sense) as a result of subcontracting activities. The same can be said about the share of engines in the CEEC's exports to the EU. In the automobile sector, the weight of finished goods (i.e., vehicles) is also important, which points to the existence of various forms of trade (direct exports by domestic firms, exports of parts as a result of direct investment, etc.).

Beyond a strictly quantitative approach, the evolution of the CEEC's trade with the EU also provides some indication of the economic transformations that are underway. At least two aspects deserve to be developed here. First, one can qualitatively assess the CEEC's trade on the basis of the unit value of trade flows. An increase can mean two things: a decrease in competitiveness or a move up market. Some studies report a rise in the unit value of the CEEC's exports in sectors such as textiles, which can be interpreted as the result of increased quality and extended partnerships between local and West European firms based on subcontracting agreements or joint ventures (Lemoine 1994). There exists an alternative approach, which consists in calculating the average unit value of trade (UNECE 1995). This presupposes that if the unit value of exports exceeds that of imports (for a given category of goods), a country is seen as specializing in high-value-added goods.⁴ With the exception of Hungary, the ratio of unit values of the CEEC's trade with the EU is less than one (see Table 2). One can explain this by saying that the goods exported to the EU by the CEEC are of lesser quality than those imported from the EU. On the contrary, in the case of Hungary, this ratio has considerably increased since the end of the 1980s and is now greater than one. Note, however, that these calculations are

affected by exchange rate movements, which can influence export and import prices and, therefore, the structure of trade.

A second indicator of the degree to which countries in transition are integrated in the international economy is the share of intrasectoral trade in their overall trade. A high level of intrasectoral trade means that the country in question is capable of trading goods similar to those produced by the developed countries (in this case, Western Europe). Intersectoral trade, by contrast, is initially based on factor endowments. Calculations by international organizations (EEC, Eurostat) show that the share of intrasectoral trade between the EU and the CEEC in their overall trade of manufactured goods grew considerably between 1988 and 1994 and is greatest for the Czech Republic and Hungary (see Table 3). That being said, the share of intrasectoral trade in the EU's trade with the CEEC remains much smaller than in the EU's overall trade flows, even if some EU member countries participate in less intrasectoral trade than do the CEEC. One of the reasons for the increasing share of intrasectoral trade in EU-CEEC trade is that ties between Western and local firms have greatly intensified through various channels, including OPT and FDI.

OPT BETWEEN THE EU AND THE CEEC

The emergence of OPT is a major feature of the development of trade between the EU and the CEEC, especially in certain sectors. This type of trade can be easily identified as that subject to a specific customs regime.⁵ About a quarter of CEEC exports to the EU fall under this category; in textiles, the share of OPT even exceeds 80 percent. Germany dominates this type of trade: German imports represent 70 percent of the EU's total purchases of processed textiles and clothing. Germany's preponderance predates the liberalization of trade between the EU and the CEEC, while Italian imports have grown significantly, rising from 0.4 percent in 1988 to 8 percent in 1993.

Two strategic motivations can stimulate this traffic: it can offer access to markets that are otherwise protected by customs barriers, and, more important, the Western firm engaging in it is often seeking gains in competitiveness through a reduction of labor costs. This brings us back to a debate, very lively in Western Europe in recent

years (in France and Germany in particular), over the delocalizing of part of the industrial structure. The fears in this debate have been mostly over this shift's consequences for labor.

The main reason for the increased OPT between the EU and the CEEC lies in the difference between the labor costs in the two regions, but the availability of a relatively qualified workforce capable of sufficient productivity levels also plays a major role. Geographical proximity is also an important advantage for the CEEC. This type of partnership between Western firms and local enterprises has been chosen over FDI also because of its greater flexibility. For the CEEC, OPT has had some undeniably positive effects, first among which are an increased access to technology and the development of managerial skills. However, such arrangements also make the CEEC rather dependent for exports on the decisions of the Western clients, which can be a source of increased fluctuations.

RECENT TRENDS IN FDI IN THE CEEC

MAIN CHARACTERISTICS

Since the beginning of the 1990s, Hungary has been the main target country for FDI.⁶ Its cumulated flows reached \$11.4 billion in 1995 (i.e., twice the amount received by the Czech Republic), while Poland attracted only \$2.7 billion in FDI.⁷ Nonharmonized data for 1996 confirm the increase of FDI in the CEEC, with Poland apparently starting to catch up. The return of economic growth has been one of the elements stimulating FDI in recent years, while in several countries, the increase in FDI has occurred in parallel with the privatization process.

The share of FDI in the GDP for 1995 is estimated to have reached 10 percent in Hungary and 5.5 percent in the Czech Republic. Despite this recent expansion, FDI flows in absolute terms have remained modest and below expectations, especially as compared to those observed in Asia or Latin America.⁸ Several factors can explain these relatively limited results. FDI flows toward the CEEC have only very recently taken off, and the CEEC form a relatively small market (as compared to Asia, for instance), which limits the possibilities for investment. Moreover, systemic transformations have

been fairly slow at times, in particular in the privatization process, while there have long subsisted uncertainties over the legal structure. The attractiveness of the CEEC as targets for FDI has nonetheless been confirmed by recent studies (Hattem 1995).

West European firms account for most FDI in the CEEC. In the beginning of 1995, the EU's share in incoming FDI reached 75 percent in Hungary, 70 percent in the Czech Republic, and 65 percent in Poland and Slovakia. Germany is by far the main investor country in terms of the number of operations, with about a quarter of all the transactions.⁹ In Hungary, Austria is also very active. In terms of the amounts invested, Germany remains the main investor, except in Poland, where the United States comes first. However, overall results have been greatly influenced by a small number of large-scale operations (e.g., Volkswagen in the Czech Republic and Fiat in Poland), and this is also true with regard to the sectoral distribution of FDI. In terms of the number of operations, FDI is concentrated in the service industry, especially trade, but in terms of the amounts invested, the manufacturing industry is the main target. As for the shape taken by FDI, 60 percent of it goes to joint ventures or acquisitions and 40 percent to the creation of production or commercialization units (European Commission 1994).

EXPLANATORY FACTORS

We will not analyze in detail the impact of FDI for the target countries, nor motivations for investors, subjects that have already been investigated in numerous studies. Several studies have been devoted to the topic (Borensztein et al. 1995; Kojima and Ozawa 1984). We shall mention only a few of the factors that have prompted EU firms to invest in the CEEC. The first is the difference in salary costs (in terms of unit production costs—i.e., taking into consideration productivity, not just wages). FDI tends to improve access to the market, especially when customs barriers remain. Having a free trade zone covering the entire region is all the more advantageous since each country, taken individually, represents a relatively small market. In some cases, investors are considered by their clients to be local producers, thereby gaining further ability to penetrate markets (for instance, in the automobile sector). Finally, the cultural and geo-

graphical proximity of the CEEC to the EU gives them an advantage over other destinations such as Asia. One should note, however, that all of these elements function primarily over the medium run. In the short term, as noted above, West European firms have often chosen more flexible arrangements, such as subcontracting. Likewise, one can also recognize important advantages that FDI offers to the CEEC. From a macroeconomic point of view, FDI stimulates employment and investment and, therefore, growth. Foreign investors contribute to improving the managerial skills and techniques of the local staff. Local partners can benefit from the experience of Western firms in matters of distribution. More fundamentally, FDI can cause the emergence of comparative advantage if the investments are concentrated in certain key sectors, such as automobiles. Multinational corporations can also form local networks, working with small-to-medium-size enterprises, thereby increasing the latter's competency and helping them enter foreign markets.

All these advantages are illustrated by the key role played by foreign investors in the exports of the target countries. In Hungary in 1995, for instance, exports by foreign companies accounted for over 50 percent of the country's total exports, and up to 80 percent of the exports in some sectors. Moreover, 45 percent of the foreign companies made at least 25 percent of their turnover on exports (OECD 1995). FDI, nonetheless, can have some disadvantages for the target country. With regard to macroeconomic policy, the desire to attract foreign capital can lead to high real interest rates, causing an overvaluation of the currency. Some studies also reveal behavior on the part of some investors that harms target countries. The system of multinational groups for setting transfer prices, for instance, can lead to tax losses. Another problem is that the purchase of local firms often results in initial layoffs, etc. Last, foreign companies can, in some cases, displace local producers.

THE ROLE OF EU-CEEC ASSOCIATION AGREEMENTS

Association agreements between the EU and the CEEC have undoubtedly been one of the reasons for the sharp increase in trade between the two regions since the beginning of the decade. It re-

mains difficult, however, to isolate their impact from that of the general system of preferences (GSP) that was granted to transition economies in 1990 and 1991 in the context of the EU's PHARE program. Indeed, sales from the CEEC to the EU took off before the commercial components of the association agreements came into force. More generally, several other factors have influenced the realignment in CEEC's trade: the dismantling of the Council of Mutual Economic Assistance (CMEA), the disappearance of the administrative institutions that were in charge of foreign trade before 1990, the emergence of the private sector, the opening of the CEEC to FDI, the initial decline in domestic demand (which forced local companies to turn to foreign markets), and the various exchange rate policies (among others). In addition to the above, other more psychological and political considerations have led the CEEC away from their former relations with the East.

POSITIVE EFFECTS

Notwithstanding the caveats noted above, the association agreements have had an important impact on the bilateral relations of the EU and the CEEC. With regard to economic growth, the acquisition of market shares in the EU has allowed the CEEC—dependent as they now are on foreign trade—to mitigate the fall in production that resulted from the collapse of Eastern markets. The considerable growth of sales to the EU since the beginning of the 1990s has thus contributed several points to the economic growth of the CEEC. Indirect effects, in terms of economies of scale or job creation, have been just as important. Even if there have been other factors, the countries that were first included in association agreements are also those whose trade was transformed most markedly.¹⁰ The association agreements accelerated the geographic restructuring of the CEEC's trade and, more recently, helped consolidate this reorientation of trade (which, in some ways, can be viewed as strategic in terms of interdependence, the development of new opportunities, and the start of intrasectoral trade). The share of the EU in the trade of East European countries still varies considerably from country to country.¹¹ The share for Romania and Bulgaria is considerably below the average for the region, while the increased importance of the

Eastern countries in the EU's exports (their share went from 5.8 percent in 1989 to 9 percent in 1995) was mostly attributable to the CEEC leaders. The share of these countries in the EU's exports now clearly outweighs that of Russia.

From a sectoral point of view, the CEEC have deeply restructured their trade. Because of restrictive practices on the part of the EU and the failure of national policies, the share of agricultural products in total exports has diminished considerably, while the share of mechanical engineering products has grown markedly. Trade in so-called sensitive products has evolved in various ways: the share in overall sales of textiles/clothes has grown, whereas that of steel has shrunk somewhat. Romania and Bulgaria, however, have not witnessed such trends: generally speaking, labor-intensive sectors (especially textiles) still occupy a preponderant share in their trade with the EU, which reflects a rather clear difference in specialization between them and the CEEC.

Another important aspect of the association agreements has been the improvement of the CEEC's competitiveness, at least in West European markets. The agreements ended a long period during which there was discrimination against the CEEC on account of their foreign trade being state-controlled. Granting CEEC and other partners equal treatment has made it possible to overcome initial structural distortions. In fact, one could argue that on West European markets, the CEEC benefit from "positive discrimination," as compared to their Asian or Latin American competitors. The association agreements also provide exporters from the CEEC with a stable and predictable framework over the long run, which has strengthened their competitive position against the EU's other providers, in particular East Asia. Finally, even if there is no exact correlation between trade policy and the level of FDI, experience shows that a favorable, stable institutional context, such as that provided by the association agreements, can contribute to the attractiveness of a region to investors.

MIXED EFFECTS

Some of the effects of association agreements on trade have not been entirely positive. Two examples can be mentioned. These agreements have caused substantial changes in trade policies, in particu-

lar through a dismantling of customs barriers, which improved access to West European markets. In 1990, considerable obstacles to trade, including customs duties, taxes, and quotas, remained in place for most of the goods exported by the CEEC. In 1993, only 50 percent of Hungarian exports, 39 percent of Czech exports, 36 percent of Polish exports, and 17 percent of Romanian exports enjoyed free access to the market. Between 23 and 40 percent of the trade, depending on the country, also benefited from low customs barriers. The bulk of this reduction of barriers came from the removal or reduction of the average tariff. But the share of goods hit by high tariffs has not declined so rapidly, and there have even been increases in some cases, including Czechoslovakia and Romania. In 1993, the share of products sold to the EU that were subject to high excise taxes still reached 37 percent for Romania, 25 percent for Bulgaria, 18 percent for Poland, 11 percent for Czechoslovakia, and 10 percent for Hungary. These figures are highly correlated with each country's share of agricultural exports. In early 1997, most of these barriers were removed, but their persistence since the early 1990s had hampered the development of exports, economic growth, and, more generally, structural transformations.

By making OPT easier, the association agreements have had an ambiguous impact. Granted, they generated additional trade; but the impact on the balance of trade, which must be gauged in terms of value added, is much more limited than the increased exports may suggest. Moreover, the integration of subcontractors in West European networks may have caused a decline in the local production of intermediate goods.

NEGATIVE EFFECTS

Although the association agreements have initially had some undeniably positive effects, certain clearly negative aspects cannot be overlooked, in particular in a medium-run perspective. Agricultural trade is the main area for which the association agreements have failed to favor the CEEC. Indeed, after the trade liberalization undertaken by both sides, CEEC agricultural exports rapidly reached the EU's "sensitivity threshold." Moreover, CEEC producers have been unable to compete with the system of assistance to

agricultural exports in place in the EU, which caused them to suffer losses in their traditional markets like the former Soviet Union (FSU). In fact, in recent years, there has developed an asymmetry in favor of the EU for the trade of agricultural goods. They are indeed the only category of goods for which the share of the CEEC in the EU's imports has diminished, from 8.6 percent in 1990 to less than 6 percent in 1995. In the meantime, the EU's sales of agricultural goods to the CEEC have increased considerably. The Eastern countries as a whole, including the FSU, accounted for over 20 percent of the EU's trade in 1995 (making it the EU's second trading partner after the United States), against only 12 percent in 1990. If we take into account the two regions' natural endowments and their production and export structures, it becomes apparent that their agricultural trade has been distorted to the EU's advantage. Thus all the CEEC, except Hungary, ran a deficit with the EU in their agricultural trade (about \$300 million in 1995), whereas in 1990, they ran a surplus of nearly \$1 billion. In the long run, this could affect production and the specialization structure for a long time, which would be detrimental to rural labor and could endanger the modernization of the CEEC's agricultural sector.

Moreover, partly as a result of the evolution of agricultural trade, the CEEC as a group have developed a considerable trade deficit with the EU. This shows that the preference in favor of the CEEC that was supposed to result from the association agreements, in particular as regards the pace of trade liberalization, was not enough to limit the risks of grave imbalances. Of course, these trade imbalances can be explained by the growth differential between the two regions, but different strategies and tools of economic policy should be integrated in the association agreements so as to limit the risks caused by a major trade deficit of the CEEC.

Another negative aspect lies in the increase of protectionist pressures. The EU introduced temporary restrictions on the import of steel in the fall of 1992 and on agricultural goods in the spring of 1993, just as the association agreements had taken effect. The impact of this was moderate on a macroeconomic level, but it was much greater for the producers concerned, not to mention Brussels' credibility. More recently, one has also witnessed the development of protectionist pressures in the CEEC, encouraged by the appearance of external imbalances, by the difficulties for the CEEC to compete

with the subsidized agricultural exports from the EU, and by some Central European industrialists' desire to reconquer their domestic market. There has also developed a kind of lobbying on the part of those who view an overvalued currency as a potential threat to the CEEC's internal and external market shares.

In sum, since 1992 the association agreements have facilitated the CEEC's trade with the EU, but they have also caused intra-regional trade to regress more than necessary.

PROSPECTS FOR TRADE BETWEEN THE EU AND THE CEEC

EVALUATING THE POTENTIAL

Despite the unprecedented growth of trade between the EU and the CEEC since the beginning of the 1990s, it is worth asking whether a potential for growth still exists or whether, on the contrary, one can expect a slowdown after this initial catch-up phase. The use of gravitational models, despite some shortcomings, makes it possible to answer these questions partly (see Linemann 1966 and Bergstrand 1985, 1989 for details). These models, indeed, evaluate the trade potential between two partners as a function of different criteria (GDP levels, distance between the countries, and the existence of common borders). Most studies of this type conclude that there is potential for the EU's exports to the CEEC to grow. Applied to France, studies estimate that (depending on the initial hypotheses) sales to the CEEC are currently at 10-70 percent of their potential (Adam and Boillot 1995). By contrast, other studies reveal that the CEEC's exports to the EU have already reached their potential: they are at about 70 percent of the potential for Poland and the former Czechoslovakia and 80 percent for Hungary. Indeed, on the German market, sales by the CEEC already exceed the potential (Festoc 1995). From this point of view, the catch-up phase seems to be over. This implies that CEEC membership in the EU would not be likely to lead to a sharp increase in CEEC exports to the West European markets.

HOPES AND FEARS FOR THE DEVELOPMENT OF TRADE

If, overall, the CEEC have not reached the same degree of openness (as measured by the weight of exports and imports in their GDP) as the small countries of the EU, then there must remain possibilities for the expansion of external trade, in particular in the dismantling of some protections, especially in the CEEC. Indeed, there are several reasons for optimism, including further changes in the structure of EU-CEEC trade, such as 1) the intensification of intrasectoral trade and a move up market; 2) FDI, which will generate additional trade, first by stimulating the CEEC's imports, then their exports; 3) the continued modernization of the transition economies; 4) trade flows stimulated by the infrastructure privatization, which will prompt new investments by West European firms; 5) the improvement of transportation and communications links; and 6) the demand within the CEEC, which should continue to increase vigorously. The emergence of a new European periphery, reaching from Slovenia to Hungary through Slovakia, the Czech Republic, Poland, and even the Baltic states, should thus have positive effects on regional trade. This region is witnessing higher levels of growth, improved productivity, and dynamic exports, all the while attracting substantial amounts of FDI. The EU cannot ignore this region in the medium run since it will constitute an essential element of European trade and of the division of labor within the continent.

These positive perspectives are not, however, without risks and uncertainties, and optimism should be tempered by two elements. Several factors may deepen the trade imbalance. First, the second five-year period in the application of the association agreements will lead to an asymmetrical dismantling of customs barriers, which will increase the openness of the CEEC to imports from the EU. The modernization process will require additional imports but will allow exports to increase only after some time. As a result, the temporary financing of trade deficits could become a major political problem during this crucial pre-accession period. Two important measures available to Brussels would be to liberalize the EU's agricultural imports from the CEEC and adopt a strategy of financial support according to the subsidiarity principle, which would also allow it to limit the cost of enlargement by spreading financial transfers over the periods before and after accession.

The influence of protectionist lobbies in the CEEC and the EU cannot be ignored. As the CEEC gradually become efficient competitors, protectionist tendencies will likely develop in EU countries, especially in so-called sensitive sectors. In particular, the persistence of a double-digit unemployment level in most of the EU countries and the CEEC could become the main obstacle to trade. The flow of workers from the CEEC to the EU is negligible or strictly controlled, as in Germany and Austria. The question remains of how the mutual development of both regions can unfold, taking into consideration the possible relocation of production units from the EU to the CEEC.

CONCLUSION

The apparent contradiction between the regionalization of trade flows and the globalization of capital markets constitutes the main challenge with respect to the risks entailed by the maintenance of possible barriers to trade between the CEEC and the EU at the dawn of the twenty-first century. Until recently, Western Europe differed from the United States and Japan in that it did not systematically take advantage of the opportunities provided by differences in labor costs between developed and developing countries. This can partly explain the EU's recent loss of its share of world markets. From this point of view, the emergence of the CEEC provides Europe with a unique opportunity to catch up with the United States and Japan. At the same time, the eastward expansion of the EU could exacerbate the already difficult problem of unemployment in Western Europe. The situation is made even more complicated by the fact that this intra-European division of labor involves the CEEC's large reserve of qualified and motivated workers. There exists today no answer to these challenges. However, it must be clear that the issue lies not only in the future of relations between the EU and the CEEC, or in the prospects for intra-European trade flows, but also in the prospects for Europe in the next century as a region of rapid economic growth. This should be taken into consideration in the negotiations on the eastward enlargement of the European Union.

NOTES

1. Tables referred to in the text can be found in an earlier version of this study at <http://brie.berkeley.edu/BRIE>.
2. In this study, "CEEC" refers to the countries most advanced in the process of economic transition—namely, Hungary, Poland, the Czech Republic, and Slovakia, which are also known as the Višegrad countries. "European Union" refers to the fifteen countries that are presently members of the union.
3. The estimate is obtained from the following calculation: impact on the CEEC's GDP = share of exports in GDP (40 percent on average) \times share of the EU in overall exports (60 percent on average) \times growth of EU imports (10 percent is the hypothetical figure here).
4. In fact, the production of goods with high unit value could also lead to low added value if it entails increased consumption of intermediate goods, especially if these are imported.
5. There is OPT when a client in the EU provides a subcontractor in the CEEC with parts for assembly and the finished good must eventually be imported back to the EU.
6. One of the main difficulties to be faced here lies in adequately defining FDI. The main source of information is balance of payments statistics, but they often exclude reinvested profit, and some countries merely publish net FDI flows without distinguishing inward and outward flows.
7. Since the development of FDI in the CEEC dates back to the beginning of the 1990s, cumulated flows can basically be considered as stocks.
8. Per capita FDI is of course greater in the CEEC, given the difference in population, but the ratio of FDI to GDP seems to us much more indicative of a country's attractiveness. In terms of stocks, the ratio of FDI to GDP would be about the same for Hungary as for China.
9. See Table 4 on the BRIE website.
10. Hungary and Poland were the first two countries to enter into association agreements with the EU.
11. Eastern Europe is taken here to include the CEEC mentioned in the introduction, along with Romania, Bulgaria, Slovenia, and the FSU.

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EAST-WEST INTEGRATION: VERTICAL PRODUCT DIFFERENTIATION, WAGE AND PRODUCTIVITY HIERARCHIES¹

Michael A. Landesmann

The current process of East-West European integration is a particularly striking example of the reemergence of strong trade and, more generally, production linkages between two groups of economies which, albeit geographically close to each other, have had minimal trade and foreign direct investment (FDI) links over a forty-year period. The rapid and deep liberalization of external relations after 1989 (accentuated by the decline of economic activity in countries formerly in the Council of Mutual Economic Assistance [CMEA] due to “transformational recessions”) has led to a dramatic process of trade reorientation and also to a rapid buildup of pressures toward a new pattern of specialization in accordance with global market pressures, mostly in conformity with predictions made by traditional trade theory. Thus as strong deficits in skill-and technology-intensive branches emerged, an accentuation of specialization toward labor-intensive branches and a decline of capital-intensive branches could initially be observed in Central and Eastern Europe’s (CEE) trade specialization with the West (see the evidence in “The Interpenetration” 1995; Landesmann 1995).

However, at the same time as global market pressures redirected industrial and trade specialization in the Central and East European countries (CEECs) in conformity with comparative levels of economic development, factor endowments, etc., there was also evidence of the impact of the embarkation of some of the CEECs on a process of catching up with more advanced West European economies (in organizational/institutional, technological, and product quality terms). Two forces have thus been operating alongside each other: (a) the accentuation of patterns of inter-industry specialization, following the strong liberalization of trade, and (b) the begin-

nings of a process of catching up (very differentiated across the different CEECs), which is traditionally associated with a decline in strong patterns of inter-industry specialization and an increase in intra-industry trade (for details on this argument and evidence, see Landesmann 1995).

HETEROGENEITY ACROSS CEECs

Evidence on catching up suggests the emergence of strong heterogeneity across the CEE economies. For certain economies, notably Hungary and the Czech Republic, we observe strong increases in intra-industry trade with EU trading partners and a decline in the strong comparative bias against skill, R&D, and, lately, capital-intensive branches. For other countries such as Romania and Bulgaria—with Poland occupying a middle position—patterns of inter-industry specialization compatible with differential factor endowment positions between East and West European economies are further reinforced. Comparisons of both industrial and trade structures of the CEECs with North and South European economies show that the more advanced of the CEE economies occupy a middle position between the industrially more advanced northern EU and ex-European Free Trade Association (EFTA) countries, on the one hand, and the South European economies (Spain, Portugal, Greece) on the other (see Urban 1997).

The cumulative evidence of development in transition economies indicates the great importance of geographical location: the CEE economies adjacent to Western Europe absorb a much greater amount of FDI than those which are geographically (and culturally) more removed. They emerge sooner from “transformational recessions”: they obtain easier access to international finance; and they stabilize—in a feedback relationship—more rapidly, politically and economically. All these are important factors for embarking upon a catching-up process.

The potential for and speed of catching up is relatively high in the CEECs precisely because of the inherited unbalanced nature of assets (such as good stocks of engineering skills, insufficient capabilities/capacities in design, marketing, communication infrastructure, etc.). This, implying bottlenecks in some assets/skills and

excess capacities in others, has led to inefficient utilization of existing capacities and underperformance.)² Closing the existing gaps in skills and infrastructure, as well as in organizational and institutional structures, could thus lead to strong, positive externalities. Current developments (relatively rapid productivity growth and export growth with real appreciating currencies) in those CEECs which have embarked upon growth are a testimony to their existence.

VERTICAL PRODUCT DIFFERENTIATION IN EU MARKETS: QUALITY GAPS OF CEE PRODUCERS

Trade theory tends to think of intra-industry trade as being of a largely horizontal type (i.e., producing differentiated products of rather similar quality but catering to differentiated tastes).³ This picture is, as one would expect, grossly misleading if one studies the evidence of evolving intra-industry trade between CEE and Western Europe. This trade is characterized by enormous price/quality gaps in even narrowly defined product groups (for evidence on this, see Landesmann and Burgstaller 1997). Hence an analysis of “vertical” product differentiation in intra-industry trade (i.e., trade with marked differences in the qualities of products supplied by the different trading partners) in these evolving trading relationships is appropriate. Catching-up processes can be described as gradual upward movements of the more backward producers in vertically differentiated product markets and, behind that, of producers operating under technologically differentiated production conditions. There is some evidence that such upgrading does occur in the more advanced of the CEE economies, Hungary in particular, and that quality upgrading correlates with the degree of cross-border corporate involvement by Western firms (see also below).

The following are the most important findings of a recent detailed examination of price-quality gaps between East and West European producers and of the general positions of CEE producers in quality-segmented product markets of intra-EU trade (see Landesmann and Burgstaller 1997 and Appendix 1):

- The evidence suggests extremely high price/quality gaps and very little representation of CEE producers in the high-quality

segments of trade with the EU. These gaps and underrepresentation in the high-quality segments are very striking, also in comparison with those characterizing the less developed regions of Europe and those outside Europe. The measured gaps, which put CEE economies on par with the export performance (in quality terms) with the lowest quality exporters (China, India, Turkey) indicate that there is substantial scope for catching up here.

- Shifts in the positions of CEE producers with respect to the two variables above over the period 1988-90 to 1992-94 were rather dramatic in relation to other international competitors. These shifts show again a clear bifurcation in the developments of two groups of CEECs, the Western CEECs (comprising the Czech Republic, Hungary, Poland, and Slovenia) and the Eastern CEECs (comprising Bulgaria, Romania, Russia, and Slovakia).
- An interesting distinguishing feature emerged for the CEE economies over the early transition period: While upward movements in the exchange rate relative to the purchasing power parity (PPP) rate relate in the general sample (comprising all economies exporting to the EU) positively with upward movements in the price/quality position of exporters, this relationship is much less visible among CEE exporters. For the more recent period, 1994 compared to 1992, furthermore, substantial price gap closures could be found for many sub-branches of the engineering sectors, irrespective of the degrees and directions of exchange rate to PPP rate movements. Furthermore, substantial price gap closures (at current ECU exchange rates) proceeded with, at the same time, substantial improvements in the market share positions of CEE exporters. This evidence does seem to support the view that initial quality positions of CEE producers did not fully reflect underlying developmental levels.

IMPLICATIONS FOR FACTOR MARKETS AND CROSS-BORDER CORPORATE INTEGRATION

The evidence of strong vertical product and production differentiation between East and West European producers implies that some of the conjectures of traditional trade theory—Heckscher-Oh-

lin-Samuelson (HOS) theory—should be applied in a very cautious manner to draw out the implications of the fast moving process of East-West European integration. In particular, the Stolper-Samuelson theorem, which conjectures that a strong global pressure toward factor price equalization would be exerted through competition in the product markets, has to be applied only with very strong modifications. Catching-up economies, particularly those with very strong gaps in capability structures, are operating in different technological and organizational environments and, furthermore, are catering largely to different “quality segments” of international product markets than are the more advanced West European producers. If quality segmentation is rather extreme (as the evidence mentioned above indicates), one should expect East and West European producers to operate in largely noncompeting product spectra or, at least, to sell with high quality discounts attached to their products, so that the situation is rather removed from a direct application of the Stolper-Samuelson theorem. Nonetheless, over time, as catching up gains momentum and as the linkages of cross-border corporate integration thicken, the strong quality segmentation gets reduced and a wider and wider range of products become competing products. It is then that the pressures on West European factor markets increase; at the same time, of course, real wage catching-up processes in Eastern Europe are also in progress.

CATCHING UP, PRODUCTIVITY, AND WAGE DYNAMICS

Evidence on wage rates, labor productivities, and labor unit costs shows a dramatic increase in the range of productivity levels, compensation rates per employee, and labor unit costs across the European continent as a result of East-West European economic integration. A recent study by Landesmann and Egger (1997) has compiled detailed wage rate, productivity, and labor unit cost data at the branch level for the entire range of East and West European economies and shows that the coefficients of variation of productivity levels and compensation rates have increased dramatically on the European continent and now approach the values which could be calculated for the range of Asian economies (see Appendix 2). Hence

the picture of vertical differentiation discussed above with respect to product qualities supplied by East and West European producers has its complement in cost variables (compensation rates, productivity levels, labor unit costs), which traditionally point to international hierarchies in production conditions.

The picture of vertical product and producer differentiation is also essential for understanding the dynamics and pattern of FDI and cross-border corporate integration between Eastern and Western Europe. The analysis of FDI flows and cross-border corporate integration is complex, as the enormous theoretical and empirical literature on this topic testifies (for an overview, see Markusen 1995). However, there are a number of tendencies in FDI developments in CEE which support the arguments made above. First, as mentioned above, there were and are clear gaps in CEE's production capabilities and also gaps in catering for domestic demand structures once these could be expressed more freely in the market after the transition. The closure of these gaps through FDI activities and cross-border corporate integration is an important factor explaining early patterns of FDI. Second, as can already be seen from evidence in those countries and industries in which more dramatic FDI and OPT (outward processing trade) activities have developed, the presence of foreign enterprises—through FDI, joint ventures, and OPT activities—plays an important role in the upward movement within the vertically differentiated structure of East-West European production and trade relationships. In countries which receive a relatively high inflow of FDI, enterprises with foreign participation account for an overproportionate amount of export (and import) and investment activity (see Hunya 1996; Zemlínarová 1996). Wage levels are generally higher in enterprises with foreign participation; these attract skilled manpower more easily, and they are prime customers of financial institutions.

Corporate strategies in the current era are designed to exploit vertically differentiated production conditions globally. A variety of studies (see, e.g., Borrus 1995; Doherty, ed. 1995) have pointed out that in order to organize their operations worldwide, U.S. and Japanese firms in particular have built up corporate cross-border networks (sometimes with and sometimes without ownership control) which have exploited the differentiation in technological capabilities and cost conditions across Southeast Asian countries and regions. As

the degree of differentiation of production conditions has vastly increased in Europe as a result of East-West European integration, it is quite likely that similar networks initiated by West European (but also U.S., Japanese, and Korean) firms will evolve as part of the overall economic integration process of Western and Eastern Europe.

IMPACT OF TRADE AND CORPORATE INTEGRATION ON LABOR MARKETS

The relationship between trade structures, FDI flows, and labor market developments has recently occupied many economists in the West (for an overview of this—largely American—literature, see, e.g., Baldwin 1995; for a review of the debate, see Wood 1995). Careful studies (see, e.g., Murphy and Welch 1991; Borjas, Freeman, and Katz 1992; Leamer 1994; Sachs and Shatz 1994) found significant effects of evolving international trade patterns, FDI, and migration flows on employment and wage structures in the West. These studies mostly concern developments in the 1980s and concentrate on North-South trade and migration patterns. It is clear that this topic is of great relevance for East-West European relationships and particularly for countries with close geographical proximity to each other.

However, as mentioned above, there is a danger in applying standard trade theory in too simplistic a manner to the situation of increasing trade and corporate links between catching-up and more advanced economies. Development processes in CEE are characterized by rather strong heterogeneity: certain regions and segments of the company sector and the labor market are developing rather rapidly; other regions and segments are stagnating or lagging strongly behind. Consequently, the evolution of demand structures and the access to capital markets and skilled labor show strong features of segmentation. In such circumstances, competitive pressures are strong within segments but weak across segments, although the boundaries between segments are shifting as modernization gains momentum in the CEE economies.

There is evidence of a rather dramatic increase in inter-industry wage differentials in CEE since the onset of transition, approaching in some economies the type of wage dispersion observed in the West.

However, more work is required to reveal the evolution of wage structures within industries (across firms), across skill groups, etc. The simple differentiation between skilled, semi-skilled, and unskilled segments of the labor force, which is adopted in the literature on the impact of "globalization" on labor markets in advanced and catching-up economies, is probably insufficient to grasp the complexity of the gradual and problematic restructuring of the existing skill structure of the labor force in Eastern Europe. As mentioned above, while the general standards of education are high (see, e.g., Hamilton and Winters 1992), there are severe gaps in the availability of certain skills as the existing skill structure has been built up over a long period in which it did not have to comply with the requirements of an open, market-oriented economy. Hence, just as with the physical capital structure, so does the stock of human capital undergo a difficult process of adjustment; and the evolving wage structure in CEE reflects this, with very high spot prices showing up the short supply of certain professional skills (accountancy, management, legal practice) and with low wages (and/or deteriorating job prospects) reflecting the redundancy of other types of acquired skills.

From the available evidence it does look as if the longer-term comparative advantage of some of the more advanced of the CEECs might not necessarily be cheap labor per se but a relatively cheap skilled labor force, although due account has to be taken of the gaps in the skill structures mentioned above. Furthermore, exploitation of this potential presumes that necessary structural skill adjustment processes proceed successfully (supported by suitable government schemes of training and retraining and an overhaul of educational and training structures) and without too much effect of high transitional unemployment on skill erosion. The current emphasis of FDI on more capital- and technology-intensive activities in manufacturing (which are also areas in which the complementarities between capital and skilled labor are particularly high) in some of the CEECs can be taken as evidence that their longer-term comparative advantages do not seem to lie exclusively in low-tech, low-skill production.

As regards the impact of East European developments upon West European labor markets, we would expect the type of dynamics analyzed in the North-South trade and FDI literature to gain momentum over time, as East European producers gain weight in West European markets and in intra-corporate European production

chains;⁴ as the “quality segmentation” in product markets weakens; and hence as East European producers (or subsidiaries of Western companies in Eastern Europe) start to compete directly with Western producers over a wider range of products in Western and home markets. Theory suggests that the strongest pressure of adjustment in the West would be exerted by the emergence of a strong pattern of inter-industry specialization; this, we feel, however, will not be characteristic for the more advanced of the East European economies, given the scope for catching up in these economies. There, the already growing tendencies for intra-industry trade will tend to build up and strengthen the pressures for a quality (and skill) upgrading process on producers in the Western economies. In this context we should reiterate that real wage catch-up is as much a feature of an overall catching-up process, and hence what are now considered as extraordinarily high wage gaps between Eastern and Western Europe will get eroded over time. The competitive challenge is a function of the relationship between “real cost” and “quality” catching up, and here we expect that East European producers are going to differ from the East Asian “miracle economies” in that the latter managed to mount a strong challenge to Western producers by allowing, for considerable periods, quality catching up to outstrip real cost catching up; this is less likely to be the case in Eastern Europe, where social aspirations and political possibilities tend to exert a stronger pressure toward rapid real income growth.

UNEVEN PROCESS OF CATCHING UP AND THE PROSPECTIVE DYNAMICS OF TRADE AND INDUSTRIAL SPECIALIZATION IN EUROPE

To summarize the last two points: the analysis of the impact of evolving industrial specialization patterns between Eastern and Western Europe (involving both trade relationships and direct corporate integration) upon the labor markets in both parts of Europe is an extremely important topic and still very much underresearched. In the context of a potential process of catching up, specialization structures (reflected in either trade flows or intra-corporate production location decisions) are symptomatic only of specific phases of that

catching-up process and differ between the phases (see the by now voluminous literature on the Southeast Asian development process). As there is evidence already (see above) that catching up is and will continue to proceed at widely different speeds (if at all) in different regions of CEE, the pattern of industrial specialization is differentiated across both the time dimension (following the phases of a development process) and the regional dimension. Hence the impact of East-West European integration and of industrial specialization upon labor markets in both Western and Eastern Europe should be seen in the context of this dynamic and differentiated process.

For some time to come, competition from CEE producers will exert significant pressure upon the lower-cost, lower-quality segments of West European production. This will contribute toward additional pressure on industrial and skill upgrading, particularly in the countries which are geographically more exposed to such competition. From the point of view of longer-term industrial development, such a move—if successfully managed—should have a positive impact on “endogenous” growth in the more advanced West European economies. Government policies in the West should be directed to support the necessary skill and technological upgrading process.

On the part of the CEE economies, one has to consider the impact of the integration of substantial segments of their economies into the chains of international production interlinkages. Attention will increasingly focus on the extent of “spillover effects” between the activities with foreign corporate participation and the rest of the domestic economies. Evidence from Asian experience suggests that the depth and breadth of these spillovers are vital for the overall development process. On another issue, one also has to pay attention to the impact of selective migration flows of higher skill categories (“brain drain”) on the endogenous growth process. The interdependence between upward movements in the sophistication of the industrial structure and the demand for skilled labor and reduced incentives for selective migration is important here. The evolution of the “push factor” of migration from Eastern Europe will be as much a function of the expectations concerning the characteristics and the time horizon of the economic and social catching-up process as of the actually observed initial income gaps.

CONCLUSION

There is still great uncertainty about the longer-term characteristics of East-West European integration. The argument made here is that these characteristics depend particularly upon the extent, speed, and nature of catching-up processes of CEE economies. Consequently, one should be careful in drawing conclusions from applications of relatively static theories of trade and industrial specialization to the process of East-West European integration; this care should extend to the analysis of the implications of this integration process for the structural dynamics of East and West European labor markets.

Looking at the integration process from a dynamic perspective, one should pay increasing attention to the potential impact of the economic integration process of these two complementary parts of the European continent upon the dynamism of the European economy as a whole, which, in the current global context, is of vital importance for Europe's future position in the world economy. Concern for the analysis of the timeframe of catching-up processes in the current liberalized conditions of East-West European relations, of the factors which constrain the embarkation upon speedy catching up (including the extent, geographical coverage, and characteristics of cross-border corporate linkages), and of the emerging regional diversity of growth processes in this region should become paramount.

NOTES

1. The appendices referred to in the text can be found in an earlier version of this study at <http://brie.berkeley.edu/BRIE>.
2. The unbalanced nature of existing capacities/capabilities was revealed even more strongly following the liberalization process after 1989–90.
3. There are exceptions to this description and analysis of intra-industry trade; see particularly the contributions by Shaked and Sutton (1982) and Gabzewicz and Thisse (1979), as well as the analysis of quality competition in models by Flam and Helpman (1987), Grossman and Helpman (1991), and Taylor (1993).

4. In 1996, the combined market share of all CEECs in EU markets in manufacturing as a whole hardly exceeded the market position of a small advanced Western economy such as Austria.

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TRADE PATTERNS, FOREIGN DIRECT INVESTMENT, AND INDUSTRIAL RESTRUCTURING OF CENTRAL AND EASTERN EUROPE¹

Paolo Guerrieri

This paper analyzes changes in the trade patterns of Central and Eastern Europe (CEE) and the former Soviet Union (FSU) and the potential role in the global/European division of labor of these transforming economies. In the reform period (1989–95) the trade patterns of CEE changed significantly. The most pronounced trend was the strong expansion of trade with the OECD countries, in particular with the European Union (EU), whereas Council of Mutual Economic Assistance (CMEA) intraregional trade literally collapsed. This massive geographical reorientation has also led to significant changes in the commodity composition of CEE trade in the same period.

The first part of the paper will assess the patterns of microeconomic performance and structural transformations in 1989–95 that are likely to have significant consequences in the role of Eastern Europe in the global division of labor and in its integration into the European economy. The main goal is to assess the different impact of trade liberalization and economic reforms on the trade patterns of the transforming economies in their relations with the market economies in order to evaluate different industrial restructuring of the former centrally planned economies (CPEs) in the transition from central planning to a market system. The aim is also to provide empirical evidence for different evolutions of production and technological capabilities of the CPEs in the recent period.

In this regard, what we call a “structuralist-evolutionist” approach to economic growth and development is used by drawing on recent conceptual and empirical works on the role of technology in economic growth and international trade specialization. The first section presents this evolutionary framework, and it stresses the

importance of dynamic efficiency, technical infrastructure, and an efficient process of generation and diffusion of technology to achieve long-term growth. A related sectoral taxonomy is employed to analyze the relationship between technological capability and international trade performance of the former CPEs and to emphasize the main inter-industry linkages at the level of each individual country.

There is no doubt that within the CPEs, three major transforming economies (Poland, Hungary, and the Czech Republic) have registered—at least so far—a relatively greater success in their restructuring and trade specialization patterns. This has certainly been due to their different economic and social starting points, but it has also been the result of many other factors, such as differences in the introduction of a market economy, the forms of private activity, the elimination of foreign trade restrictions, and the introduction of more realistic and flexible exchange rates. Foreign direct investment (FDI) has also played a significant role in the individual trade patterns of the three most developed Central and East European countries (CEECs). The CPEs as a whole have been able to attract only a limited amount of foreign capital, of which Hungary, the Czech Republic, and Poland have attracted about two-thirds (ECE 1995b).

Although all three CEECs experienced significant restructuring, important diverging patterns of trade and production specialization have been taking place even within this limited group. The second part of the paper will assess the overall and bilateral trade specialization patterns of the Czech Republic, Hungary, and Poland, especially with the EU. A highly disaggregated analysis of their trade specialization patterns with regard to trade with the market economies, based on an original industrial and technological sectoral taxonomy, is carried out in this section. The aim is also to analyze what kinds of linkages (backward or forward) have been induced by restructuring in the three countries. Different linkage effects are going to determine different integration patterns of the individual CEECs into the global and European area. In this regard, the specialization patterns of the three major CEECs will be compared in the third section of the paper with those of the four most advanced East Asian countries or regions (Hong Kong, South Korea, Singapore, and Taiwan) so as to assess their evolution and respective roles in the regional and global division of labor. The final section provides some concluding comments on these findings.

TRADE, TECHNOLOGY, AND ECONOMIC TRANSITION

There is no doubt that a successful transition to new market-type economies in the former CPEs still largely depends on their ability to ensure an upturn in their medium- and long-term economic growth prospects. Above all this requires investment to both restructure and modernize production capacity in such a way as to generate endogenous sources of investment, innovation, and economic growth. All that implies and requires structural changes in the economy.

In the traditional, orthodox, neoclassical framework, restructuring, in terms of structural change, can simply be considered a nearly automatic result of an efficient resource allocation among sectors which is entirely driven by market incentives (a set of relative prices) according to an individual country's comparative advantage (domestic versus world prices). In the traditional model the openness of the economy can be regarded as a very powerful device for rapidly importing efficient world prices and creating strong incentives for efficiency in resource allocation (restructuring) and long-term growth. Trade specialization is not a problem because there is always something each country can profitably produce and trade, as long as markets are open and domestic relative prices free to move.

There are well-known theoretical and empirical arguments to cast serious doubts on this conventional explanation of the sequence among trade openness, structural change, and economic growth/development. Although a proper set of market incentives, such as those created by "outward-oriented" growth strategy is very important, it can at most be considered a necessary condition for success of the restructuring process. The structural features of industrial restructuring in a transition economy and the role played in it by technology call for a more articulated approach.

The purpose of this paper is to move in this direction by following a structuralist-evolutionist approach to economic restructuring and growth; it draws on recent theoretical and empirical works on the role of technology in trade specialization and economic growth. The structural approach stresses the central role of technological change and dynamic efficiency to explain countries' relative industrial and trade performance. Technological capability is considered

a key factor driving the international trade specialization and competitiveness of single countries; this capability is a combination of knowledge, skill, and organization (Dosi, Pavitt, and Soete 1990; Foray and Freeman 1992).

Whereas an efficient structure of incentives (price structures) is essential for industrial development, the ability to respond to those incentives depends on the skill and knowledge of the firms concerned—i.e., on their technological capability. At country level, the ability to cope with industrial technology depends on the rate of generation/diffusion of technology and on the structural changes that such progress requires (Ernst and O'Connor 1989; Lall 1990). Industrial development may thus be seen as a sequence of structural changes within the manufacturing sector contributing to the emergence of new sectors (Justman and Teubal 1991). In this regard, structural change is a cause of growth and should not be considered an autonomous market-driven result of trade openness and outward-oriented growth. In this perspective, the generation of comparative advantages is also an articulated process, in which the accumulation of physical capital interacts with the development of skill and technological endowments (Chesnais 1986; Dosi, Pavitt, and Soete 1990).

Technology, however, cannot be equated with “information” or ideas that are easily reproducible and passed from firms and countries who have them to others, as in the traditional neoclassical model. In fact, innovative activity is a cumulative process which is both country- and firm-specific since it is differentiated in its technical characteristics and its market application (Amendola, Guerrieri, and Padoan 1992; Pavitt 1988; Cantwell 1989). Furthermore, processes of technological change tend to assume varying sectoral features in terms of differences in technological opportunities, sources, and appropriability conditions (Pavitt 1984; Dosi, Pavitt, and Soete 1990; Guerrieri 1992; Guerrieri and Tylecote 1994). Thus there are systematic differences in both productivity levels and growth potential across industrial sectors. The case for the industrial restructuring of transitional economies turns essentially on this point.

To take into account this role of structural transformation in economic development, the industrial system of a country should not be considered as merely a list of sectors that are independent of one another; rather, it has a hierarchical structure, defined by a complex technological interdependence among its various component

sectors (Rosenberg 1982; Chesnais 1986; Scherer 1982). In this regard, the linkages among different industrial sectors assume great importance (Schmookler 1966; Rosenberg 1976, 1982; Pavitt 1988)—i.e., in terms of innovation user-producer relationships (Scherer 1982; Lundvall 1988). In other words, the industrial system could be viewed as national networks of interfirm, intra-industry and inter-industry linkages that affect the ability of nations to transform opportunities for innovation into actual technological change (Lundvall 1988; von Hippel 1988). These innovation linkages occur within and between industries, and to a large extent they constitute externalities which increase the opportunity for technological spillovers across firms and sectors, generating a cycle of positive feedback and self-reinforcing growth (Arthur 1990; Kaldor 1981). Also, the competitive advantages of individual countries are concentrated in these clusters of sectors connected through vertical and horizontal relationships at the technological and production levels (Porter 1990; OECD 1992; Guerrieri and Tylecote 1994).

To try to individuate in an empirical analysis these potential flows of innovation learning among firms and among industries, we need an adequate taxonomy of industrial sectors to be used as a proxy of the complex technological interdependence characterizing an industrial structure. Following work by Pavitt (1984, 1988), Guerrieri (1992, 1993) used an alternative sectoral taxonomy to analyze the relationship between technological capability and international trade performance of the major countries, which is consistent with the above-mentioned theoretical works on technological change and trade specialization. It identifies five types of industries, primarily through a combination of technology sources, technology user requirements, and means of technology appropriation: *natural resource-intensive*, *supplier-dominated or traditional*, *scale-intensive*, *specialized suppliers*, and *science-based*.

In the *natural resource-intensive* group the availability of abundant raw materials strongly influences the choice of production localization and countries' comparative advantage (e.g., petroleum, refineries, nonferrous metal basic industries, pulp and paper); the *supplier-dominated (traditional)* sectors encompass the more traditional consumer and nonconsumer goods industries such as textiles, clothing, furniture, leather and shoes, ceramics, and the simplest metal products. Both sectors are net purchasers of process innova-

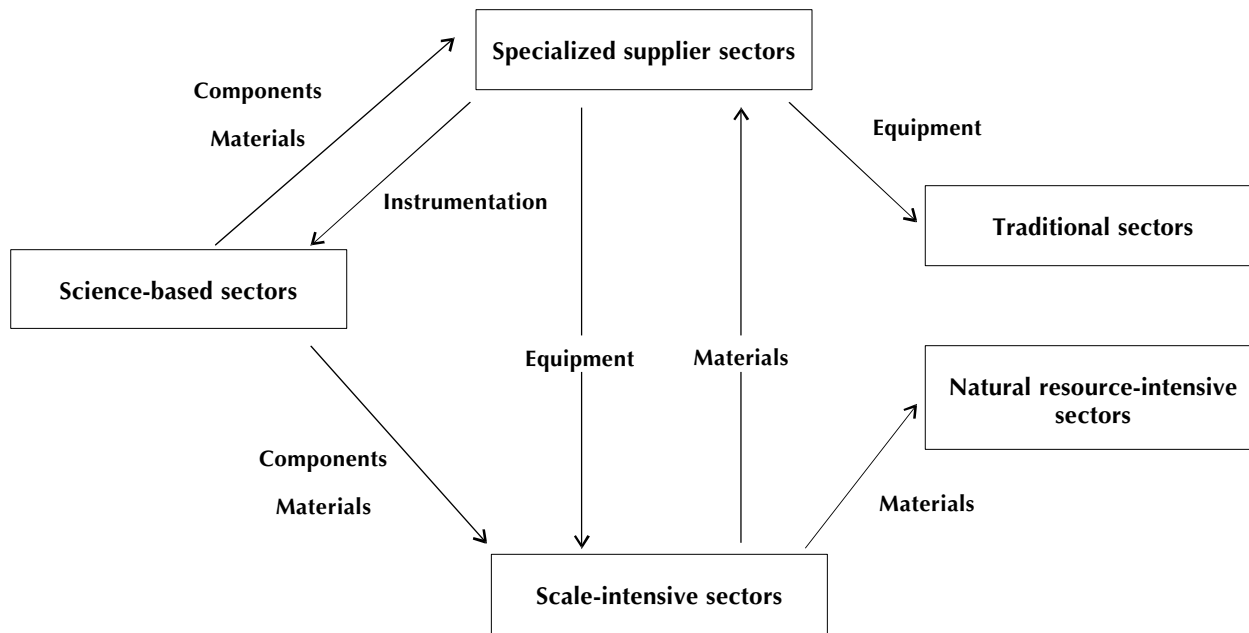
tions and innovative intermediate inputs from other suppliers of productive equipment and materials (see Figure 1). In these sectors technology is easily accessible; firms' competitiveness is notably sensitive to price factors, although in a few traditional sectors it is also influenced by nonprice factors such as product design and quality, and factor endowments have a major influence on the generation of comparative advantage.

Scale-intensive sectors include typical oligopolistic large firm industries, with high capital intensity, wide economies of scale and learning, high technical or managerial complexity, and significant in-house production engineering activities, such as automobiles, certain consumer electronics and consumer durables, and the rubber and steel industries. *Specialized suppliers*, which include most producers of investment goods in mechanical and instrument engineering, such as the machinery for specialized industries (i.e., machine-tools), are characterized by a high diversification of supply, high "economies of scope," relatively medium to small companies, and a notable capacity for product innovation that enters most sectors of scale-intensive and supplier-dominated groups as capital inputs. Finally, the *science-based* sectors include industries such as fine chemicals, electronic components, telecommunications, and aerospace, which are all characterized by innovative activities directly linked to high R&D expenditures. A large number of other sectors rely heavily on them as capital or intermediate inputs, and their product innovations generate broad spillover effects on the whole economic system.

In three categories—science-based, scale-intensive, and specialized suppliers—comparative and absolute advantages are dominated by technological activities, as shown by many empirical studies (Soete 1987; Fagerberg 1988; Amendola, Guerrieri, and Padoan 1992). Industrial restructuring and growth, as pointed out above, may be seen as a sequence within the manufacturing sector, a technology-driven structural change depicting an evolution from traditional and resource-intensive to scale-intensive, and from scale-intensive to science-based and specialized supplier industries (Bell and Pavitt 1995). In this regard, the different innovative linkages among groups of industries (the interactive learning among sectors) and the complex-related technological interdependency, as shown in Figure 1, are of great significance (Lundvall 1988; Enos and Park

Figure 1

The Main Technological Linkages among Industrial Sectors



1988; Katz 1987). At least this has historically been the case in the advanced countries (Rosenberg 1982). This evolution, however, should not be considered inevitable. It requires a set of given conditions and includes interactive roles and strategies by firms, governments, and institutions of individual countries (Nelson, ed. 1993; Lall 1995). The structuralist-evolutionist approach and the related sectoral taxonomy—as shown below—may be particularly useful for analyzing the current transition phase of the former CPEs.

TRADE PERFORMANCES AND STRUCTURAL CHANGES IN THE FORMER CPES

In the present and following section the long-term trade performance of the former CPEs is analyzed by using the sectoral taxonomy presented above. The aim is also to provide empirical evidence for different patterns of restructuring and technological capabilities of the CPEs in the recent period. In effect, trade performance and specialization provide a relatively objective and convenient test of comparative efficiency in each industry for the countries considered. The analysis uses a variety of indicators and relies on the highly disaggregated SIE World Trade Database (see Appendix 1), comprising UN and OECD statistical sources expressed in current dollars (450 product classes, 98 sectors and 25 commodity groups) for more than 80 countries (OECD, newly industrialized countries [NICs], ex-CMEA, and less developed countries [LDCs]).

Our analysis will take into consideration only trade relations of the former CPEs with market economies (including both developed and developing countries) since they were carried out to a large extent on the basis of market incentives and were much less distorted than intra-CMEA trade. It follows that intra-CMEA trade flows are not included in our analysis. Furthermore, exports and imports of CPEs are calculated in the analysis by using trade declarations of all the partner countries. The reason is that the original CPE declarations were either not available for the period until 1989 or not adequately broken down in the more recent years.

As noted, the most pronounced change in CEE trade was a geographical reorientation from East to West through a dramatic

increase of trade flows, especially with the EU (ECE 1995a). The EU very rapidly became the leading trading partner for most CEECs. This massive geographical reorientation has been accompanied by significant changes in the commodity composition of trade in most transforming economies. Trade patterns, however, have varied substantially across the former CMEA countries (see Tables 1–10). In this regard the CPEs could be divided into three groups: Poland, Hungary, the Czech Republic, and to some extent Slovakia in the first—designated jointly as the CEE-4; the second group consists of Romania, Bulgaria, and Albania; the third is the FSU.

In the following we will assess the three distinct patterns of trade performance and structural transformation which are likely to have significant consequences in the future role of the former CPEs in the global division of labor and in their potential integration into the European economy.

THE FSU

The past five years have produced profound changes in Russia and the other FSU states. On the macroeconomic side, prices and trade have been liberalized, inflation has fallen dramatically, and capital markets have developed significantly. But it is also true that industrial restructuring has generally been unsuccessful in these years, largely because the state remained the principal owner in most large enterprises, and the state agencies that were asked to transform these firms into market-oriented enterprises did not have the power to do so. On the real side of the economy, therefore, production and investment have been continuously declining in this period, and only recently has Russia been able to stabilize its output level.

An initial overall view reveals clearly defined comparative advantage patterns for the FSU. During the recent transformation process, this group of countries consolidated its revealed comparative advantage in fuels and primary resource-intensive sectors, such as those connected with oil, gas, and nonferrous metals. Although FSU oil and gas product exports fell precipitously from their high level in the late 1980s (around 44 percent) to around 23 percent in the mid-1990s due to the political transformation, other sectors have increased their export capacity. Both scale-intensive sectors (such as steel) and natural resource-intensive groups have made and consoli-

dated export gains. Most recently, the FSU has even started showing strengthened comparative advantage in manufactured products, including mechanical engineering sectors, science-based, and traditional manufactured products.

ROMANIA AND BULGARIA

Romania and Bulgaria show distinctive patterns with respect to the rest of the CEECs. Their share of world exports declined significantly during the first part of the transformation process and has only partially recovered the lost ground in more recent years. This negative trend has especially characterized industrial exports. A fundamental cause for poor export performance has been the small-scale restructuring and its only limited success. Consequently, trade specialization has not allowed Romania and Bulgaria to capitalize on their comparative advantage, which is primarily in traditional and resource-intensive industries. The transition thus far has favored products such as clothing and footwear but has accelerated the decline of other sectors that played a larger role during the socialist era, such as oil products. Moreover, specialized suppliers and science-based goods, which never thrived under the old system, have suffered even more in the transition. Exacerbating these trends has been the disappearance of Soviet oil, raw materials, and derivative imports that at one time supported the production of technologically more sophisticated products in Romania and Bulgaria.

THE CEE-4 CZECH REPUBLIC, HUNGARY, POLAND, AND SLOVAKIA

With regard to trade performance, there has been a substantial increase in the four major CEECs' share in world exports in the period 1989–95 after a relative decline in the 1980s. Almost all manufactured product groups have been a part of the new increasing export trend, whereas agriculture, fuels, and other raw materials have registered a symmetrically opposite path with significant losses in recent years. Especially in the case of labor-intensive products (traditional products, such as textiles, apparel, footwear, and metal products) the CEE-4 registered strong increases in the share of world exports from 1989 to 1995 (from 0.81 to 1.62 percentage points) and held a substantial positive trade balance in the same period

(Guerrieri 1995b). In contrast, their share in world exports of the food-processing industries and energy-intensive products dropped significantly in the transformation process, and trade balances of these sectors also sharply deteriorated. One should also note that the share of CEE-4 imports in world trade strongly increased during the transition phase, outpacing export growth. Thus the overall trade balance with market economies, especially the EU, has substantially deteriorated (Guerrieri 1995b; ECE 1995a). The large and increasing deficit of the CEE-4 with the EU is mainly caused by trade in industrial products, which accounted for the majority of CEE-4 imports from the EU by the mid-1990s (more than 70 percent).

Additional relevant insights on the structural changes in CEE-4 trade with the market economies can be drawn from their specialization pattern during the past one and a half decades, covering both the CPE phase and more recent years (Table 11). During the 1980s under the CMEA trade regime the CEE-4 displayed sound comparative advantages in trade with market economies in (i) labor-intensive or traditional goods, such as textiles, apparel, footwear, and paper products; (ii) natural resource-intensive sectors, such as basic metals and petroleum products; (iii) fuels. In the resource-intensive sectors, CEE-4 specialization increased sharply over the first half of the 1980s, when the low price of oil imported from the FSU benefited the exports of petroleum products to Western markets. In food and agricultural products the CEE-4 experienced sharp fluctuations in comparative advantage over the 1980s; it rapidly increased to positive values by the end of the decade after a sharp decline in previous years.

In contrast, the weakest points of trade specialization between Eastern Europe and the market economies were mostly concentrated in mechanical engineering (specialized supplier) and science-based products. Conversely, it should be noted that most of these sectors represented the strong assets of trade specialization of the CEE-4 in intra-CMEA trade, especially with the Soviet Union (see Drabek 1989; ECE 1992). Thus, there was a strong dual trade specialization pattern of the CEE-4, which provides clear evidence of their weak structural competitiveness in technologically complex sectors vis-à-vis the market economies (Poznanski 1987).

Recent trade patterns (Table 11) show that the CEE-4's comparative advantage in trade with market economies has been strongly consolidating in labor-intensive traditional products. They

have substantially expanded their exports of simple manufactures such as clothing, footwear, furniture, light mechanicals, and other product groups in which labor cost rather than technology plays an important role. The share of traditional or labor-intensive products in total exports from the CEE-4 to market economies has increased from 23.5 to 31.7 percent in the period 1989–95.

The specialization pattern of the CEE-4 in resource-intensive sectors is less clear-cut. Net exports of these products have continued to provide a significant positive contribution to the CEE-4 trade balance. There was, however, a sharp decline in these products in terms of percentage share in total exports, revealing that the adoption of market criteria has increasingly been penalizing the CEE-4 supply capacity in this area. Furthermore, net exports of agricultural products decreased significantly between the late 1980s and the mid-1990s, and specialization in this product group has declined more recently. In this regard, it is quite evident that the association agreement with the EU and its asymmetrical impact very negatively affected agricultural production and export patterns of the CEE-4.

Absolute and comparative disadvantages of the CEE-4 tend to concentrate in most capital goods and technological inputs, such as specialized supplier and science-based groups. They continue to represent the bulk of East European net purchases on foreign markets and have maintained negative values in their specialization indicators. In the case of specialized suppliers, however, a relative improvement has been registered in the more recent period. One should also note that the export shares of the CEE-4 in world trade in both specialized supplier and science-based sectors have increased in recent years (Table 11). The exports of the two product groups accounted for more than 20 percent of CEE-4 overall exports.

To sum up, the comparison of the performances of the CEE-4 and the other two CPE groups reveals a clearly different degree of industrial restructuring and trade specialization patterns. While the FSU faces serious delays in the transformation process and the economic transition of Romania and Bulgaria is still at an early stage, the Czech Republic, Hungary, Poland, and to some extent Slovakia have substantially restructured their economies and present dynamic structural changes.

The relative success of the CEE-4 is certainly due to their different economic and social starting points, but it is also the result of

the restructuring process. The price system has been reformed, trade has been liberalized, private ownership has spread rapidly, and more realistic and flexible exchange rates have been introduced. FDI has also played a significant role in affecting the individual trade patterns of the CEE-4. After initially concentrating on retail trade and services, FDI in the CEE-4, especially European FDI, has been mostly directed toward the manufacturing industries. One should note, however, that the Czech Republic, Hungary, and Poland experienced different industrial restructuring processes. Therefore, significant differences in trade and production specialization patterns have been taking place even within this small group.

INDUSTRIAL RESTRUCTURING AND TRADE INTEGRATION IN THE CZECH REPUBLIC, HUNGARY, AND POLAND

This section assesses the overall and bilateral trade specialization patterns of the three most advanced CEECs (the Czech Republic, Hungary, and Poland—the CEE-3) in trade relations with market economies through a highly disaggregated analysis of their trade specialization patterns and by using the same sectoral and technological taxonomy previously employed. The aim is to get information about the economic restructuring and industrial changes taking place in the individual CEECs through recent developments in their trade patterns. As noted, a related goal is to analyze the kinds of linkages induced by restructuring.

Tables 12–13 show the trade patterns over the past decade (1980–89) and in recent years (1989–95) for the CEE-3 in their trade with developed and developing market economies. The evidence highlights both the country-specific nature of trade performance and specialization and some common sectoral features. Over the entire transformation process the Czech Republic (given the period covered, it is treated here as a single country with Slovakia up to 1992) had the best trade performance in terms of increasing market share at the world level (+90 percent), with gains spread across industrial sectors, especially in traditional, scale-intensive, and specialized supplier goods (Tables 1–10). This remarkable performance was achieved by maintaining a relatively stable trade specialization pattern with com-

parison to that prevailing over the 1980s in trade with market economies (Tables 12–13). The comparative advantages of the former Czechoslovakia have been mostly concentrated in manufacturing trade, traditional and scale-intensive goods being the strongest areas of specialization. In recent years there was a consolidation in comparative advantage in the traditional sector or labor-intensive products. At the same time, there was a relative decline in the value of resource- and scale-intensive groups. The specialized supplier and (to a lesser extent) science-based industries continued to display high comparative disadvantages and increasing trade deficits during the recent period of economic reforms and transformation, although their share in total Czech exports has increased in recent years.

Thus, industrial restructuring has only slightly modified trade specialization patterns of the Czech Republic, and it appears to have contributed to trade performance mostly through a differentiation of export products across the existing industrial structure, from scale-intensive sectors (steel, chemicals, and autos) to some specialized supplier sectors (electrical machinery and instrument activities) to labor-intensive traditional sectors (textiles, clothing, and wood products). This increasing differentiation has been taking place through a substantial increase of intra-industry trade between the Czech Republic and the market economies. Among the CEECs the Czech Republic registered the highest level of intra-industry trade with the EU as a whole by the mid-1990s (Table 14). Conventionally, we think of intra-industry trade as largely horizontal—i.e., trade in differentiated products of rather similar quality (Helpman and Krugman 1985; Greenaway and Milner 1987). In the case of the CEECs, however, intra-industry trade is more typical of vertical style, in terms of both the exchange of vertically differentiated products (Landesmann and Burgstaller 1997) and inputs for more processed outputs (Hoekman and Djankov 1996). The increase in intra-industry trade is certainly a sign of closer links between Western (especially European) firms and Czech producers that have developed in various ways, such as subcontracting agreements and joint ventures. The role of FDI, at least so far, has been relatively less important, with the exception of the car industry (Table 16). In some cases, such as in traditional (e.g., apparel and footwear), scale-intensive goods (vehicles), and specialized suppliers (electrical machinery), vertical intra-industry trade has been characterized by an upgrading of Czech exports through an

increase in their average unit values (Table 15; Hoekman and Djankov 1996). This upgrading should not be overemphasized if it is true that by the mid-1990s the average unit values of the Czech exports were still well below those of many developing economies in Europe and Asia (ECE 1995a; Drabek and Smith 1995).

Poland shows a rather similar successful trade performance but it seems to have followed a different type of restructuring process (Table 12). Poland's world export share has increased significantly (+40 percent) over the transformation period. The major gains by far have been in the traditional labor-intensive industries (+150 percent), with the resource- and scale-intensive sectors also registering substantial gains (more than 80 percent). The trade specialization pattern of Poland shows significant changes from that prevailing in the 1980s. In recent years traditional labor-intensive goods, especially clothing and wood products, have become the most important assets in Polish trade specialization, doubling their positive contribution to the trade balance and strongly increasing their share in total exports (+15 percent). Fuels, which were the leading sectors of Polish specialization in the past, have seen a dramatic reduction in their role. Resource-intensive products (such as nonferrous metals) represent one of the few industrial activities that continued to make a positive contribution to the Polish trade balance even during the transformation period. In contrast, in food items (foodstuffs) and industry, after a period of increasing competitiveness over the 1980s, trade performance and specialization deteriorated sharply, particularly during the more recent years, and increasing trade deficits have occurred. The same negative trends (high comparative disadvantages and increasing trade deficits) characterized the specialized supplier and science-based sectors during the transformation. In the case of Poland, the increasing role of traditional sectors could be attributed to intense local activity, as well as relatively intense subcontracting processes (outward processing trade—OPT) with West European firms. The role of FDI in manufacturing was quite marginal, with the exception of the car industry (Table 16). In this regard, Poland had a lower intra-industry trade intensity than the other two major CEE economies with regard to the EU between 1988 and 1994 (Table 14; ECE 1995a).

The case of Hungary lies somewhere between the two considered above since consolidation and differentiation trends in trade

patterns have gone hand in hand with significant changes in industrial and trade structure (Table 12). By the mid-1990s the latter seemed to be characterized by a persistent strength in agricultural products and food industries, although along a declining trend in recent years owing to the negative impact of a European association agreement in this sector (Inotăi and Henriot 1996). On the other hand, Hungary has been trying to abandon resource-intensive goods (metal products), as confirmed by a decreasing contribution of these sectors to the trade balance (although still in a positive value range) and to strengthen certain medium-high technology-intensive productions, as in the case of specialized suppliers and science-based goods, with increasing shares in overall exports for both groups and declining comparative disadvantages over time. Note that like many other East European countries, Hungary registered a positive comparative advantage in the traditional sectors, especially in the early phase of the transformation process.

In Hungary by the mid-1990s there was a substantial increase of intra-industry trade of the vertical type, accompanied by a significant upgrading of Hungarian exports within certain product groups in the scale-intensive sectors (vehicles), specialized suppliers (electrical machinery and instruments), and traditional (apparel and clothing) (Hoekman and Djankov 1996). It is confirmed by the marked increase of the weighted average unit value ratios in Hungary's trade with the EU by the mid-1990s (Table 15) (ECE 1995b). Even in the case of Hungary, however, a comparison with the trade unit values of other developing countries in Asia shows a huge gap still dividing the CEECs from other regions (Drabek and Smith 1995).

The fact that Hungary had initiated market reforms well before the end of the socialist experience certainly played a role in the increase of vertical intra-industry trade cum upgrading of many export items. But a quite decisive contribution derived from the fact that Hungary was able to attract by far the largest inflow of FDI with respect to the other CEECs (Table 16). The role of capital inflow was particularly significant in the economic transformation of Hungary also because greenfield activities have attracted a large part of the FDI flowing into the country (Inotăi and Henriot 1996). Furthermore, although the empirical evidence on the contribution of FDI to trade is very fragmented and incomplete, it can be shown that a relatively large share of Hungary's exports was provided by foreign firms—al-

most half of all exports, and even a higher percentage in certain individual sectors (OECD 1995).

But in terms of both the reconversion of trade patterns and restructuring of the existing industrial sectors, this deeply micro-economic adjustment has had—at least so far—an ambivalent impact on the trade performance of Hungary during the transformation process. Unlike in Poland and the Czech Republic, the share of Hungary in world exports has stagnated during the transformation period, and it has shown some progress only in those sectors (specialized suppliers and science-based) where the presence of foreign companies is very high (Tables 1–10). It would, of course, be grossly simplistic to establish a direct correlation between this sluggish overall trade performance and the relatively great role of foreign capital in the industrial restructuring of Hungary. The major benefits of deep restructuring and FDI are indeed in the long term and cannot be evaluated on a period of a few years—even more so since macroeconomic factors such as nominal and real exchange rate variations have also played a significant role in the trade performance of Hungary and all the other CEECs (Halpern and Wyplosz 1995).

In sum, diverging patterns of export and production specialization have characterized the three most important economies of CEE over the transformation period. Poland appears to have experienced significant changes in terms of specialization and composition of trade, mostly expanding traditional exports and registering relatively negative performances in medium-high technology-intensive sectors. The Czech Republic underwent few structural changes, pursuing a strategy of differentiating the existing production and export activities across various industrial sectors. Hungary followed an intermediate course, both changing and upgrading the composition of its trade, with fewer overall positive results at least until the mid-1990s, but with recent significant progress in the medium-high technology-intensive sectors (specialized supplier and science-based sectors).

Given the highly differentiated patterns followed by the three major CEECs during the transition period, it is not very easy to provide an overall evaluation of individual developments (especially with regard to changes in technological capability) and thus assess the prospects for their economic integration into Europe. The foreseeable future role of the CEECs in the world division of labor will mostly be that of subcontractors, especially with regard to the EU. In order

to qualify this role and create endogenous sources of accumulation and technological change, it is evident that supply-side upgrading will have a vital role to play. Therefore, specialization should concentrate more and more on high productivity and products with high technological content rather than on labor-intensive ones—even more so given that in the 1980s during the former CMEA trade regime there was a sharp deterioration of CEE technological capability, with net exports to market economies increasingly characterized by a relatively low utilization of new technologies (Poznanski 1987; Guerrieri 1995b).

For this technological supply-side upgrading, major benefits could derive from closer Western integration and links with Western enterprises, especially in the EU. Between 1988 and 1995, the share of intra-industry trade in total CEE-EU trade in manufactures, as already emphasized, increased substantially, especially in the case of the Czech Republic and Hungary (ECE 1995a), confirming closer links between Western (especially EU) and CEE producers. Various channels have been used to strengthen these connections. Among them, as outlined above, the role of FDI as a source of reconversion and technological changes has been rather limited up to the mid-1990s, with the exception of Hungary and the car industry.

Despite the favorable legislation introduced to attract FDI, as of 1995 the transforming economies had been able to attract only about \$12 billion in FDI—that is, less than 4 percent of yearly flows of FDI (UNCTAD 1996). Other emerging countries, in particular in Asia and Latin America, performed much better in this regard. On the other hand, in many sectors—especially in the case of traditional goods (mostly textiles/clothing and leather/footwear) and a few scale-intensive and specialized suppliers (electrical machinery and instruments)—nonequity based linkages such as subcontracting activities and OPT greatly contributed to the rapid expansion of CEE trade (Hoekman and Djankov 1996). Subcontracting has often been preferred by West European firms as a more flexible device than FDI, especially in those traditional sectors where specific advantage lies in market access rather than in proprietary technology or production management.

As is well known, both FDI and nonequity based linkages could have great advantages for CEE by developing backward linkages and integrating local firms into networks of large foreign firms; by helping to improve local levels of managerial, organizational, and technical

skills; and by favoring the development of new comparative advantages. There is no doubt that such a positive impact has already occurred, and significant progress toward reciprocal economic penetration between Western and Eastern Europe has certainly been made. On the other hand, if one looks at the current pattern of specialization of the CEECs, the technological impact of both FDI and nonequity based activities—especially in terms of backward linkages—still appears rather limited and restricted to certain low-technology and labor-intensive sectors. With the partial exception of Hungary in the more recent period, the persistently extremely low degree of competitiveness of the CEECs in both specialized supplier and science-based goods is illuminating in this regard.

It is evident that this weakness of trade-technological specialization could be a cause for concern with regard to the prospects for economic integration of the CEECs into the European space. In this regard, the success of the East Asian strategy of industrialization and technological upgrading (and the important role of FDI in it), could fruitfully be reviewed in order to assess the opportunities and risks of future growth for the CEECs.

THE CEECS AND THE EAST ASIAN NICs: TRADE AND TECHNOLOGICAL PATTERNS

In many respects, the successful modernization of East Asian economies through their increasing integration into world markets could be extremely valuable for East European countries. First, it is important to note the positive trade performance of East Asian regions and countries—Hong Kong, Singapore, South Korea and Taiwan (the East Asian NICs)—over the period 1980–95 in terms of rapidly increasing market shares. Such a remarkable trade performance may be connected with the export-led growth strategies followed by the Asian NICs since the end of the 1960s. A massive reallocation of productive resources into industrial sectors with the highest export potential was the main goal of these strategies. In addition, either state intervention or incentive and subsidy policies were used on a large scale and in different forms (Amsden 1989; Wade 1990). The industrial development of these countries was in-

initially supported by the production and export of consumer goods requiring large amounts of unskilled labor, in which these states had the strongest comparative (and absolute) advantages (Tables 17–18).

After consistent growth up to the late 1970s, the contribution of traditional goods to the trade balance decreased significantly throughout the last decade. This trend stems from the diversification process of manufacturing output and radical changes in trade patterns cum upgrading of exports (increasing average unit value) that took place from the late-1970s to the mid-1990s in some Asian NICs, especially Taiwan and Singapore. Consequently, these two countries were able to improve their specialization in scale-intensive sectors (iron and steel, shipbuilding, and petrochemicals) through the first half of the 1980s, and most of all in the science-based sectors (electronics, components, and investment goods) from the mid-1980s to the mid-1990s. Such gains confirm that Taiwan and Singapore—whose industrial development strategy was based initially on competitive poles comprising production and exports of labor-intensive consumer goods—have gradually carried out a process of diversification and upgrading of industrial structure to first strengthen highly capital-intensive production and, more recently, technology-intensive products. One should note that primary resource-intensive goods shifted into the comparative disadvantage area of all Asian NICs over the second half of the 1980s.

Further evidence of the specialization pattern of the Asian NICs can be drawn from their competitive patterns in single product groups related to the taxonomy previously outlined. Indicators show a sharp strengthening of the NICs' competitive positions on international markets in all main industrial categories in terms of rapidly rising shares in world exports, especially in traditional industries until the second half of the 1980s and in science-based goods over the past decade. Within the latter group, the significant achievements of the Asian NICs in many electronics sectors are emblematic (Guerrieri 1995a). Finally, in specialized supplier sectors, and particularly in mechanical engineering, the NICs have achieved rising export shares in recent years. The import dependence of the Asian NICs has also greatly decreased, as shown by substantial improvements in the trade balance contribution indicators of this sectoral group.

These overall trends, however, mask sharp differences in the trade patterns of the East Asian countries. Singapore and Taiwan (Table 18) achieved the highest results within the group in terms of radical changes cum upgrading of their trade specialization to science-based goods, especially electronics. This was due to deep structural changes in the two countries' trade patterns since the early 1970s, when comparative advantages were concentrated in traditional goods and the food industry in the case of Taiwan and in natural resource-intensive and agricultural products in the case of Singapore (Guerrieri 1993). But South Korea, for example, has a much less diversified trade pattern and focuses mainly on scale-intensive goods. At the same time, traditional goods remained strong assets in its specialization pattern throughout the entire period considered (Table 18). Finally, Hong Kong's position is distinguished by the remarkable stability of its specialization pattern (Table 17). Its trade patterns were based mainly on traditional products, and by the early 1990s strong specialization points were still labor-intensive sectors such as textiles, clothing, furniture, and consumer electronics.

Over the past decade and a half there has been a sharp contrast between the performance of Eastern Europe and the Asian NICs, which are also net exporters of manufactured goods. In the 1980s, Eastern Europe's exports fell behind those of the Asian NICs in most manufacturing groups. The Asian NICs surpassed Eastern Europe not only in traditional product groups, but also in other more technologically sophisticated sectors. The widest gap between Eastern Europe and the Asian NICs (especially Taiwan and Singapore) was in specialized supplier and particularly in R&D-intensive (science-based) sectors, which are the two manufacturing groups with the highest technological content. In the more recent period the trade performance of the CEECs has fallen further behind, with only a few sectoral improvements. As to trade patterns, both groups of countries have undergone deep changes in recent years but in different directions, mostly as a result of industrial restructuring.

For Taiwan and Singapore, scale-intensive goods, science-based goods (electronics), and (less so) specialized suppliers have played a key role. This diversification has had far-reaching implications in terms of the countries' technological capability. Let me explain by using the conceptual framework presented above. As shown in Figure 1, mechanical engineering (specialized suppliers)

has a notable capacity for product innovation, which enters most sectors of scale-intensive, supplier-dominated, and natural resource-intensive groups as capital inputs (Lundvall 1988; von Hippel 1988; Rosenberg 1976); in addition, the innovations of R&D-intensive sectors generate broad spillover effects on the whole economic system, and many other industries heavily rely on them for capital or intermediate inputs (OECD 1992). As the experience of many developed countries with abundant natural resources fully confirms, these vertical linkages can play an important role in the consolidation phase of the industrialization process (Justman and Teubal 1991). As a consequence, technological change patterns are influenced by intersectoral linkages, which in turn become sources of comparative advantages for many advanced industrialized countries. Taiwan and Singapore experienced similar trends.

As shown in Figure 1, the industrialization process starting from traditional and resource-intensive goods was able to move toward science-based goods, generating linkages and broad spillover effects, strengthening the whole industrial systems of Taiwan and Singapore. Traditional and natural resource-intensive goods were fully integrated into the industrial development. Thus, technological change was positively influenced by these intersectoral linkages, which were sources of new externalities and competitive advantages. FDI played an important role (Urata 1993) because the electronics sector was the central pillar of the industrial and technological development (Borras 1993). Electronics products are complex systems based on a number of critical components and therefore are particularly favorable to a network organization spread across countries (Ernst 1996).

As many studies have shown, FDI and production networks based on strong intraregional interdependence as regards inputs and sales, and often part of the global production strategies of U.S. and Japanese medium-large firms, have played an important role in East Asia's overall competitiveness and intraregional trade (see Zysman, Doherty, and Schwartz 1997). Part of East Asian FDI has aimed at taking advantage of local natural resources, skills, and relatively low wage costs. But interest in the region has not been motivated only by the search for the last. The same MNCs that set up as "footloose" industries have pursued a more lasting involvement in the region (Guerrieri 1995a). Therefore, other important inputs related to both

economics and technology have played a dominant role, such as the expansion of East Asian FDI, subcontracting, and outsourcing (Bor-rus 1993). The increasing importance of intra-industry trade in the region could also be attributable to an increasing division of labor within multinational companies. Thus, in many cases, FDI in East Asia has generated trade, and trade opportunity, in its turn, has attracted new FDI (Ernst and Guerrieri 1997).

In the case of Eastern Europe, technological linkages among firms and sectors were weak and performed very poorly during the socialist period and therefore contributed to the deterioration of the long-term competitive position of East European economies (Guerrieri 1995b; Poznanski 1987). Trade expansion in the reform period seems to have only partially compensated for these weaknesses. There are signs of positive development, as in the case of Hungary, but overall unsatisfactory trends still predominate, as shown by negative evolutions and highly competitive disadvantages in specialized supplier and science-based sectors over the past decade. Because both groups are able to generate broad spillover effects across the whole economic system, this competitive failure might create obstacles to the diffusion of innovation and technological change.

CONCLUSIONS

We have assessed changes in the trade patterns of the CEECs and FSU over the period 1989–95 and the potential role in the global/European division of labor of these economies. In our structuralist-evolutionist framework dynamic efficiency, technical infrastructure, and the efficient generation and diffusion of technology are considered very important for long-term growth.

Not only is there variation among the three main groups of CEECs, but also there is substantial variation in the degree to which the most successful group has restructured its economies and pursued trade specialization. The weaknesses of trade-technological specialization could be a cause for concern in regard to the future economic integration of the CEECs into Europe. In the European division of labor the CEECs will be mostly subcontractors for the foreseeable future. In order to use this role to create endogenous sources of

accumulation and technological change, supply-side upgrading is vital. In this regard, useful suggestions stem from the strategies of industrialization and technological upgrading of some East Asian NICs. In Taiwan and Singapore in particular, traditional and natural resource-intensive goods were fully integrated into the development strategies. Technological change was positively influenced by these intersectoral linkages, and this in turn became a source of new externalities and competitive advantages. Therefore, specialization should concentrate increasingly on high productivity and high technological content products rather than on labor-intensive ones.

In Eastern Europe technological linkages among firms and sectors were weak and performed very poorly in the past. More recently, aside from a few positive developments, overall trends remained far from satisfactory. All in all, if it is true that supply-side upgrading has a vital role to play in the future growth of the CEECs, the Asian experience seems to suggest that a technological upgrading depends particularly upon the extent to which production and trade patterns can be shifted in such a way as to generate endogenous sources of innovation and accumulation in the long term, mainly through innovative intersectoral linkages across firms.

NOTES

1. The tables and the appendix referred to in the text can be found in an earlier version of this study at <http://brie.berkeley.edu/BRIE>.

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INTEGRATING CENTRAL AND EASTERN EUROPE IN THE REGIONAL TRADE AND PRODUCTION NETWORK¹

Françoise Lemoine

The integration of the economies of Central and East European countries (CEECs) into the European Union (EU) is an example of the wave of new regionalism which began in the 1980s and which involves the integration of developing and advanced economies (De Melo and Panagariya 1993). Such regional integration of heterogeneous partners follows different models. In Europe, the enlargement of the European Community to Southern countries with a lower level of income (Spain, Portugal, Greece) has been accompanied by policies aimed at reducing disparities among member-states through budgetary transfers, and economic integration has aimed at creating an ever more homogeneous space. In North America, the integration of regional economies across the border has led to the development of the so-called *maquiladoras* in northern Mexico, where assembly plants process U.S.-made components and export the assembled products back to the United States, taking advantage of the much lower wages in Mexico. The Asian experience with regional integration is characterized by an intricate division of labor among heterogeneous economies, based on the cross-national production networks of multinational corporations (Zysman et al. 1997). It has resulted in successive waves of industrialization and in the rise of Asia as an economic powerhouse.

This raises two questions about the integration of Central and Eastern Europe (CEE) in the European economy. First, are cross-national production networks (CPNs) emerging, and can they become as significant for European integration as they are in Asia? Second, what changes in the regional competitiveness will be induced by the new, more heterogeneous European architecture? More specifically,

will the low-wage areas in Europe give European firms the means to withstand Asian competition in labor-intensive production?

This study outlines relevant aspects of the integration of CEE economies to help answer these questions. The first section considers how the strategies of Western firms have influenced the trade and production patterns of CEE. It then assesses the changes that these new emerging partners are causing in EU trade and points out how individual EU countries have reacted in different ways to the new opportunities offered by the reintegration of Eastern Europe.

CPNs IN EASTERN EUROPE

FROM OUTWARD PROCESSING TO FOREIGN DIRECT INVESTMENT

Since 1989 trade relations between the EU and CEE have rapidly intensified, and the surge in trade flows has been accompanied by the establishment and the strengthening of cooperative links between Western and Eastern industries. Western firms have extended their production networks toward CEE as part of their internationalization strategy. This strategy has sought to both improve price competitiveness and exploit regional markets. In the early phase of liberalization, the first objective prevailed, and industrial cooperation mainly took the form of subcontracting production to East European firms. More recently foreign direct investment (FDI) has become a more important component of Western firms' strategies in Central Europe.

OUTWARD PROCESSING TRADE: SHIFTING FROM CENTRAL TO EASTERN EUROPE?

Outward processing trade (OPT) between the EU and Eastern Europe developed fairly rapidly in the early 1990s. EU firms supplied subcontractors in Eastern Europe with materials and components to be processed or assembled for reexport to the EU. This enabled Western firms to take advantage of lower wages and to reduce production costs, without limiting their flexibility to adjust to market conditions. In the early 1990s, OPT drove CEE manufacturing exports, accounting for almost one-fifth of volume in 1992 and

a much larger share in labor-intensive products such as clothing, leather, and shoes (Tables 3 and 4). The EU's preferential tariff quotas for OPT imports allowed CEE clothing exports to soar despite the sensitivity of the sector in the EU. Most CEE clothing exports thus resulted from relocation policies pursued by EU firms. Subcontracting arrangements also actively stimulated CEE exports of electrical machinery.

However, the share of OPT in Eastern Europe's exports to the EU soon declined, falling from over 20 percent in 1992–93 to less than 15 percent in 1995. One reason for this decline was the shift in the composition of CEE manufacturing exports to the EU away from sectors most dependent on OPT (such as clothing, leather goods, and shoes). This shift, in turn, reflects the strong performance of CEE engineering sectors (including machinery, electrical machinery, and transport equipment), the result of the establishment of more durable relationships with foreign firms through FDI (Lemoine 1996). OPT has also been moving from the CEECs with higher wages (especially Hungary and Slovenia) to the Balkan countries. Taken together, these trends suggest that two tiers of regional cooperation are emerging in CEE (Tables 5–6 and Appendices 1–3).

Although subcontracting had a crucial role in the redeployment of CEE industries toward Western markets in the first phase of transition, it seems to have rapidly exhausted its potential effect on export growth. A comparison with Asia shows that this form of the internationalization of production, based exclusively on cost considerations, had much less importance for emerging exporters in Europe than for a country such as China, for which OPT represented about half of all exports in the mid-1990s. CEE economies thus benefited less from the relocation strategies of Western firms than China did from those of Asian firms. This underscores the difference in the nature of comparative advantage between the CEECs and the Asian less developed countries. Another reason may be found in West European industry, which had already lost a good deal of labor-intensive production by the late 1980s and was thus offered fewer opportunities for subcontracting.

FDI: SHAPING MANUFACTURING INDUSTRY IN CENTRAL EUROPE

FDI, which expanded later than OPT, has recently accelerated, especially in Central European countries. Hungary, the Czech Republic, and Poland have received three-quarters of the FDI inflows. As economic recovery makes them attractive sites for investments, they are becoming part of the worldwide strategies of multinational corporations. At first, substantial investments resulted from privatization, but FDI flows to Central Europe should remain substantial in coming years, the result of reinvested earnings and the expansion of existing projects (UNCTAD 1996a).

FDI stocks in CEE remain relatively small by world standards, although inflows have increased rapidly, reaching 5 percent of world flows in 1995. Yet the relative importance of FDI in GNP reached levels comparable to those prevailing in the Asian countries most successful in attracting foreign capital (Table 7). FDI has driven the restructuring of CEE manufacturing industry, where it was concentrated up to 1994 (Figure 1). Foreign capital has played a particularly important role in sectoral modernization because domestic enterprises lack the financial means to launch strategic restructuring. In Poland and the Czech Republic, FDI represented around one-fifth of the total investment in manufacturing in 1992–94, but in some industries the intensity of FDI was much higher (Table 8). In Hungary, which received the bulk of foreign investment, FDI was equivalent to two-thirds of total investment in manufacturing industry. As a result, in Hungary, industry has already been internationalized to a large extent; in Poland and the Czech Republic, this internationalization is under way.

The present sectoral distribution of FDI indicates that the comparative advantages of Central European countries will emerge in capital-intensive, as well as in natural resource-intensive, rather than labor-intensive sectors (UNECE 1996; Jungnickel 1996). In the three Central European countries, FDI has targeted the same sectors: cars and transport equipment, food, and chemicals. The Central European economies thus appear as a new field of competition for multinational corporations. Although the sectoral distribution of FDI shows that investors are concerned with supplying domestic or regional markets, firms with foreign capital are usually more export-

oriented than local firms, and they actively contributed to the success achieved by these countries in penetrating Western markets.

Data for Hungary and Poland indicate that firms with foreign participation account for a large share of exports, especially in those industries which have recently improved their performance in foreign markets—machinery, electrical equipment, and transport equipment (Tables 9–10). The two countries' export pattern and their competitiveness on world markets thus appear closely linked to the strategy of Western firms. A large part of Hungary's industrial activity is integrated in CPNs; indeed, foreign firms play a dominant role in the performance of most branches on both domestic and foreign markets. Likewise, the dependence of Polish exports on firms with foreign capital is high in some industries, such as the car industry, machinery, and electrical equipment. In both countries, FDI has led to a strong export orientation in sectors such as transport equipment and engineering products, while in sectors oriented toward domestic markets, foreign firms generally lead in exports (Tables 11–12). In both countries, affiliates of foreign firms have been responsible for about 40 percent of imports, much of which probably represents supplies of intermediate products or capital equipment from parent companies (Table 10 and Hamar 1993). Affiliates of foreign firms were responsible for 56 percent of the Hungarian trade deficit in 1994 and for more than two-thirds of the Polish trade deficit in 1995. In short, if FDI helps finance the deficit on the balance of payments, it also contributes to the trade deficit.

IMPACT OF FDI ON INDUSTRIAL PERFORMANCE

Country and sectoral performance suggests that there is no systematic relationship between high FDI and output growth. Hungary has received the largest amount of FDI, but up to 1995 its economic growth clearly lagged behind that of Poland and the Czech Republic (Table 13). In all three countries the food industry grew relatively slowly despite receiving quite large amounts of FDI, while the transport equipment sector, which benefited from large capital inflows, led industrial revival (Lemoine 1996). Such mixed results may be explained by the fact that much FDI takes the form of acquisitions through privatization sales, in which case sale revenues go to the

budget and not to the enterprise (Hunya 1996). FDI improves the investment capacities of the firms only indirectly, as foreign affiliates benefit from restructuring investment following acquisition, from an increase in capital, and generally from better access to domestic and foreign credit. Moreover, each country's economic performance appears to influence the level of nonprivatization FDI. For example, Poland, which saw rather limited foreign participation in the privatization program, has received the highest amount of nonprivatization investments, a situation that coincides with a remarkable growth performance (UNCTAD 1996b). Likewise, sectoral data suggest that FDI stimulates growth only when it supplements rather than supplants local investments (Lemoine 1996).

CEE IN THE EU FOREIGN TRADE NETWORK

CEE AND OTHER EMERGING ECONOMIES IN EU TRADE

Since the end of the 1980s, the CEECs have been among the EU's most dynamic partners. In particular, the CEECs have performed well in comparison with the first tier of newly industrialized economies (NIEs—South Korea, Taiwan, Hong Kong, and Singapore), the second tier of NIEs (Malaysia, Thailand, and the Philippines), and North Africa—which have also expanded sales to the EU. Over all, these emerging economies raised their share of total EU imports from 14 percent in 1988 to 23.7 percent in 1995, while in manufactured products their share increased from 16 to 26 percent. The CEECs demonstrated increased competitiveness in manufactured products, accounting for half of the gain registered by the emerging economies, most of the gain stemming from the Višegrad countries. China accounted for a little more than one-fourth of the gain, while the first-tier NIEs managed only to maintain their relative positions. As a result, in 1995 CEE exports of manufactured industrial products overtook those of the first tier of NIEs. Moreover, the rise in CEE market share did not take place at the expense of North African exports, which slightly improved their performance over this period (Table 14).

Since 1988, the CEECs have recorded their major gains in clothing, leather and shoes, wood and paper, building materials, and engineering. From 1988 to 1995, CEE took the lead as the largest non-OECD clothing supplier, as the first-tier NIEs abandoned the market and the second-tier NIEs fell behind; in fact, the CEECs increased their exports by the same amount as China and North Africa taken together. In this labor-intensive sector, changes in the geographic pattern of EU imports reflect the transfer of production capacities to low-wage countries. The bulk of EU clothing imports now results from processing trade, engineered by West European firms in the CEECs and by Asian firms in China (about half of EU imports from China are linked to subcontracting arrangements with foreign firms). Note that CEE sales of clothing have not displaced North African producers. Notwithstanding China's progress, the EU has clearly favored suppliers from neighbor countries in the Southern and Eastern periphery of the EU. Similar trends prevailed in the leather and shoes sector: while China crowded the first-tier NIEs out of the market, Asian exporters as a whole lost ground to suppliers from Eastern Europe and North Africa (Table 14).

In two resource-intensive sectors, the wood and paper industry and building materials, the CEECs are well ahead of other exporters thanks to natural resources and geographical proximity to European markets. Meanwhile, the position of the CEECs differs across sectors in engineering. In machinery, Central Europe has improved its export performance but stands far below the first tier of NIE exports. CEE electrical machinery exports are also much smaller than those of the second-tier NIEs. But these industries have recorded accelerated growth rates of output and exports in recent years, and one can hope that this sector will become more competitive. The 1994 surge of transport equipment exports from Central Europe, which overtook the first tier of NIEs in 1994, provides evidence that the region can rapidly expand its competitiveness in capital-intensive industries provided foreign investors contribute to the restructuring and the upgrading of capacity (Table 14).

In short, since 1988 Central Europe has enlarged its share of EU imports in most industrial sectors, whereas other regions have concentrated their progress in some sectors. In labor-intensive sectors, Central Europe faces competition from the most recent emerging exporters (China, North Africa), all of which benefit from the relo-

cation strategies of firms from high-wage countries. In these sectors, the integration of the CEECs in the EU economy has increased the competitiveness of the “enlarged Europe” vis-à-vis low-labor-cost Third World countries. In more capital-intensive sectors, Central European exports are catching up less rapidly with Asian industrialized exporters.

POTENTIAL COMPETITION FOR THE VIŠEGRAD COUNTRIES

Based on the degree of similarity of the commodity structures of bilateral trade flows, it appears that the Višegrad countries are likely to face competition from other latecomer economies in the Balkans and China (Table 15A). Competition with the first- and second-tier NIEs is likely to be less intense, in large part because CEE has not developed an export capacity in electronics comparable to that of Asian countries. Moreover, the recent moves in Central European exports toward more capital-intensive products may further dampen competition with the least developed Asian countries, although the latter will also strive to upgrade their export structures. North African exports appear to compete with those of the Balkan countries, but not with those of the Višegrad countries, a situation that should alleviate North African fears of losing EU markets to Eastern competitors.

INTRA-INDUSTRY TRADE

Trade between the EU and Central Europe involves a relatively high level of intra-industry trade (IIT), which is typically associated with similar relative factor endowments. In fact, it is not only well above the level found in EU trade with other regions, including the first-tier NIEs in Asia, but it even exceeds the level displayed between certain EU member-states (Hoekman and Djankov 1996: table 16). The nature of trade with the EU suggests that the relative factor endowments of the Central European countries do not correspond to their present level of income. In addition to their past industrialization, this situation reflects the rapid development of nonequity relationships between firms in CEE and the EU, as well as intrafirm trade which grows out of FDI. Intra-industry trade between Central

Europe and the EU has been increasing very rapidly, much more rapidly than the overall bilateral trade, especially in the cases of Hungary and the Czech Republic (Table 17). For these two countries, the largest part of trade with the EU is taking place within industrial sectors. As far as Central Europe is concerned, this indicator confirms that the integration in the European economy is not based on intersectoral specialization and that comparative advantage in labor-intensive industries is only part of the story. At the same time, EU trade with Balkan countries sees a much lower level of IIT, which confirms the position of the latter as the second tier of emerging economies in Europe. The Balkan countries are, from this point of view, in a similar situation vis-à-vis the EU as the second tier of Asian NIEs.

We still need to learn more about intra-industry trade between the EU and Central Europe. Is it a trade in differentiated products (exchange of different qualities or varieties) which would correspond to a horizontal division of labor? Or is it the result of a vertical division of labor, in which intermediate products are exchanged for finished products (division of productive process)? Both trade theory and empirical studies have shown that the latter plays an important part in international integration (Fontagné, Freudenberg, and Ünal-Kesenci 1996). There is strong evidence that the CEECs are getting more involved in a vertical division of labor, but we still do not know where their specialization lies in the productive process—upstream (with primary and transformed products) or downstream (with component parts and finished products).

WEST EUROPEAN FIRM STRATEGIES TOWARD CEE

Up to now, Western Europe has supplied the overwhelming share of FDI in the CEECs (three-quarters of the total), and most of that has come from EU countries (two-thirds of the total; Table 18). This share is roughly in line with the EU share in CEE foreign trade, which underscores the global integration process of these countries in the European economy. In contrast, European firms provide only a small share of FDI to Russia.

European firms have reacted differently to the opening up of the CEECs to international trade and investments. In some countries,

firms have rapidly seized the new opportunities, while in others they have not (Table 19). French and German firms have followed different strategies, which manifest themselves in both the importance of their OPT and the geographic and sectoral patterns of their FDI.

German firms clearly lead in both OPT and FDI in the CEECs; this in turn has contributed to trade between Germany and the CEECs (Table 20–21). In addition to geographic proximity and historical and cultural links, economic factors have strongly encouraged German firms to exploit opportunities in Eastern Europe. Since the late 1980s, German firms have transferred an increasing share of production to low-wage countries in response to domestic production costs. The CEECs have been among the main beneficiaries of this strategy. From this point of view, Germany has adopted the same stance toward the CEECs as the Asian industrialized countries have taken toward the third tier of Asian NIEs. Thus the major share of German FDI in CEE has been directed to manufacturing industry, and especially to the engineering sectors (Table 22, Figures 2–3).

French firms have been much less involved in trade and investment with CEECs than German and Italian firms. One reason for the low trade intensity with CEE may be that French businesses have maintained strong ties to the Mediterranean countries (Table 23). French firms rapidly expanded their FDI in non-OECD countries during the early 1990s, but they directed only a small fraction (around one-tenth) toward CEE. Thus although employment in French affiliates in CEE has increased substantially in recent years, it still represents only 10 percent of their total employment in non-OECD countries, much less than in Africa. The 1995 surge in French FDI in Hungary and Poland may indicate that this situation is changing (Table 21). French FDI in CEE was not so much directed to industry as to services and infrastructure, and thus was less likely to boost trade in goods between French firms and their CEE affiliates (Table 24). The food industry, which received relatively large amounts of French capital investment, is a sector in which local sourcing is likely to be important.

Although we lack sufficient data for precise intercountry comparisons, the above account suggests that investment and trade follow similar patterns. Thus German trade and investment have favored the neighbor countries of CEE, where German firms have

built up a substantial stock of capital in a few years. French trade and FDI provide evidence of the resilience of traditional links with Africa. Italian firms display a pattern of regional preference that lies in between.

CONCLUSION

Available evidence indicates that the CEECs stand a good chance of escaping a strictly hierarchical model of the international division of labor such as that found in Asia. The analysis of OPT and FDI data suggests that the future comparative advantage of the Central European countries (Hungary, the Czech Republic, and Poland) lies in capital-intensive and natural resource-intensive sectors, rather than labor-intensive sectors. This implies that the strategy pursued by Western firms in these countries will shift from a "least cost approach" to a "complementary specialization approach" (Kurz and Wittke in this volume). Observed trade and investment flows also indicate that the integration of the EU and CEE is already driven more by an intra-industrial division of labor than by intersectoral complementarities. Nevertheless, as in Asia, the integration process in Europe will to a large extent depend on the strategy pursued by Western firms, which are building new production networks in CEE. Up to now, individual EU countries have reacted in different ways to the new opportunities offered by the reintegration of Europe. German and Italian firms have developed strong regional strategies and have integrated CEE in their production and trade networks. This has contrasted with the strategy of French firms, which, until recently, have displayed a relatively weak orientation toward these emerging markets, as they have been more strongly involved in trade and investment with the countries located on the southern periphery of Europe.

NOTES

1. Tables, figures, and appendices referred to in the text can be found in an earlier version of this study at <http://brie.berkeley.edu/BRIE>.

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THE EXTERNAL SECTOR, THE STATE AND DEVELOPMENT IN EASTERN EUROPE¹

Barry Eichengreen and Richard Kohl

INTRODUCTION

Early optimists hoped that Eastern Europe might be able to emulate the high-performance economies of Asia once the shock of liberalization was absorbed.² The ingredients of the East Asian “miracle,” in this view, were rapid accumulation based on high investment in physical and human capital, productivity growth based on technology transfer through licensing and foreign direct investment (FDI), rapidly expanding exports able to support industrial specialization and scale economies, and a strong state capable of guiding the development process and solving coordination problems.³ Emulating this recipe could provide the basis, it was hoped, for the expansion of exports and buoyant economic growth more generally.

In fact, Eastern Europe’s economic progress has been less uniformly impressive than the optimists had hoped. While exports have risen rapidly, there has been a tendency toward large trade and current account deficits, potentially constraining growth. There is no obvious correlation between competitiveness and output growth, with some countries growing rapidly but displaying little ability to move up the product ladder into the export of higher-value-added goods, and others, while moving into higher-value-added exports, growing more sluggishly overall. Thus Poland has been growing rapidly largely on the basis of low-value-added activities, whereas the Czech Republic and Hungary have been growing more slowly while building a more advanced industrial base.

The East Asian mirror provides clues as to why. While Eastern Europe, like the best performers in East Asia, possesses relatively high levels of human capital, the other ingredients of “miracle

growth" are missing. Rapid accumulation is discouraged by immature financial markets, the stresses of macroeconomic stabilization, and pent-up consumer demands. East European governments have only a limited capacity to guide the process of economic development: their fiscal systems are weak and they lack a cadre of well-trained bureaucrats. Moreover, the economies of Eastern Europe must integrate themselves into an international economic order that closes off options available twenty or thirty years ago. Economic liberalization and opening in other parts of the world make global corporations increasingly footloose. Multinational corporations (MNCs) can choose where to operate and resist pressure to share proprietary knowledge. The technology licensing strategy that was feasible for Japan and South Korea is not available today.

This leaves the option of relying on FDI and outward processing trade (OPT) if Eastern Europe is to achieve sustained economic growth and converge with the West. The hope is that FDI and OPT will permit greater market access and serve as channels for the acquisition of technological and organizational knowledge. Combined with the Central and East European countries' (CEECs') high levels of indigenous human capital, this may enable them to move up the technological ladder into the production of higher-wage, higher-value-added goods.⁴ But the geographical incidence of OPT and FDI has been uneven. Hungary, the Czech Republic, and recently Poland continue to attract the vast majority of FDI. Together, these three countries continue to account for fully 90 percent of FDI flows to the region.

The story for OPT is different. Where Hungary was the principal location of East European OPT prior to the transition, the OPT center of gravity has shifted toward Poland and Romania. Czech and Hungarian OPT is increasingly dominated by newer, more technologically sophisticated, skilled-labor-intensive products. While the same tendency is evident in certain sectors of the Polish economy, other sectors continue to rely on low-wage, unskilled-labor-intensive OPT. Clearly there is a correlation between this pattern of FDI and OPT and the afore-mentioned trends in manufactured value-added and movement into the production of differentiated products.

The question, of course, is why countries differ in their ability to attract FDI and engage in technologically sophisticated OPT. Unavoidably, part of the answer is geography, history, and politics: less

proximity to West European markets, inferior infrastructure, and unstable policies make the southern and eastern tiers of transition economies (and, by implication, the successor states of the former USSR) less attractive destinations for technologically sophisticated Western investment. But in addition, higher-tech FDI and OPT, once started, have worked to disseminate technological and organizational knowledge and to attract additional FDI and OPT in a self-reinforcing circle. This virtuous circle has operated most effectively where FDI and OPT have been concentrated regionally (facilitating local knowledge spillovers) and where governments have used competition policy to encourage emulation by domestic firms.

Generally speaking, however, East European states have had only limited success in putting in place policies that accentuate these positive spillovers. In this respect, Eastern Europe resembles Iberia more than East Asia.⁵ Following the fall of their authoritarian governments and regulated financial systems, Spain and Portugal took steps to attract FDI and OPT and put in place the preconditions for growth. Both countries integrated into the European Union (EU). Both took steps to stabilize their macroeconomies and liberalize their markets. Both succeeded in attracting increasingly sophisticated FDI, and both were in a position to attract net transfers and structural aid from the EU. But neither possessed a strong state capable of closely guiding development, and investment only modestly exceeded OECD averages. In other words, neither country followed the East Asian model. While they have begun to close the income and productivity gap vis-à-vis Western Europe, neither has experienced growth at rates that approach East Asia's in the 1970s and 1980s.

This suggests several lessons for Eastern Europe. First, while OPT and FDI can provide market access and technological know-how helpful for closing the income and productivity gaps, they cannot fuel growth as fast as that enjoyed by the high-performance East Asian economies into the 1990s. Limited levels of investment will mean less opportunity for spillovers through embodied technical change. And limits on the extent of state support will constrain the speed with which technological and organizational knowledge is transferred to domestic firms.

Second, while the Iberian economies have had unique advantages by virtue of their early integration—on favorable terms—into

the European Community, they made significant mistakes in the course of restructuring and opening. FDI inflows were regulated and discouraged until the second half of the 1980s, and privatization was delayed, further limiting the scope for foreign investment. In Spain, rigid labor markets, an overly generous welfare state, and unstable financial policies have hindered convergence with the EU. At the same time, transfers from the EU through regional aid and the Common Agricultural Policy (CAP) have played an integral role in these countries' economic development. The analogous treatment of the new East European members of the EU is likely to be less generous.

TRADE

We develop these points by analyzing Eastern Europe's trade with the EU.⁶ In sum, while that trade has expanded impressively, different countries have had different degrees of success in moving into the production and export of higher-value-added, higher-tech goods. Hungary and to a lesser extent the Czech Republic have shown an ability to diversify into new sectors and to develop exports of more R&D and skill-intensive, higher-value-added, less price-sensitive products. Export trends in the other CEECs are less uniformly positive. Poland, Romania, and Slovakia have also demonstrated some success in raising value-added and moving into the production of more skill-intensive goods.⁷ However, while some parts of their economies have been specializing increasingly in the production and export of low-wage, low-value-added goods, others have been developing higher-tech capabilities, a duality which is most clearly evident in Poland. Bulgarian exports, in contrast, are increasingly concentrated in low-skill, labor-intensive, undifferentiated, price-sensitive commodities, although even there one sees some evidence of success in raising manufacturing value-added. Thus one no longer sees the once standard bifurcation between the so-called first and second tiers of transition economies. Instead there is a steady gradation or tiering of development as one moves from north and west to south and east.

COMPOSITION

The composition of CEEC exports changed with the decline of sectors dependent on Council of Mutual Economic Assistance (CMEA) markets (engineering, especially mechanical) and CMEA inputs (energy products). Consider CEEC exports to the EU: 1996 exports were only 72 percent similar to those in 1988 for the region as a whole (see Table 1). The comparable figure was noticeably lower for Spain and Portugal following their accession to the EU, underscoring the rapid pace of structural change in Eastern Europe. Reinforcing this picture is the fact that the figures for individual East European countries are even lower than those for the region as a whole. In other words, not only were there ongoing changes in the composition of the external trade of the region, but also there were even more substantial reallocations of trade within it.

This picture can be further elaborated by calculating the similarity of the export structure of different countries (as in Table 2). While there is no obvious pattern for 1988, three separate clusters had emerged by 1996.⁸ Romania and Bulgaria are now highly similar to one another, as are Hungary and the Czech Republic and Poland and Slovakia.⁹

FACTOR CONTENT

Although Eastern Europe is touted as possessing a skilled labor force, the composition of its trade implies a comparative advantage in low-skill, labor-intensive sectors.¹⁰ The European Commission analyzed the factor content of CEEC exports (based on factor intensities of EU production at the three-digit NACE level) using 1992 data and found that CEEC exports were low in R&D and skill content: 79.3 percent were of low or medium R&D intensity, and 81.6 percent were of low or medium skill intensity. Conversely, EU exports tended to be high-skill, high-R&D and strongly capital-intensive.¹¹ Eastern Europe's revealed comparative advantage remained stable between 1989 and 1992, reflecting long-standing structural characteristics of the region (compare Drabek and Smith 1995).

That said, there are striking changes since 1992 (subsequent to the period covered by the European Commission and Drabek and Smith studies; see Table 4). Exports have become more evenly di-

vided between labor-intensive and non-labor-intensive sectors and between R&D-intensive and non-R&D-intensive sectors (Table 5). The shares of both the energy- and capital-intensive sectors have declined. While there has been an increase in the share of skill-intensive exports, this has come at the expense of sectors characterized by intermediate levels of skill intensity. Hence the share of unskilled-labor-intensive exports has remained roughly constant.

These regionwide patterns disguise different movements in different countries. Hungary displays huge increases in R&D-, capital-, and skill-intensive sectors and corresponding drops in low-R&D and low-skill-intensive sectors, rendering the absolute share of R&D- and skill-intensive sectors higher than for any other country. Poland, the Czech Republic, and Slovakia similarly show a shift toward R&D-intensive sectors. They also display small declines in capital-intensive sectors in favor of their labor-intensive counterparts. Romania and Bulgaria, in contrast, show large shifts from capital- to labor-intensive exports. Romania shows little rise in the R&D and skill intensity of its exports, while Bulgaria actually shows a decline in both.

UNIT VALUES

Although the CEECs have had limited success in developing new export sectors, exporters may nonetheless be improving their competitive position within existing sectors and moving up the technological ladder into the production of higher-value-added goods. Drabek and Smith (1995) conclude that export unit values fell substantially in most countries between 1988 and 1991.¹² Hungary was an exception: its export unit values have been rising steadily since 1988.

Our analysis reports the unit value of CEEC exports to the EU relative to the unit value of non-CEEC exports to the EU. The picture is one of little improvement in competitiveness in those sectors that dominated CEEC trade and production prior to the transition, some slight progress in newly emerging sectors through 1992 (confirming the findings of the European Commission and Drabek and Smith studies), and then accelerating progress as those countries which undertook structural adjustment began putting their difficulties behind them.¹³

To what extent did OPT drive these trends? Table 7 reports the export unit values of OPT exports relative to the unit values of non-OPT exports for the same sectors.¹⁴ For the CEEC-6 (Poland, Hungary, the Czech Republic, Slovakia—the Višegrad Four—plus Romania and Bulgaria), this ratio declines by nearly a third over the 1988–96 period. The drop is pronounced in Poland, Hungary, the Czech Republic, and Slovakia while the ratio actually moves in the opposite direction in Romania and (after 1992) Bulgaria. This suggests that OPT has not promoted the movement into higher-value-added exports in the case of the Višegrad Four but that a case can be made for it in the second tier of CEEC economies. (We return to this below.)

An analysis of country performance reveals a sharp divergence between Hungary, on the one hand, and Romania and Bulgaria on the other. While all the CEECs but Bulgaria are raising their export unit values, they are doing so in different ways. Romania (along with Bulgaria) is moving out of the capital-intensive sectors of the planned economy in favor of labor-intensive, assembly-oriented activities. Hungary, the Czech Republic, and Slovakia have been more successful in developing more R&D, skill-intensive export sectors. But this trend is only pronounced in Hungary, with Poland, the Czech Republic, and Slovakia effectively keeping a foot in the labor-intensive camp.

PRICE SENSITIVITY

Table 8 divides exports of manufactures to the EU into price-sensitive and price-insensitive goods.¹⁵ The summary figures indicate a shift out of price-sensitive exports, whose share declined by 6.2 percentage points between 1988 and 1995. This is progress in the sense of restructuring away from exports of raw materials in favor of differentiated products. Note, however, that this movement is concentrated in 1988–91 and 1994–96. In the first period it was associated with the loss of traditional markets and the decline in nonviable sectors. There was then a lag of three or four years until further progress began to take place, reflecting the effects of prior enterprise restructuring and FDI inflows.

Overall this analysis provides some evidence that, particularly since 1994, Eastern Europe is moving rapidly into the production of higher-value-added goods and converging with the West. The high levels of education and skill for which the region is known and which were embodied in technology-intensive exports to CMEA markets do not form the basis for its exports to the EU. While Bulgaria appears to be increasing its dependence on the kind of low-wage, price-insensitive commodities upon which much of Eastern Europe's pre-transition trade with the West was based, Hungary and the Czech Republic have been more successful at moving up the value-added ladder into the production of more technologically sophisticated goods. Poland, Slovakia, and Romania, here as elsewhere, display both tendencies. The question is why. We consider three explanations: the association agreements, Eastern Europe's reliance on FDI, and OPT.

EFFECTS OF THE ASSOCIATION AGREEMENTS

Under the terms of the association agreements, the members of the EU reduced their tariffs on imports from Eastern Europe starting in 1992–93 and agreed to phase out quotas on the products of the "sensitive sectors" after five years (four years for certain metal products; see Table 10). EU quotas and anti-dumping policies have been criticized as restrictive, while EU tariff reductions have been praised as facilitating the expansion of Eastern Europe's trade. (See for example Winters 1992.) In fact both characterizations are wide of the mark. The tariff reductions provided by the association agreements have had little effect, with the possible exception of agriculture. Tariffs were already low due to large reductions following the granting of Most Favored Nation and Generalized System of Preferences (GSP) status in 1990–91 (Table 11). While large in relative terms, the additional cuts offered by the association agreements were small in absolute size.¹⁶

While quotas on CEEC exports of the products of the sensitive sectors have been criticized as stifling Eastern Europe's trade, improvements in market access provided by GSP status and the association agreements combined have in fact permitted a substantial increase in CEEC exports (with the notable exception of agriculture).

Strikingly, exports of the sensitive sectors other than agriculture have grown more rapidly than total exports, again with the exception of Hungary. Moreover, Eastern Europe's exports to the EU have expanded more rapidly than those of other developing and transition economies (like the Mediterranean countries). This is hard to reconcile with the view that EU quotas significantly stifled Eastern Europe's trade.¹⁷

The effects of the EU's anti-dumping policies are also of questionable importance. Anti-dumping actions declined in number, scope, and severity once the CEECs were no longer state-trading countries. They have been too few to have significant demonstration effects. Over the three-year period from 1993 to 1995 only eleven of the EU's eighty-seven anti-dumping investigations were directed against the CEEC6. (Of these, four were directed at Poland and three at the Czech Republic.) The affected sectors (unalloyed zinc, wooden pallets, iron or steel sections, Portland cement, and urea ammonium nitrate) accounted for less than 2 percent of the industrial exports of the countries subject to action.¹⁸

TRADE-RELATED FDI

FDI in the CEECs rose from negligible levels in the first years of the transition to \$4 billion in 1992, \$11 billion in 1995, \$9 billion in 1996, and an estimated \$7 billion in 1997.¹⁹ Still, flows of FDI have been modest in comparison with flows into other developing regions, with the exception of Hungary, which was one of the top five recipients worldwide in 1992–94.²⁰

The distribution of FDI inflows has been determined by the pace of privatization, especially of large, capital-intensive public utilities such as telecommunications and electric power, and by the openness of that privatization to foreign investors. Until 1994, Hungary was the primary recipient of FDI.²¹ Inflows into Hungary, Poland, and the Czech Republic have continued to rise, most dramatically in Poland, where joint ventures have increased their capitalization to the point where the stock of Polish FDI probably passed that of Hungary in 1997. Together, Poland and Hungary are host to nearly 80 percent of FDI in the region (see Table 12).²²

Foreign investment enterprises (FIEs) account for a disproportionate share of Eastern Europe's trade. They generated an estimated 50–70 percent of Hungary's exports in 1994–95, nearly double their share of the capital stock and the labor force.²³ This export orientation is not just a compositional effect reflecting greater investment in export-oriented sectors; FIEs have a disproportionate share of exports even when one controls for sector (OECD 1995).²⁴ FIEs also account for a disproportionate share of imports, reflecting their high levels of investment and heavy reliance on imported capital goods, as noted above, and intensive use of intermediate inputs.²⁵

OPT

OPT exports to the EU have been growing, at a compound annual rate of around 24 percent since the beginning of the transition (Table 13). This is more rapid than the growth of CEEC non-OPT exports to the EU, so that the share of OPT in total CEEC exports to the EU rose from 10.5 to 15.8 percent between 1988 and 1996.²⁶

The OPT share of total exports has at least doubled in all countries but Hungary. OPT exports now account for over 30 percent of all Romanian exports, followed by Poland and Bulgaria, with 17 and 15 percent, and the OPT share in the other countries ranges from 11 to 13 percent. These differential growth rates mean that the geographical center of this activity has shifted from Hungary to Poland.²⁷

Initially, apparel and clothing accounted for two-thirds of all OPT exports. Early in the transition other low-skill, labor-intensive sectors like footwear and furniture also made up an important part of OPT exports. Since then several new sectors have emerged: textiles; electrical machinery, appliances, and apparatus; and telecommunications equipment. This shift was due mostly to an increase in the OPT share of total exports of these sectors rather than their faster overall export growth: the OPT share of total exports in traditional sectors (footwear, furniture, luggage) declined, in part replaced by FDI in the same sectors. By contrast, the OPT share of total textiles and telecommunications exports rose.²⁸

The composition of OPT exports suggests that the Czech Republic, Slovakia, and Poland have an advantage as a result of their proximity to Germany and Scandinavia. This gives the Czech Re-

public and Slovakia an edge in telecommunications equipment and electrical machinery since it minimizes monitoring and coordination costs, facilitating just-in-time turnaround. Such factors appear to dominate any handicap associated with the Czech Republic's relatively high labor costs. Poland's success in capturing OPT exports of furniture also likely reflects the importance of proximity, in this case to Scandinavia.²⁹ Insofar as Romania's subsequent stabilization did not lead to the return of its OPT exports of furniture, the implication is "If you lose it, it doesn't come back."

Together, these trends reflect the now familiar differentiation between the more and less advanced CEEC economies. Whereas Hungary and particularly the Czech Republic have moved into OPT exports of newer, more technologically sophisticated, skilled-labor-intensive products, over 90 percent of Romanian and Bulgarian OPT exports continue to be accounted for by low-wage, unskilled-labor-intensive sectors such as footwear, clothing, and apparel. Here as elsewhere, Poland displays both tendencies, while OPT remains of marginal significance in Slovakia.

GROWTH

In this section we consider the implications for growth of Eastern Europe's OPT and FDI-oriented strategy. We describe the state's capacity to accentuate the positive effects of these activities. Viewing Eastern Europe in an East Asian mirror, we conclude that this capacity is more limited in Eastern Europe and suggest that Iberia is a more pertinent comparison. We therefore review the effects of FDI and OPT and of integration with the EU on Iberian economic development.

SPILLOVER EFFECTS OF FDI AND OPT

The literature on the host-country spillovers of FDI distinguishes technology spillovers, organizational spillovers, and market-access spillovers.³⁰ Technology spillovers involve the spread of best practice from foreign-investment enterprises to host-country competitors.³¹ Organizational spillovers involve the spread of

knowledge about quality control, distribution, and post-sales servicing of products.³² Market-access spillovers facilitate the efforts of local producers to penetrate foreign markets, as local component suppliers are encouraged to feed into multinationals' production networks, thereby developing familiarity with the prerequisites for international production.³³ These three types of spillovers flow through direct linkages—when local firms supply inputs to FIEs, for example—as well as through emulation and instances where workers and managers who have acquired relevant knowledge are hired away from FIEs.³⁴

Eastern Europe's generous human-capital endowment favorably positions domestic producers for technology transfer. On the other hand, the gap in best practice between Western and Eastern Europe is large (though it is not clear that it is larger than in East Asia twenty years ago). Manufacturing technologies rely on increasingly sophisticated computer and chemical technologies even in low-tech industries such as textiles and apparel, complicating technology transfer.

Perhaps most significantly, competition is limited in many sectors in which FDI is important—telecommunications, consumer electronics, and motor vehicles. Some FIEs have no significant domestic competitors. Small firms seeking to enter input markets are constrained by inadequate access to external finance and limited organizational knowledge (which prevents them from managing cash flow, information, and quality control).

The spillover effects of OPT have not been the subject of similar scrutiny, but we conjecture that the situation is similar to FDI. OPT exposes workers and managers to new products and processes; it is a channel for the transfer of technology and marketing expertise. In contrast to FDI, market-access spillovers may be more important than technology spillovers. Because the output of firms involved in OPT is exported, firms gain familiarity with international standards of quality, packaging, product design, and distribution. On the other hand, OPT may do little to encourage the development of products with brand recognition. Because the technologies involved in assembly and processing tend to be less sophisticated, OPT has relatively little impact on production technology. The fact that exports of price-insensitive goods have not risen as quickly from Romania and Poland, where OPT is disproportionately important, as from Hungary and the Czech Republic is consistent with this conjecture.

While there is considerable evidence that FDI and licensing are conduits for technology transfer, it is unclear which is more efficacious. FDI provides access to more up-to-date technologies, but it is criticized for encouraging host countries to specialize in low-wage, low-valued-added goods. It remains unclear whether licensing is a more effective means of encouraging producers to move up the value-added ladder, but there is no question that global firms are increasingly reluctant to license their most advanced technologies (United Nations 1995: 159 and *passim*).

STATE CAPACITY

The contingent nature of technology transfer points to the pivotal role of state capacity and social capability. The literature on these topics (e.g., Abramovitz 1986; Koo and Perkins, eds. 1995) is still in its infancy. It identifies a cluster of determinants of the capacity of firms to acquire technical and organizational knowledge (see, e.g., Dahlman and Nelson 1995). Key determinants include the stock of human capital, the transparency of regulatory and tax systems, and the stability of macroeconomic and trade policies.

In addition, recent analyses of high-growth economies have highlighted the need to solve coordination problems deterring modernization. Rodrik (1995) develops a model in which it is in the interest of no single manufacturer to start up in the absence of comparable initiatives by others. Government may then have a role in coordinating the necessary activities through public-enterprise production and selective subsidies. If it does, the marginal efficiency of capital rises sufficiently to elicit higher levels of investment, and export growth follows as a way of financing imports of capital goods.³⁵

Other recent analyses (e.g., Campos and Root 1996) emphasize the importance of wage moderation for investment and of institutions for encouraging wage moderation. Realistic real wages are important for small open economies that sell into markets where price competition is intense. And where financial markets are less well developed and firms depend on retained earnings for liquidity, the stimulus to profitability and retained earnings from wage moderation can be critical for capital formation. Governments can encourage wage mod-

eration by ensuring an even income distribution, coordinating bargaining across firms and sectors, and encouraging cooperation rather than confrontation between unions and employers.³⁶

Each of these perspectives highlights the role of the state in economic development. If rapid rates of growth are to be sustained, the state must have the capacity to underwrite human capital formation (since liquidity constraints prevent individuals from funding it themselves). It must build a stock of engineers and technicians with the skills attractive to FIEs.³⁷ It can support institutions providing research and extension services because these functions must develop ahead of the market and firms appropriate only a small share of the returns on their own R&D expenditures in the early stages of growth. By cultivating a competitive environment, it can strengthen the incentive for indigenous firms to emulate the examples set by FIEs. It can provide concessional finance for small and medium-sized enterprises that would otherwise find entry barred by liquidity constraints. It can establish the testing and quality-control standards needed to penetrate foreign markets (in pharmaceuticals, for example) because producers will free ride on private attempts to create them.³⁸ Finally, it can seek to solve coordination problems while at the same time resisting capture by special interests who seek to divert resources to socially unproductive but privately remunerative uses. If it is to have the leverage and legitimacy needed to oversee a social contract to exchange wage restraint for high investment, it must be insulated from political pressures but at the same time be accountable to the polity.

THE EAST ASIAN MIRROR

East Asian states are well endowed with these capacities. Public support for the developmental state was buttressed by the specter of military aggression from China and North Korea. Politicians saw development as integral to the national defense and gave economic experts free rein so long as they delivered results. Public-sector employment was based on civil-service examination and merit-based promotion, rewarding good performance. The strength of East Asian states, based on a distinctive conception of “guided democracy” and the political role of the military (itself a legacy of the army’s role in

wars of liberation), provided insulation from special-interest pressures, while at the same time the accountability of the state to its constituencies was ensured by the presence of consultative bodies, minimizing government excesses, and seeing that the fruits of growth were equitably shared.

The East Asian approach now appears less admirable in the wake of the financial and economic crises of 1997–98. Where it was once said that strong states grounded in the distinctive Asian conception of democracy and reinforced by the existence of an external threat possessed the insulation to fend off special-interest pressures, “guided development” the Asian way is now seen as a recipe for cronyism and corruption. This too may pass; it may be that the reaction against the Asian model will prove to have been overdone. Alternatively, it could be that a model suited to the stage of extensive growth (when the problem for Asia’s industrializers was to import known technologies and embody them in high levels of capital formation) is less suited to the subsequent stage of intensive growth (when the problem is to raise total factor productivity). It could be that a model appropriate in an environment of highly regulated financial markets is less well suited to a world of globalized finance. If so, encouraging East European countries to emulate the Asian model would only lock them into a development strategy no longer suited to the times.

Then there is the fact that state capacity is more limited in Eastern Europe. In reaction against decades of authoritarianism, political systems are open and elections are hotly contested; many countries have reinstalled their pre-1950 electoral systems, which are conducive to party proliferation and parliamentary fractionalization. This gives special-interest groups, be they pensioners, farmers, or enterprise managers, the opportunity to shape government policy to their narrow ends. The old regime lacked a tax system, requiring the transition economies to create one *de novo*; this opened the door to noncompliance and evasion. Public employees are poorly trained and poorly paid; only Hungary gives them civil-service protection.³⁹ Judiciary systems are too weak to efficiently enforce property rights. Government concertation of wage negotiations often breaks down in the face of fragmented and warring union confederations and weak employers’ associations. Two generations of Stalinism have created an aversion to the idea of a strong state and at the same time

encourage the presumption that the government should provide support from cradle to grave.

For all these reasons, East European states lack the capacity to emulate the Asian growth model. Attempts to eliminate bottlenecks through public production and selective subsidies are susceptible to capture and prone to go awry. Initiatives to solve coordination problems are too likely to be delegated to bureaucrats, formerly employed by planning institutions, whose attitudes and outlooks were formed in pre-liberalization days. The preferential provision of credit to small firms is unlikely to target viable enterprises or include workable performance criteria.

THE IBERIAN MIRROR

The fact that Eastern Europe lacks the capacity to implement the East Asian model does not mean that its economies will stagnate. Other Western economies—those of Spain and Portugal, for example—emerged from decades of authoritarianism and centralized planning similarly lacking strong states; yet their governments, by following more limited interventionist agendas, have succeeded in sustaining respectable rates of growth. Those agendas include stable macroeconomic policies, economic integration, and the creation of an environment hospitable to FDI and OPT. The result has been healthy rates of capital formation and economic growth. This would seem to be a model which Eastern Europe can follow. We therefore consider it in more detail.⁴⁰

Transformation and Growth. Spain and Portugal, like the transition economies of Eastern Europe, experienced significant dislocations as a result of liberalization and transformation. They emerged from dictatorship with state-owned enterprises, protected manufacturing sectors, underdeveloped service industries, and repressed labor markets.⁴¹

Growth in the first post-liberalization decade was a relatively modest 1.5 percent per annum in Spain and 2.6 percent in Portugal. In 1986–91 it accelerated to 4.1 and 4.7 percent per annum.⁴² With the European Community (EC) growing at a bit more than 2 percent per annum, this produced steady convergence. But with the Europe-wide recession of 1992–93 and persistent problems of fiscal and fi-

nancial imbalance, Iberian growth rates slipped back to less than 1 percent. More recently, the Iberian economies are again converging with the rest of Western Europe, if slowly. But associated with this deceleration has been mounting unemployment, especially in Spain, a problem blamed on high tax rates, excessive hiring and firing costs, and generous welfare and unemployment benefits (see Table 14).

Growth has been accompanied by buoyant trade: between 1976 and 1985, exports rose at an annual rate of 23 percent in Spain and 37 percent in Portugal.⁴³ Accession to the EC had little obvious impact on export growth (which had already accelerated prior to entry) but occasioned a shift in its direction toward Western Europe. The EC's share of Spanish imports and exports rose from one-third to two-thirds within a few years of membership. The growth of trade was not, however, accompanied by Asian-style investment rates; investment/GDP ratios averaged 21 percent in Spain and 30 percent in Portugal (compared to 30–40 percent in Japan and the newly industrialized countries [NICs]).⁴⁴

Tables 4 and 5 above provide some information on the factor content of this trade. Spanish and Portuguese exports are increasingly R&D-intensive, although this change occurred later in Portugal (mainly after 1992), coincident with a shift in the composition of inward FDI (see below). Portuguese exports have also shifted out of low-skilled, labor-intensive sectors in favor of moderately skill- and labor-intensive activities.

The Role of FDI. FDI was substantial in the first post-liberalization decade, averaging nearly 1 percent of GDP in both Spain and Portugal.⁴⁵ It then rose to 2.1 percent and 2.3 percent of GDP respectively in 1986–92.⁴⁶ Foreign investment accounted for more than a tenth of all investment in Spain and for an even higher share in Portugal (see Table 12 above).

Foreign firms were initially attracted to Spain by the desire for access to the home market. Low labor costs were not a major factor (FDI was in fact concentrated in relatively high labor cost areas around Madrid and in Catalonia).⁴⁷ The Portuguese market being smaller, foreign firms were attracted more by low labor costs and export potential.⁴⁸

The pattern of investment flows was shaped by tariffs, subsidies, regulation, and privatization. Spain and Portugal both re-

stricted foreign ownership until the mid-1980s, when liberalization accompanied EC accession.⁴⁹ Privatization and deregulation of the banking, telecommunications, and transportation sectors also helped attract a critical mass of foreign investment, especially into services. In Portugal, tax and financial benefits amounting to as much as 30 percent of investment succeeded in attracting major investments in auto components.⁵⁰

As in Eastern Europe, Iberian FIEs have a greater propensity to export than domestic-owned firms.⁵¹ In Spain, FIEs employ more skilled labor than domestic-owned firms, undertake more R&D, and import more technology (as measured by their expenditures on licensing fees).⁵² Compared to domestic-owned firms, FIEs in Portugal are larger and more capital-intensive and pay higher wages.

FDI in Portugal has been associated with the production of standardized components using low-wage labor. There is less evidence of its leading to indigenous product development and R&D.⁵³ The recent movement of FIEs into services and integrated manufacturing (like auto components) has been accompanied by only a limited increase in domestic component sourcing, training, and cooperation with domestic research institutions.

There is some evidence that FIEs in Spain are using more modern technologies and undertaking greater product innovation.⁵⁴ The foreign (usually German) managers who accompanied foreign purchases of newly privatized firms—who took part in the so-called “flight to the sun”—helped to diffuse managerial skills (especially around Madrid and in Catalonia, where FDI and foreign management were highly concentrated). FIEs in Spain have never been low-wage-oriented, and the size of the domestic market and the roles of Barcelona and Madrid as regional centers may have helped by allowing FDI to achieve a critical mass where domestic spillovers became significant.

Implications. Spain and Portugal emerged from dictatorship with structural and macroeconomic problems similar to those facing the CEECs. After a few rocky years they achieved solid growth based on domestic restructuring (reallocating resources from industry to services and from agriculture and industry to expanding manufacturing activities), integration with the EU, immigrant remittances, and inflows of FDI and regional aid. Investment rates, while above

OECD averages, have been modest by East Asian standards, as has been government intervention. Instead, Iberian growth has been propelled by exports and foreign investment. Exports, primarily to the EU, have allowed domestic producers to exploit economies of scale and scope. FDI has provided modest technological spillovers (more in Spain than in Portugal) as FIEs have begun producing components as part of global production networks.

Spanish FIEs' relatively high levels of technology licensing, R&D, and backward linkages to domestic suppliers are encouraging for Central Europe. Hungary and the Czech Republic even more than Spain twenty years ago possess the skilled labor, infrastructure, and locational advantages which allow countries to serve as regional platforms for MNCs.⁵⁵ But a key lesson from Spain is that the spillover effects of these activities are pronounced only when a critical mass of foreign investment develops. Tax and other financial incentives can help bring this about, but a key role for government is opening up infrastructure and service sectors to privatization and foreign investment.

Portugal, with its smaller population, greater openness, lower incomes, and larger share of labor-intensive sectors (including clothing and textiles), better approximates conditions in Eastern (as opposed to Central) Europe. The Portuguese case reminds us that there is no guarantee that a low-wage country providing an export platform for foreign firms will benefit from significant backward linkages into component production, let alone give rise to domestic product design and R&D.

Moreover, there are reasons to question whether Eastern Europe can match even Portugal's achievements. Capital formation in Portugal was stimulated not just by FDI, but also by remittances from Portuguese citizens working elsewhere in the EU; it is implausible that a Western Europe already saddled with high unemployment will permit the equally free entry of Bulgarian or Romanian labor until such time, well into the twenty-first century, when these countries are admitted to the EU. In addition, aid transfers from the EU were important for both their macroeconomic effects and priming the pump for FDI. While new East European members of the EU will continue to receive Structural Fund transfers for some years, it seems unlikely that the cash-strapped incumbent members will be willing to finance transfers on the scale enjoyed by Portugal in the

1980s. Finally, an important component of the Portuguese story that has little to do with trade and FDI is the large decline in real wages that occurred in 1977–85, which was not completely offset during the 1986–91 boom. This reflected Portugal's unique political situation; it seems unlikely that it could be replicated in Eastern Europe today.

Another lesson of Iberian experience is that while a FDI-intensive development strategy holds out the promise of technology spillovers and foreign finance, it is also a source of macroeconomic vulnerability. The high levels of FDI of the initial years of EC membership have not been sustained.⁵⁶ Meanwhile, export growth has fallen off from the levels of the first post-liberalization decade.⁵⁷ The large current account deficits financed by foreign investment (especially in the case of Spain) created adjustment problems when the capital inflow fell off since large shifts in the trade balance were required.

A final lesson from Iberia is the importance of limiting interference in labor markets, limiting social safety nets which hinder regional and intersectoral adjustment, and restraining real wage growth. The extensive regulation of the Spanish labor market is a legacy of Franco, while the burdensome social safety net installed in the 1970s can be understood as a well-intentioned but misguided attempt to cushion the need for sectoral adjustment. One can imagine that East European governments, inheritors of a similar legacy, might succumb to excessive labor regulation and excessive safety nets, given the social dislocations associated with restructuring and EU pressure to harmonize domestic arrangements with those of the advanced industrial countries.

CONCLUSION

The CEECs have displayed widely disparate trade performance since the beginning of the transition. Hungary and the Czech Republic have had some success moving into the production and export of more technologically sophisticated, higher-value-added goods, while Bulgaria and Slovakia have continued to specialize, sometimes increasingly, in low-skill, low-value-added goods. Poland and Ro-

mania are intermediate cases. In Poland, different parts of the economy show each of these tendencies. In Romania, performance is very different in different periods—significantly better after 1994 than before.

In accounting for these patterns, our analysis points to the importance of FDI and OPT. FDI has been an engine of technological and organizational learning, but it has been significant only in Hungary, the Czech Republic, and, most recently, Poland. OPT is widely spread and helps to explain the strong export performance of the region. But the technological and organizational implications of OPT are less obviously favorable; in particular, it does not encourage the development of differentiated, price-insensitive export products that offer countries insulation from foreign competition.

Thus it appears that the integration of the CEECs into the international division of labor is taking different forms in different countries. FDI is integrating the more advanced economies into multinational production networks, not merely as manufacturers of components, but also as integrated manufacturers with the capacity to undertake product development and R&D. FDI-based production is largely found in sectors like electronics and motor vehicles, characterized by strong backward linkages. In the region's less advanced economies, where FDI is largely absent, integration into the world economy takes the form of OPT and assembly which affords less opportunity for investment in human capital, employment of skilled labor, and local R&D. It is found in low-wage, labor-intensive, technologically unsophisticated sectors like textiles, apparel, and footwear, thought to afford few domestic spillovers.⁵⁸

How can governments manage this process? A realistic strategy must acknowledge three facts. First, these economies are latecomers. While countries like Czechoslovakia were once among the high-income elite and even under central planning possessed some capacity to produce technologically sophisticated goods (mainly in connection with military needs), there is a significant technology gap between high-value-added industries in Eastern Europe and their counterparts in Western Europe and Asia. As a latecomer, Eastern Europe's essential task is not to invent new products and processes but to tap the existing stock of technological knowledge and adapt it to local conditions.

In addition, these countries must integrate into an existing economic order. In an earlier era, when many countries restricted inward foreign investment and few provided a hospitable environment for MNCs, countries like Japan and Korea could license foreign technologies, but today, when economic liberalization is sweeping the world and many countries are competing for foreign investment, global corporations have better alternatives than sharing their proprietary knowledge. A licensing strategy that was feasible two decades ago is not feasible today. This leaves no alternative to FDI and OPT.

Finally, Eastern Europe possesses a distinctive political inheritance. Two generations of totalitarianism have left its citizens leery of strong governments and organizations. Bureaucrats, managers, and trade union leaders are not held in high esteem. Attempts to provide "economic governance" would not enjoy public support or be resistant to capture.

The CEECs thus have no alternative to what we term the Iberian model. This means capitalizing on proximity to West European markets, access to which can be locked in by accession to the EU. It means acquiring technological and organizational know-how through FDI and OPT. For the less advanced countries of the region, where location, infrastructure, and politics imply that there are fewer prospects for attracting FDI, it means exploiting their comparative advantage in low-wage, labor-intensive sectors like textiles and apparel.

Governments can contribute to this process. Those of the EU can agree to a timetable for the accession of the most advanced East European countries in a manner that does not saddle them with expensive social programs and restrictions on their sales of sensitive products. Those of Eastern Europe can make the environment for FDI and OPT more attractive and encourage intellectual and organizational spillovers by privatizing infrastructure and services and opening these sectors to foreign investment. They can pursue stable policies, improve infrastructure, and invest in human capital. They can place domestic producers in a competitive environment that provides incentives for learning. Miracle growth like East Asia's will not result. But if the goal is convergence with the West at Spanish and Portuguese rates, there are grounds for hope.

NOTES

We thank György Szapáry for helpful comments. The opinions expressed here do not reflect those of the OECD or its member countries.

1. Tables and figures referred to in the text can be found in an earlier version of this study at <http://brie.berkeley.edu/BRIE>.
2. In this paper we focus on Eastern Europe narrowly defined, putting aside the successor states of the former Yugoslavia and the former USSR, including the Baltic states, whose cases differ in important respects.
3. See, for example, World Bank (1993). To be sure, the East Asian miracle looks less miraculous since that study was published. Commentators now suggest that the East Asian recipe might be appropriate for the early stages of industrialization (the period of "extensive growth"), when the problem is to import known technologies and embody them in large amounts of physical investment, but less appropriate for later stages (the period of "intensive growth"), when the problem is increasingly to stimulate innovation and total factor productivity growth.
4. As we shall see, in Hungary enterprises with some foreign ownership account for 70 percent of total exports. In Poland OPT accounts for a quarter of total exports and more than 80 percent of exports of light industry, the most vibrant part of the economy.
5. Another case worthy of comparison is Ireland, where FDI is widely seen as a dominant factor in the growth of exports and as a conduit for the adoption of advanced technologies. FDI is seen as having been attracted by Ireland's access to the EU market, the provision of tax incentives, and the existence of an English-speaking labor force. See De la Fuente and Vives (1997) and the references cited there.
6. There are several obvious justifications for this focus on trade. In a period when economic statistics are still incomplete, data on East European trade are relatively abundant and organized into standard international categories. In a world of increasingly globalized markets, and especially for economies that seek to enter the EU, trade and international competitiveness are critical to economic success. Trade is affected by domestic factors and the external environment and as such sheds light on the sets of two forces operating on these economies. And trade has been critical to the success of the two cases which the economies of the region seek to emulate: Western Europe after World War II and East Asia since the 1970s.
7. For Romania, this is a relatively recent development. There, economic stagnation through 1994 was followed by a dramatic reversal in 1995–96, following a significant change in policy regime.
8. Romania and Bulgaria are the most similar to one another, but Bulgaria is also similar to Hungary, the Czech Republic, and Slovakia.
9. Note the similarity with Spain and Portugal. As of 1988, none of the CEECs is at all similar to Spain, and only the leading CEEC exporter, Hungary,

displays any similarity with Portugal. By 1996, in contrast, one can see a substantial convergence toward export structures of the sort evident in Portugal, particularly on the part of the middle-income CEECs (Poland and Slovakia). In contrast, only the Czech Republic and Slovakia show signs of resembling Spain, presumably reflecting the importance of the automotive sector.

10. The CEECs also have an advantage in low value to weight commodities because of the physical proximity to Western Europe.
11. The European Commission analysis was disaggregated to the three-digit level but used factor intensities derived from West European data.
12. For different measures of changes in composition, see Hoekman and Djankov (1996).
13. The assumption is that unit values are reasonable proxies for value-added. The problem with it is that changes in unit values will also be affected to some extent by movements in the world prices of the commodities in question. The Economic Commission for Europe (ECE), which examined the ratio of export to import unit values, found this to be even more true for total exports, though it also found rising unit values for manufacturing exports. Hoekman, by contrast, presented unit values for several key commodities for individual countries and concluded that unit values were rising for most countries for most commodities.
14. It is still possible that the improvements in trade performance evident in 1994–95 reflect cyclical factors—in particular, strengthening West European demands for the products of Eastern Europe. This picture is consistent with our hypothesis that the granting of Generalized System of Preferences (GSP) status in 1991 was important for the transition, insofar as this event coincided with a marked improvement in CEEC trade performance in 1992.
15. Unit value ratios were calculated for the thirty-five most important three-digit SITC sectors in terms of OPT exports. These accounted for 85 percent of CEEC6 OPT exports to the EU in 1996. Three simple unweighted averages were calculated: a simple average, an average which excluded observations we judged to be outliers, and an average which excluded observations that were at more than half the average difference between the minimum and maximum values for that country and year.
16. We rank three-digit SITC categories using the conventions followed in Aiginger and Wolfmayr-Schnitzer (1996). By considering the share of high, moderate, and low price-sensitive exports, we can examine the potential ability of countries to capture rents associated with the production of more differentiated products.
17. As a study by the European Commission based on 1993–94 data concluded: “The largest gains in competitiveness in manufacturing exports were observed between 1988 and 1991, which suggests that the initial reforms and liberalization of trade and payments, including convertibility, had probably a stronger impact on competitiveness than the implementation of associa-

tion agreements and the resulting better access to EU markets which [followed]" (p. 50).

18. Although Kaminski (1993) calculates ratios of exports to quotas in excess of 100 percent prior to the negotiation of the association agreements, suggesting that pre-agreement quotas were binding and that EU liberalization could have been important, others suggest that such high average export/quota ratios reflect binding quotas on a narrow range of CEEC exports and that for the majority of categories Eastern Europe did not come close to bumping up against quota limits. Even where quotas were filled, they did not necessarily preclude additional exports to the West; East European exporters could export above quota by paying a relatively modest tariff on the additional exports. Assessment is further complicated by the fact that for sensitive sectors—the so-called five-year group or Annex III, MFA group, and items under the European Coal and Steel Community (ECSC)—quotas are in the midst of being phased out.
19. Agreements with the EU and accession to the GATT and the WTO resulted in the reduction of import as well as export barriers. Cuts in import barriers partly explain the rapid growth of imports of foodstuffs and other consumer items, though pent-up demand for Western quality and brand names has also been important. Thus Eastern Europe's commitment to reduce and eliminate remaining barriers between 1997 and 2001 may further stimulate the already high growth rate of imports. This will pose difficulties for governments, like Poland's, which already face strong protectionist pressures at home.
20. Alternative estimates of the magnitude of FDI vary significantly. The figures we utilize are drawn from IMF balance of payments data. Figures produced by the WIIW in Vienna show a similar pattern over time: total inflows of \$10 billion, \$9 billion in 1996, and an estimated \$8 billion in 1997.
21. United Nations (1995) notes that the stock of FDI in Eastern Europe remains below that of Argentina, a single, middle-sized, semi-industrialized economy.
22. As late as 1992, Hungary accounted for 55 percent of the region's accumulated stock of FDI. Ninety-one of the top two hundred Hungarian firms have foreign ownership. Poland and the Czech Republic came in a distant second and third.
23. Privatization also accelerated, and the reestablishment of international creditworthiness with the London and Paris Club deals was no doubt important.
24. Data for Czech manufacturing in 1994 confirm the Hungarian results: FIEs accounted for 16.4 percent of exports, compared to 10.2 percent of fixed capital and 7.5 percent of employment. Exports accounted for 41 percent of their sales, versus 31 percent for domestic firms (Zemplínerová 1996). Confirming the heavy import bias and higher labor productivity found in Hungary, the share of FIEs in value-added in the Czech Republic was lower than their share in output and higher than their share in employment.

25. A similar tendency for FIEs to export a disproportionate share of their output (and to import a disproportionate share of their inputs—see below) has been found for other countries, although these propensities have been found to decline with time. See McAleese and McDonald (1978).
26. Whether FDI-related trade and investment are associated with productivity spillovers and positive linkages to domestic firms is a separate question, to which we turn below.
27. Growth was most rapid in 1991–92 and 1995, strongly suggesting that OPT exports are pro-cyclical, acting as the marginal source of production for EU manufacturers.
28. In 1988 Hungary accounted for about 35 percent of the region's OPT exports to the EU, with another 28 and 26 percent coming from Romania and Poland. By 1996 Poland's share had matched Hungary's in 1988, with Hungary, Romania, and the Czech Republic all with slightly less than 20 percent each. Though OPT exports are important in Bulgaria, that country accounts for a tiny share of total CEEC exports; therefore, Bulgarian OPT exports account for only a small share of the region's total.
29. Interestingly, the countries with growing OPT exports in the newer sectors tended to be the four Višegrad countries, which are also displaying more ability to export the products of new sectors according to our other measures.
30. In addition, Poland's ability to capitalize on its location was presumably facilitated by early macroeconomic stabilization.
31. For a survey, see Blomstrom and Kokko (1996). Markusen and Venables (1997) provide a model of the mechanisms discussed in this subsection and references to the literature.
32. Riedel (1975), for example, argues that technology spillovers were important for the development of manufacturing in Hong Kong, where FIEs have long been prominent.
33. Thus in the Czech Republic, Volkswagen transferred skills to indigenous managers following its acquisition of Skoda by having pairs of managers, one Czech and one expatriate, work together as a team and by sending its Czech managers abroad to study and work.
34. Market-access spillovers are purported to have been important in East Asia, where firms acquired marketing skills through contacts with Japanese trading companies (Hone 1974).
35. See United Nations (1995: 116 and *passim*).
36. Rodrik has applied his model to the East Asian experience. Three features of his account stand out. First, once coordination problems were solved, East Asian economies could exploit the existing backlog of technology because they possessed adequate levels of human capital. Second, trade was important for providing access to imported capital goods. Third, exports were a consequence rather than a cause of the acceleration in East Asian economic growth.

37. In East Asia (Campos and Root 1996)—as in post–World War II Western Europe (Eichengreen 1996)—governments encouraged wage moderation by building institutions (deliberative councils in East Asia, workplace co-determination in Germany) and pursuing policies (carrots like land reform in East Asia and the welfare state in Europe, sticks like the favorable tax treatment of investment in both places) to ensure workers that wage restraint would result in additional investment (rather than simply higher distributed profits), increased productivity, and ultimately improved living standards.
38. For example, it can create institutes for management education and encourage training abroad.
39. In addition, the existence of a strong state can support the pursuit of stable macroeconomic policies (an aspect of transition that we do not explicitly deal with here). In particular, to frame sound and stable monetary and fiscal policies, the executive and central bank must be insulated from politicians whose time horizon extends only as far as the next election. To encourage participation in the formal sector, the government must operate an efficient and equitable tax system, or it will be forced to raise tax rates to onerous levels on those firms which have not already fled to the underground economy.
40. Poland passed limited civil service protection in January 1997, but implementation has been slow and so far covers only a few hundred employees. In Romania, a civil service law was being considered by parliament in the spring of 1998.
41. Spain and Poland are of comparable size, as are Portugal, the Czech Republic, and Hungary. Openness is comparable for Spain and Poland and only slightly lower in Portugal than in the smaller CEECs. In terms of external openness, the ratio of exports and imports to GDP for Portugal, on a national accounts basis, increased from 42 percent in 1976 to 60 percent in 1986 and 66 percent in 1994. For Spain, the comparable figures are 32, 38, and 47 percent. Recent figures for the CEECs show the Czech Republic at 108 percent, Hungary at 65 percent, and Poland at 47 percent (calculated on a national accounts basis from OECD data base). Per capita GDP in the Višegrad Four is a bit less than half that in Portugal and Spain but close to Iberian levels in the early 1980s, measured at purchasing power parity. The ratio of per capita incomes was somewhat higher in the case of the Czech Republic (at 70–80 percent), whereas at the other end of the spectrum Bulgaria and Romania have roughly similar though rapidly diverging levels (30–40 percent, respectively).
42. In Spain, state ownership of heavy industry was a result of a system of central planning which was not dissimilar to that in Eastern Europe. Extensive nationalization of already existing large enterprises, often conglomerates, occurred in Portugal after the 1975 revolution. As of 1988, Portugal, with Greece and Italy, had one of the largest public enterprise sectors in the EC—14.5 percent of nonagricultural business sectors employment. While Spain's public enterprises were a much smaller share of employment—7.5

percent—public financial support to this sector averaged 2.4 percent from 1977 to 1985, reaching a peak of 3.7 percent in 1984. As for protection, Spain's nominal and effective protection rates prior to EC membership are estimated at 15.1 and 24.7 percent, excluding quotas and other non-tariff barriers. These subsequently fell to 4.9 and 4.1 percent respectively (OECD, *Economic Survey of Spain 1990–91*: table 15). The converse of underdeveloped service sectors—namely, excessively large agricultural and industrial sectors—implied, as it has in Eastern Europe, a double-barreled problem of transition, with the potential for producing high unemployment. The share of total employment in agriculture was 36 and 21 percent in Portugal and Spain respectively in 1976. The industrial sector in Spain and Portugal accounted for 37 and 35 percent of employment in 1975. Even by the time of EC membership agricultural employment had fallen to only 22 and 12 percent respectively and as of 1994 was 11 and 7 percent. Agricultural productivity still remains low, with agriculture accounting for 4.6 percent of Spanish GDP in 1994. Spain (again like the CEECs) quickly established social welfare systems similar to those found elsewhere in the EC, with the attendant labor market problems, compounding the problem of the double transition.

43. Current OECD projections for both countries see real GDP growth remaining under 3 percent through 1998, only slightly higher than the EU average.
44. Over the 1977–96 period as a whole, they expanded at double-digit rates.
45. These investment/GDP ratios are for 1977–91. In any case, the higher figures for Portugal were sustained by large inflows of EU regional aid. For Portugal, combined investment by the central and local government, public enterprises, and private sector investment cofinanced with the EC accounted for an average of 72 percent of total investment from 1986 to 1989. Total gross inflows from EC Structural Funds alone averaged 2.1 percent of Portuguese GDP from 1986 to 1993, which were 80–90 percent of gross financial inflows from the EC (see OECD, *Economic Survey of Portugal 1991–92, 1993*).
46. These statistics are for the period 1976–86.
47. Corado (1998) reports slightly different figures of FDI ratios of 0.7 percent of GDP and 2.5 percent of gross fixed capital formation (GFCF) between 1976 and 1985, increasing to 3.1 percent of GDP (12 percent of GFCF) in 1986–92. FDI reached peaks of 2.5 and 4.0 percent respectively in 1990.
48. Various regression analyses of the determinants of FDI inflows to Spain emphasize the importance of domestic market access, availability of skilled workers, and infrastructure and explicitly reject unit labor costs, and this is equally true of the sectoral distribution.
49. The weight that should be attached to low unit labor cost in FDI is disputed. Corado (1998) argues that FDI was primarily attracted into industries characterized by undifferentiated products and mature technologies (metal and nonmetallic mineral products) or technology-intensive industries (machinery, equipment, and transport equipment) and not labor-intensive industries. At the same time, Corado finds a high correlation between labor costs

and the share of exports in total sales. By contrast, Simoes (1992) argues that low labor costs were the primary attraction, even if labor-intensive industries (food and beverages, textiles, footwear) were not the primary targets.

50. These changes facilitated the increase in FDI in services and other new sectors discussed above. The initial program of 1988 only undertook privatization of minority shares and limited foreign participation to 5 percent. After full privatization (which was launched in 1989) commenced, foreign participation in privatization was gradually raised to 30–40 percent (as of 1993), with actual participation based on case-by-case considerations that generally limited foreign participation to a 25 percent share. Furthermore, safeguard clauses were put in place initially, though never used, which discriminated against non-EC investors. Priority was given to the financial sector, explaining the large share of this sector in total inflows.
51. Foreign firms operating in Portugal now include Ford, GM, and Volkswagen. Waves of foreign investment in these sectors occurred both in the early 1980s and again in recent years. Prior to 1986, autos and auto components, chemicals, and electronics accounted for half of all projects and nearly 80 percent of investment receiving subsidies. These sectors also received some preferential tariff treatment. Other incentives targeted information technology, biotechnology, ceramics and plastics, hospital and surgical equipment, food processing, and tourism.
52. Again as in Eastern Europe, they also have a higher propensity to import, arguably contributing to the problem of trade deficits. This is particularly true for majority-owned FIEs. One study of Spain (cited by Duran Torres 1992) showed that as of 1989 exports accounted for 50 percent of FIE production, and as of 1990 five of the six largest exporters were FIEs (all were auto companies). The same study showed that FIEs accounted for 25 percent of the Spanish trade deficit in 1989, as compared with 12 percent of Spanish GDP. Martin and Velazquez's (1996) analysis confirmed this result for the 1983–89 period and also showed that FIE import propensities were several times higher.
53. By contrast, there was little difference between domestic firms and FIEs in terms of labor productivity. Bajo and Torres (forthcoming) found that FIE-dominated sectors were characterized by higher productivity and greater technology intensity.
54. What Simoes (1992) characterizes as product specialists or strategic majors. The former are responsible for developing, manufacturing, and marketing specific products for regional or world markets and have substantial domestic technological content. Strategic majors are the same but more so—i.e., they can develop entirely new lines of business and with even more local technological and design content, and in fact may have as their role maximizing access to local technological developments.
55. Duran Torres (1992) presents evidence from a 1988 survey of Spanish firms that the subsidiaries of MNCs were four times as likely as publicly owned

Spanish companies to be innovating new products and processes and twice as likely as private domestic Spanish companies. He also presents evidence from the balance of payments on imports and exports (payments and receipts) for technology licensing, but this appears to be somewhat contradictory regarding the relative role of domestic- and foreign-owned firms. As of 1989, he states "80 percent of the number of transactions and almost 70 percent of the payments are in the hands of domestic Spanish firms, with no foreign capital. The majority-owned subsidiaries account for 15 percent of the transactions and 27 percent of the payments" (p. 239). However, in the context of a discussion of new product innovation, he states that "MNC subsidiaries are on average the most active in the introduction of new products or processes. The imports and exports of technology are concentrated in relatively few firms. Thus the top hundred import companies pay about 70 percent of the total and about 20 of them are responsible for 50 percent of total payments. Out of these, three-quarters are subsidiaries of multinational companies." It is not clear what this tells us about technology transfer in terms of economywide diffusion, as opposed to embodiment in particular products.

55. Poland has in common with Spain a large domestic market. In fact, transportation infrastructure is often superior in density, if not quality, to that in Iberia. Gual and Martin (1995) show that Hungary had a denser system of railways and public roads than Spain, as well as having the Danube. Hungary also has a higher share of secondary and university graduates than Spain (see their table 6.13).
56. Apart from bursts associated with privatization. In addition, foreign investment has been constrained by the sluggishness of the European economy as a whole, even though export growth has remained high. The burst of FDI provoked by trade policy, privatization, and financial incentives was followed by a slump. This time profile now seems to be occurring in Eastern Europe in a more compressed fashion. For example, in the Czech Republic, as in Iberia, FDI inflows appear to have slowed and to have grown increasingly dependent on the pace of privatization.
57. While Spanish exports have risen relative to 1986–91 levels, they were unusually stagnant during this period. Portuguese export growth has fallen by a third relative to 1986–91 levels and by two-thirds relative to 1977–85.
58. This bifurcation resembles the pattern evident until recently in the contrasting experiences of Spain and Portugal.

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INTERNATIONAL PRODUCTION NETWORKS IN THE AUTO INDUSTRY: CENTRAL AND EASTERN EUROPE AS THE LOW END OF THE WEST EUROPEAN CAR COMPLEXES¹

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Automakers have been among the first Western companies to enter the Central and East European countries (CEECs). In both production and distribution, International Production Networks (IPNs) are emerging which link Western Europe with the CEECs. This paper identifies four types of such IPNs in Europe—*front-runner*, *follower*, *peripheral*, and *lock-out networks*—which represent diminishing degrees of involvement in the CEECs. It explores these networks in terms of the automakers' domestic bargaining setting, the dynamism of the internationalization process, the reception in the host countries, and the patterns of intra-European trade that result from their rise. It concludes that the nature of these IPNs affects CEECs' prospects of integrating into the European Union (EU) and developing autonomous domestic industrial structures.

Throughout the Soviet era, the auto industry symbolized the centrally planned economies' ambition to provide their citizens consumption levels comparable to those of the free market economies. Car production was substantial. In 1988, auto production in Central and Eastern Europe (CEE) (including the former East Germany, excluding the former Yugoslavia) was estimated at 3.2 million units. At least nine independent producers of substantial volumes of cars existed in CEE (excluding the former Soviet Union): Wartburg and Trabant of the German Democratic Republic, FSM and FSO of Poland, Skoda in Czechoslovakia, Industrije Motornih Vozil (IMV) in Slovenia, Zastava Yugo Automobili (the Serbian producer of the Yugo brand), and Dacia and Olcit in Romania.³

Ten years later, the picture has changed entirely. Large segments of the CEE auto industry have come under the control of Western volume producers, mostly through takeovers rather than the establishment of greenfield sites. Seven of the nine producers are now majority-owned by Western carmakers, while Yugo was close to obliteration as a result of the Bosnian crisis. East of this takeover “battlefield,” the Russian car industry seems to have been less affected: none of the big producers has yet been taken over, and Russian and Ukrainian producers still dominate the former Soviet markets.

Foreign investments in the auto industry have played a central role in the transformation of the CEECs. In many cases, individual car manufacturers’ investments represent the largest investments ever.⁴ While a major lure for foreign investors has been the prospect of the region’s some 330 million consumers, early expectations about auto sales have proven too optimistic. It was initially forecast that regional auto consumption could reach 3 million units by the year 2000 (*Financial Times*, 11 December 1990; hereafter cited as *FT*). In reality, sales in most CEECs declined after the breakup of the Council of Mutual Economic Assistance (CMEA). In Poland (by far the biggest market after Russia), new car sales dropped by half from around 284,000 units in 1990 to under 143,000 only a few years later. Sales eventually bounced back, reaching 264,000 units in 1995 and 373,000 units in 1996 (*FT*, 26 March 1997). Sales in seven CEE car markets—Bulgaria, the Czech Republic, Hungary, Poland, Romania, Slovakia, and Slovenia—are expected to rise by at least 10 percent a year to reach more than 1 million in 2000 (*FT*, 28 February 1996). Such prospects are good news for West European producers, which, according to EIU/*Autofact 1997* estimates, have operated at 33 percent below capacity, turning out 6 million fewer cars than they could.⁵

While the expanded European regional market allows auto producers to pursue expanded economies of scale, the integration of CEEC also enables a new intrafirm division of labor based on an expanded variety of locations and factor costs. These characteristics are not sufficient to explain why car producers in the West European market have adopted notably different strategies in CEE. This study examines the investment strategies of the leading foreign car producers in CEE and puts forward an explanation for the range of varying outcomes. It consists of four main sections. The first reviews the nature of core firm internationalization strategies in general. We

explain that these strategies are basically a function of both the company's home country conditions—or what we term the “domestic car complex”—and the structure of the international market. The second section analyzes the shape of the emerging IPNs in CEE and the way they get embedded in the carmaker's overall internationalization strategies. The third section looks at the CEE reception of the foreign automakers and the influence of national policies on production strategies. The conclusion addresses the future configuration of the European automotive industry after the year 2000. Different arguments have been put forward: while some authors emphasize the continued influence of national and regional differences (Sadler 1996: 7), others suggest that CEE will be incorporated into the European “car system” (Banville and Chanaron 1991), possibly leading to the disintegration of national industries (Bordenave and Lung 1996). Finally, we trace the influence of auto industry investments and restructuring on domestic and international politics.

CAR PRODUCTION NETWORKS AND INTERNATIONALIZATION STRATEGIES

The most important actors in the car industry are the end producers. They have orchestrated various types of production networks in the home economies. Figure 1 displays the resulting positions of the core firms along the two network dimensions of this research project: open/closed and vertical/horizontal. The figure allows for a “medium” position on the two dimensions. It shows that sometimes firms from different regions share a larger number of characteristics than firms from the same region. Fiat and General Motors (GM) resemble each other in their networking approach, while the commonalties in the networks around (for instance) PSA (Peugeot, Citroën, and Talbot) with the Daewoo network are remarkable. The most “open” network can be considered that of the Swedish producer Volvo. Having to deal with such sizeable and strong external actors as industrial banks, large numbers of strong foreign suppliers, strong trade unions, and an influential government, the company has the least influence over its network. The most “closed” network can be considered that of Toyota: it has organized a large

Figure 1

number of actors, including local and national governments, trade unions, and financiers, in a network of structural control. Most vertically integrated car producers aim at volume production, whereas most luxury producers operate in more open networks.

The context for these networks is the series of ongoing changes in the organization of the global auto industry. The core firms have different types of internationalization strategies at their disposal which can be linked directly to the properties of the home network (Ruigrok and van Tulder 1991, 1995). Four specific internationalization strategies are normally distinguished in the car industry, each containing an increasing degree of “local content”:

- Exports of complete cars;
- Exports and local assembly of cars that are slightly disassembled (semi-knocked-down, or SKD);
- Substantial local assembly of cars (completely knocked-down, or CKD);
- Integrated local manufacturing (sometimes referred to as built-up manufacturing).

The first two strategies are primarily aimed at serving the local market, leaving the home car complex relatively untouched. The latter two strategies often function in an international division of labor strategy and can serve as a first step toward a reimportation intended to influence the bargaining relations in the car complex at home. In cases where firms export complete cars to another country, the degree of local integration of the network is zero. In cases of complete and integrated (built-up) manufacturing, a car firm wants to locate production as well as supply in the country in which it is investing.

In the mid-1990s only a few core firms in the car industry had spread integrated production over the regions of the so-called Triad (Europe, North America, and Asia). Only the Japanese producers Toyota and Nissan (and to a much lesser extent Honda and Mitsubishi) produced substantial volumes of cars throughout. It is estimated that Japanese firms produce around 1.8 million cars in the United States, 0.5 million in Europe, and 8 million in Japan. The internationalizing Japanese car complexes have aimed at *producing locally for local markets*,

which we call a *glocalization strategy*. The more production value firms locate in host countries, the more captive suppliers follow in order to (re)create the same closed network structure locally. These companies have not planned substantial reimports into their country of origin. Only Honda has aimed at reimports to the Japanese market. This strategic stance illustrates the relatively weak position of Honda in the Japanese bargaining environment, making it the vertical *keiretsu* with the lowest degree of vertical integration and the most open production and distribution networks in the local market. For instance, of the relatively small volume of cars that were exported from the United States to Japan in 1996, Honda-U.S. delivered the largest part, making it the leading exporter as well as reimporter of cars from the United States to Japan.

Ford and GM have been the American core companies that have gone the farthest in forging an internal international division of labor, an approach which we term a *globalization strategy*. This strategy entails the spread of production and supply through multiple-sourcing agreements in many countries and regions. Firms that have invested in regional production networks have aimed at reimporting substantial volumes of finished cars back into the home markets. The threat of reimports puts the domestic bargaining arena under pressure: local suppliers might have to compete with foreign suppliers at lower prices, and firms can ask trade unions to lower their wage claims and increase their flexibility. In the mid-1990s, however, Ford and GM essentially operated in only two regions: the United States and Europe. There they located semi-independent vertically integrated production structures, while SKD and CKD assembly operations still prevailed in other important (but protected) markets. In both regions the companies strive for further coordination of the networks. Ford in particular has been trying to build a new generation of cars (Mondeo) on the basis of a division of labor between the United States and Europe. In Europe, the coordination of the IPNs, spread over the UK, Belgium, and Germany in particular, has gradually moved from the UK to Germany. The GM network in the United States can be considered more vertically integrated and closed than the network of GM in Europe, with Opel in Germany and Vauxhall in the UK as the most important subsidiaries. The European network is looser. In the case of Ford the differences between the American and European networks are less clear. Ford-Europe produces in dif-

ferent countries throughout Europe, though, which tends to weaken the cohesion and closure of its production networks. This makes Ford's continued efforts to increase coordination understandable—for instance, in its Ford 2000 program; such efforts should increase the degree of central coordination (from the United States) on a worldwide scale.

Europe's volume producers (Fiat, PSA, Renault, and Volkswagen) have maintained the bulk of their production networks in Europe. They aim at a regional (but not global) division of labor, complemented by exports to the rest of the world. Only in South America have they located substantial production facilities, most of which house SKD assembly for local markets. Only Fiat aimed at reimports to its home market. Europe's luxury producers—Mercedes-Benz and BMW—have maintained a largely domestic production base, while serving world markets through exports. To be sure, in 1992 and 1993 BMW and Mercedes started to locate around 10 percent of production in the United States, their most prominent market. This strategy may seem a major departure, but it is largely complementary to their previous export-oriented strategies. BMW and Mercedes are pressing their suppliers to locate component manufactures near their U.S. factories, which would increase local content and reproduce their successful German supply structure in the United States. BMW and Mercedes thus largely follow the globalization strategy of Toyota and Nissan. Other relocation activities are not really envisaged, certainly not toward marginal markets.

WHO WENT EAST AND WHY: FIRM STRATEGIES IN CEE

The internationalization strategies of car assemblers in CEE basically follow the same network logic as they did in the past in other regions. Following the events of 1989, all car manufacturers were obviously interested in CEE. The opening up of the region could solve part of their overcapacity problems, and it presented a potential market. This section documents the networks that have developed on the basis of front-runner, follower, peripheral, and lock-out strategies. The strategies had distinct origins in the producers' domestic car complexes, and these characteristics also led to comparable properties of the IPNs, including supplier networks. Moreover,

entry strategies have had distinct consequences for the distribution structure and the degrees of market penetration. By choosing a rapid-entry strategy, front-runner firms have been able to create markets for themselves.

FRONT-RUNNER NETWORKS: ENTRY BY TAKEOVER

In two years' time, around 90 percent of the production capacity of the CEECs had been acquired by just four Western producers: Volkswagen (1991), GM/Opel (1991), Fiat (1992), and (to a lesser extent) Renault (1991). Many of the moves were based on long-established historical ties. Fiat had worked closely with the Soviets and the Poles since 1966, GM-Europe had some thirty years' experience in the Hungarian market. To German-based companies, the eastern part of Germany was a logical objective. Renault had been cooperating with IMV in Slovenia since 1972. Rushing in was necessary, however, because for every takeover there were many contenders.

These four producers share a number of domestic network characteristics:

- They belong to vertically integrated and relatively closed networks (see Figure 1);
- They are European producers or a relatively independent subsidiary of a U.S. producer (Opel);
- They produce for the volume car segment and aim at the maximization of their market share;
- At least three had the closest possible links with their own government (Renault and Volkswagen due to direct state ownership, Fiat due to its monopolistic position in Italy); even Opel has close links with the German government.

Aiming at maximum market share while confronted with considerable overcapacity, these firms have been prompted to adopt a rapid-entry strategy in CEE. The fear of losing out in a new region is particularly important for firms that compete primarily in the volume car segment. Volkswagen and Fiat adopted a rapid and rather aggressive takeover strategy in the Czech Republic (Skoda) and Poland (FSM) respectively. Opel was quick but generally more hesitant

than either of the leading European companies. Renault moved rapidly toward a lucrative share of a producer located in a relatively marginal part of the region.

The involvement of the governments of the largest West European states has been considerable in the first phase of entry. The front-runner companies acted in conjunction with efforts of the national governments of Germany, Italy, and France. For instance, East Germany has been targeted by the West German volume car producers (including Opel AG) in close consultation with (and financially backed by) by the federal German government. No other non-German firms were capable of acquiring a share in the former DDR car industry. The East and West German car complexes became effectively integrated. Moreover, negotiations on joint ventures or acquisitions involved not only the respective carmaker and CEE authorities, but also the West European government of the country where the carmaker originated. Even though the investments in CEE are based primarily on firm-specific strategies, governments in Germany (regarding East Germany), Italy (regarding Catholic Poland), and France (with regard to Renault's failed bid for Skoda but successful bid for IMV) have supported investment plans for a variety of political and social reasons, such as the wish to promote stability in this part of Europe. The Italian government has been actively involved in Fiat's expansion to Eastern Europe. The Italian State Export Credit Insurance Agency covered the risks of revenue loss due to political events and actions by Polish authorities that could limit FSM production or block exports.

All front-runner firms aimed at the local market *as well as* at reimports into Western Europe. A *segmentation* of production inside Europe became envisaged, in which the East European part of the network would produce the lower-end models. So Fiat builds its Cinquecento—Fiat's smallest car—only in Poland for the whole (European) market, whereas Volkswagen builds its Skoda cars only in the Czech Republic for exports to the West. Volkswagen is developing a second range of models to be introduced at the end of 1997, which will bring its production capacity to around 350,000 cars around the year 2000. This is comparable to the production capacity that Fiat is planning in its Polish facilities. GM plans to develop and produce a new range of low-cost small cars in CEE—smaller than its

Opel Corsa supermini, which is its smallest car at the moment (Havas 1996: 6).

All four producers attach importance to their first production site. The site—and therefore the country—is projected to become the focal point for their CEE strategy: coordinating reimports into the home country, sourcing strategies in the region, and the like. These markets also represent the most important outlets in the region. One-third of Renault sales in CEE are in the tiny market of Slovenia. Poland is the largest market for Fiat and Opel, as is the Czech Republic for Volkswagen. Other markets are in lower-tiered positions.

The eagerness to move into CEE first stems from a desire to influence the local bargaining arena. This was particularly the case for German car producers, which have been confronted with relatively high wages and strong components suppliers. The VDA (the united car manufacturers) have complained for more than two decades about the high wages, which they believe lower the competitiveness of the industry. This complaint has been equally true for German components suppliers. The front-runner companies (assemblers as well as suppliers)—from Germany in particular—are explicit that they intend to use CEE sites in a reshuffling of their whole European operations.

The less a firm has been embedded in the local car complex in Western Europe, the more bluntly and overtly it tends to make this argument. Consequently, GM seems to have gone furthest of all four front-runner firms in its desire to use its CEE strategy to influence the traditional industrial complexes in which it operates. GM has been the first “European” producer to explicitly integrate its European strategy. In 1998 it announced that it would shed 20–30 percent of its European employment (80,000 employees total) and production capacity. The countries most affected by this strategy are in Western Europe (in particular Germany, but also Spain and the UK), whereas the (greenfield) production sites built in Poland and Hungary would expand and would build newer generations of the Astra, Vectra, and Corsa cars. The cars produced by GM in CEE are thus also intended to *substitute* for some of the models produced in Western Europe. Front-runner producers Fiat and Volkswagen have targeted CEE more as a *complement* to their existing product range. The effect of imports of these cars on the West European production system will therefore remain more limited. With these volume pro-

ducers, broader effects on domestic bargaining relations can be expected from the relocation of components production in CEE.

FOLLOWER NETWORKS: INCREMENTAL INTERNATIONALIZATION

The two remaining European volume producers, PSA and Ford-Europe, did not join the bandwagon of the front-runner firms. PSA wanted to but could not develop enough bargaining clout for successful acquisitions. Ford-Europe, on the other hand, did not want to engage in large-scale acquisitions. Both firms tend to be slightly less vertically integrated than the other European mass producers, while their networks tend to be more open than those of the front-runner companies (see Figure 1). More important, however, both firms have looser relationships with the governments of their home countries, so their entry strategies are not as well backed by committed governments, lowering their vigor and bargaining leverage as compared to the front runners.

Planned production volume of the followers in CEE has been substantially lower than for any of the front runners. Retreat and entry strategies have developed simultaneously, which illustrates the more incremental nature of the internationalization strategies of these firms—indicative also of the lower importance attached to a substantial presence (especially in production) in the region. In the country in which they located production, the followers share the following characteristics:

- Local production has involved mostly SKD on the basis of reengineered low-end cars from the existing portfolio;
- They have been much more interested in greenfield site investments;
- They have located relatively small assembly volumes (10,000 units or less) that require much smaller investment volumes;
- No regional division of labor between Western and Eastern Europe is envisaged or needed for this particular kind of local assembly;
- They have primarily aimed at the local market and do not aim at large volume reimportations toward Western Europe;

- For political reasons, therefore, they need not worry much about a low level of local content;
- The SKD nature of the assembly operations includes the imports of subassemblies from more important production sites in the rest of Europe; no real pressure develops for captive suppliers to locate in the host country.

The followers have been looking primarily at the region as a market and have not been prepared or capable of making credible bids for the larger companies left in the East. Because of the market-oriented nature of the investments, most of the plants of the late-comer producers are of an SKD nature. The proliferation of their production networks into CEE has remained limited, and the impact of the decision to “go east” on domestic bargaining relations, therefore, has remained rather limited as well. It can be expected that as soon as the tariff barriers with the EU become zero (around 2002), these facilities will be wound down (*Automotive Monitor*, February 1997: 15).

PERIPHERAL NETWORKS: ENTERING WESTERN EUROPE THROUGH THE BACK DOOR

In cases where a core firm is not part of the existing complexes, an entry strategy through the front door is extremely difficult and costly. The West European car market remains surrounded by direct and indirect trade barriers. Tariffs, quotas, as well as single-franchise dealer structures, create a large number of (institutional) barriers to entry. The opening up of CEE, as well as the prospect of a free trade agreement—and ultimately economic integration—between the EU and some of the CEECs, has inspired many of the peripheral firms to try to enter through the back door. Most noticeably Suzuki and Daewoo have targeted CEE as a production site to overcome European trade barriers and enter the West European market.

The newly entering producers share an interesting common feature: they belong to relatively weak and open car complexes in their home countries. Only since 1992 has Daewoo been capable of exporting cars. The 1992 dissolution of a joint venture with GM freed it from GM-imposed restrictions to export cars under its own badge. The firm nevertheless remains relatively weak. In 1995 Daewoo had an 18 percent market share in South Korea, whereas Hyundai had

52 percent and Kia 26 percent. Daewoo lacks the cash to invest in core regions. Over the 1991–94 period it lost approximately \$460 million in its production activities. Suzuki is still 15 percent owned by GM (according to January 1996 figures). In Japan it is—compared to Toyota—a relatively small producer of mainly compact cars, yet independent of the larger Japanese players.

Suzuki and Daewoo share a number of network characteristics in their home base. First, they are among the weaker players. This gives them an extra incentive to go abroad in order to escape the relatively inimical domestic bargaining environment. Second, they are medium horizontally integrated (Suzuki in the DKB group, while Daewoo is a horizontal group itself) and share relatively open networks with suppliers from other car complexes. This makes it less problematic for them to plug into the networks of others when they move abroad. Finally, they are (or until recently have been) partly owned by other car complexes, making it difficult to enter the core complexes of their (minority) owners. These common characteristics explain why Suzuki and Daewoo have sought to approach Western Europe through the back door: Suzuki via Hungary and Daewoo first via Poland and later via a large number of other CEECs.

The strategies of the peripheral players reveal the following common characteristics. First, although they also produce substantial volumes for the local market in which they produce, the primary aim is exports to Western Europe. Second, to supply to the West European market, a high local content (80 percent) is required; each peripheral player is trying to evade EU local content regulations as much as possible—for instance, by “redefining” components or supplying local suppliers as second-tier producers. Third, they have made use of the frustration of local governments vis-à-vis the bargaining practices of Western car producers to get a foothold.⁶ As a result, they have successfully gotten joint financing of investments with local governments and actors, which makes the investment risky for these actors as well and increases the inclination of the governments to use political measures to support/protect the local industry.

Suzuki aims at a regional division of labor between its plants in CEE and Western Europe (Spain). Daewoo, on the other hand, is aiming at a regional division of labor *within* CEE. Because of the larger investments involved, the larger production volumes envisaged, and the almost exclusive reliance on CEE as its IPN, Daewoo’s strategy

contains considerable risk. In the slipstream of Daewoo, Hyundai and Kia are actively seeking to get a foothold in CEE. The logic for these producers is comparable to that of Daewoo: because they are not major players in the European market themselves, they seek weak business partners and relatively weak governments. Their primary target is the EU market, and they have had considerable success: in 1991 Korean firms sold fewer than 50,000 cars in Europe; in 1996, 252,000 units were sold (*ACEA Newsletter*, March 1997).

VOLUNTARY LOCK-OUT NETWORKS: THE ART OF NEGLECT

Neither Toyota, Nissan, or Honda nor the European luxury producers BMW, Volvo, or Mercedes-Benz have shown great activity in CEE. By strategic intent they have voluntarily locked themselves out. These producers form a logical strategic category. The internationalization strategies of BMW and Mercedes very much resemble those of the big Japanese players. They basically aim at exports and have been relatively late to internationalize. When they finally started to internationalize, they moved noticeable production capacity only to their most important markets: the United States (next to Europe). In the United States they have emulated their successful domestic supply structures by demanding that their prime suppliers move abroad with them. These firms therefore internationalize only under very specific circumstances. They do not aim at an international division of labor.

The “art of neglect” for these firms entails ignoring the inclination of firms to go abroad and set up production sites in small and/or relatively unattractive markets. It involves ignoring the bandwagon effect of the front runners, with the short-term effect of lower market shares. It involves staying out of countries for lack of size and/or possibilities of influencing the political arena to the extent that front runners can do. This argument is particularly true for emerging markets such as CEE. Japanese firms like Toyota have only modestly internationalized toward marginal or emerging markets. Whenever they have internationalized, they have preferred SKD or screwdriver assembly. The first priority of the largest Japanese carmakers has been to become local players in the EU. At the end of the 1980s, this strategy implied local production *inside* the EU. Except for Suzuki,

no Japanese car company decided to set up an operation in Eastern Europe, and in the case of Suzuki it took a long time before the negotiations could be settled. All the Japanese firms that took a wait-and-see attitude toward the CEEC anticipated that the market would open up after 2001, making local production for local markets superfluous. Moreover, none of the luxury car producers expanded their IPNs in CEE beyond East Germany and some components plants.

HOW HAVE CORE FIRMS INTEGRATED CEE IN THEIR SUPPLY NETWORKS?

Core companies consider CEE primarily as either a market for relatively cheap cars or the lower end of the supply chain: lower-end car models and component supplies. The realized integration of local parts suppliers in European IPNs depends largely on the intended internationalization strategies of core firms. In some instances, officially stated and politically induced intentions do not match real strategic intentions (see above), which makes the former unlikely to be achieved. The degree of realized local content also provides an indication of opportunities for the host countries to develop a local supply industry.

Front Runners: Building Local Supply Networks. Front-runner firms acquired production capacity in CEE to enter markets as well as to reimport low-end cars into Western Europe. As noted, producers from outside the EU are submitted to import tariffs unless they have a high degree—80 percent—of local content. For the West European producers, achieving this local content has not been problematic and therefore never a reason for outsourcing. A political motive for promising high shares of local content, however, has been more prominent: in the bargaining process over the acquisition of a local car firm, sourcing locally has been a major point of discussion. All CEE governments demanded West European commitment to setting up an advanced local parts suppliers industry—a promise readily made but not always kept by the new entrants.

The high degree of vertical integration of the acquired CEE producers implied a substantial share of in-house production of components. After acquisition, most Western producers tried to rejuvenate these in-house producers. They also tried to make them supply components to other car complexes at home as well as

abroad. The Western subsidiaries and first-tier suppliers played an important role in this process: most front runners actively encouraged joint ventures between their own first-tier suppliers and the local component suppliers in the CEECs. The first-tier suppliers that followed this strategy most rapidly were the companies' own (preferred) subsidiaries.

By the mid-1990s, most front-runner firms entered a second, consolidation, phase of their investment strategies. They started scaling down the high degree of vertical integration. Volkswagen and Fiat in particular stimulated a large number of Western suppliers to locate part of their business near the production facilities, either as greenfield sites or in joint ventures. At the same time, the core firms put considerable pressure on their suppliers to produce at high quality levels *and* to lower prices regularly (Calbreath 1995: 9).

Front-runner firms targeted particular supply networks in the CEECs. Hungary in particular was an important target. It was one of the few CEECs with an automotive components industry that was independent from (national) vehicle assemblers (Sadler 1996: 22). The engine plants of Opel and Audi in Hungary are examples of how the CEECs could be integrated into the production networks of Western manufacturers. Audi's (Volkswagen) and Opel's main aim for investing in Hungary was to supply parts to operations in Germany. If local suppliers want to become parts suppliers to Western core firms, they run the obvious risk of becoming dependent upon the core firm and also upon the suppliers to that core firm. The experience over the 1990s has been that CEECs can become suppliers only by entering into joint ventures with a Western firm. Havas (1996: 25) gives an interesting example of such dependency in the case of Jung Hungária GmbH, which has been considered the first local supplier of Audi Motor Hungary. First of all, the Hungarian company had to become a joint venture with the German firm Jung. Second, the actual supply contract was signed with Südaluminium GmbH, a German foundry.

What this means in practical terms is that castings made in Germany are machined in Hungary and . . . supplied directly to the AMH [Audi Motor Hungary] plant in Győr. In other words, Jung Hungária is a subcontractor of Audi's German first-tier supplier. This arrangement seems to be the most likely way for Hungarian

companies to become involved in major automotive companies' supply networks (Havas 1996: 25).

The strategies of Volkswagen and Fiat to use CEE sites in a more global distribution and production strategy means that local preferred (first-tier) suppliers should increasingly be able to supply to the entire Volkswagen group and Fiat. The initial provision for the Czech suppliers that they could deliver parts to Skoda without having to supply the rest of the Volkswagen group is being superseded (EIU 1997: 104). The number of Czech suppliers that can raise their quality levels to be able to compete with Western producers in such a short period of time is bound to remain limited. The selection process becomes sharper at the startup of a new model. When Skoda moved from the production of the Felicia to the Octavia, some of the traditional Czech suppliers in vital parts such as engines and transmission systems lost out in cost advantages, quality, and manufacturing capacity (*ibid.*). Comparable developments can be observed in Poland. For instance, Fiat's Polish components are also shipped to Brazil, where another site of its "world car" is located. The export volumes of car components from Poland and the Czech Republic have risen, which largely represents intra-company trade. Fiat has selected a limited number of companies (seventy at the end of 1996) that have complete systems responsibility and supply its car assembly operations worldwide. Fiat aims at component standardization. None of Fiat's systems suppliers is of Polish origin (yet). GM's sourcing strategy is aimed more at a regional division of labor. GM has also been trying to reduce its dependence on German-based components, which in 1996 were estimated to account for more than 50 percent of GM-Europe's (GME) outsourcing. The company has targeted countries with a traditionally weak currency, such as the UK, Italy, Spain, and increasingly Eastern Europe. Poland is becoming a vehicle production center for GME and a source of components for its other European plants, in particular in Germany (EIU, 3d quarter 1996: 126). Renault does not aim at high degrees of local content in its Slovenian production site. The chances of creating an advanced local suppliers industry to the Renault factory are rather bleak, certainly because Renault imports its most strategic components directly from France.

Follower networks: Importing Components for Local Assembly. Follower firms did not invest in production capacity for reimports or exports to other parts of the world. Consequently, the need to create high levels of local content remains both politically and economically limited. The number of suppliers that have followed Ford or PSA in their SKD operations remains limited as well. When components are needed in the local assembly, importing subassemblies is preferred. There is no major pressure on captive suppliers to locate in the host country, and local suppliers will hardly have any opportunity to enter into any meaningful supply relationship with the core firms (“no tier” relationship).

Peripheral Networks: Local Sourcing to Meet EU Local Content Rules. The companies adopting a peripheral strategy (in particular Daewoo) have been aiming at a regional division of labor in which some production sites supply to other production facilities within the same group. In this scenario, local components producers have a clear chance of becoming first-tier suppliers of medium-tech products. The peripheral players Suzuki and Daewoo have differed from other car companies in their approach to local suppliers. They lacked an appropriate supply structure in Europe, while at the same time they were forced to have more than 80 percent local content in order to export to the EU market. As the story of Daewoo above aptly illustrates, the maneuvers of the peripheral players in CEE are dominated by a desire to show high local content as rapidly as possible. The desire stems from political necessity, not primarily out of company-intrinsic strategic considerations.

Daewoo’s strategy has aimed at taking over other producers and linking into their original supply networks. The relatively late entry of Daewoo, however, has also meant that it has been capable of taking over only the least attractive core firms and consequently the less attractive suppliers. The goal of outsourcing locally without becoming dependent upon the supply networks of other firms is therefore difficult to achieve. Plugging into the networks of other core firms is not easy. Daewoo faced difficulties when it wanted to cash in on the contacts of local suppliers with the existing core firms. These firms were bound to withdraw once they found out the (supplying) company was collaborating with Daewoo. For instance, Opel wanted to collaborate with FSO in setting up a DM 500 million pro-

duction site in Poland, but it announced that the partnership would not be created if FSO decided in favor of a partnership with Daewoo (which happened).

Being linked to the car complex of a more peripheral player like Suzuki offers opportunities but also creates problems for the (Hungarian) suppliers. First, the capacity of Suzuki is not sufficient (50,000, and it has not even been reached) to attain interesting economies of scale. Second, the parts Suzuki wants are not compatible with other parts in the car industry (Havas 1995: 14). The latter is the more problematic because other Japanese car manufacturers that might be using comparable parts—in particular Toyota due to its affiliation with Suzuki—are not investing in Central Europe at all. Exporting components to the production sites of other Japanese players in Europe is not likely to happen, whereas Suzuki does not plan to export the Hungarian parts back to Japan (as is the case with most Japanese suppliers due to their closed production networks).

The Hungarian car suppliers to Suzuki are locked into a lower-end producer: Hungarian production is for a relatively dated car. Furthermore, Suzuki negotiated supply licenses with its Hungarian suppliers that precluded the Hungarian firms from supplying to other Suzuki plants outside Hungary or to other customers in Western Europe (although sales to other assemblers in Eastern Europe remained possible, in theory). After comparing Nissan in the UK and Suzuki in Hungary, Sadler concluded that Suzuki appeared to be much less committed than Nissan to developing its Hungarian partners into “genuinely European- or world-class suppliers able to compete at the forefront of technological and organizational change” (1996: 24).

Lock-Out Networks: Outsourcing to Affect Domestic Negotiations. Of the firms that have engaged in a voluntary lock-out strategy, only the luxury producers Audi and Mercedes-Benz have started to outsource components in CEE. They have done this primarily with their own (relocated) high-tech suppliers, with production intended for reimportation into the home base. They have located important segments in Hungary, the country with the oldest tradition in components production.

The most obvious reason for outsourcing to CEE is lower wage costs, thus creating second sources as well as influencing the bar-

gaining relations in the car complex at home, in particular with the strong suppliers and workers. By threatening to shift output abroad, firms have gotten concessions from suppliers and workers. In the process, the luxury car producers have outsourced substantial volumes of engines to production sites in Hungary. These networks are very closed, primarily aimed at reimportations to the production sites in Germany. This outsourcing strategy tends to be on the basis of SKD production, which leaves room for local suppliers to become only second- or lower-tier suppliers for the local assembly firm with relatively low-tech supplies. If domestic trade unions lower their wage claims, a relocation of production back into the home country looms large.

Whenever Japanese core players in Western Europe mention the possibility of relocating production or outsourcing more components in the CEECs, it is more likely that their aim is to influence the local bargaining arena than to really move substantial sourcing there. The most important first-tier suppliers of the Japanese core firms have likewise targeted Western Europe as a production site, with only limited volumes of components assembled in CEE.

DISTRIBUTION STRATEGIES AND THE PURSUIT OF MARKET SHARES

The problems of gaining a market share in the emerging economies of CEE have been considerable. The sales pattern in the four largest CEE car markets illustrates the importance of being part of the local car complex in order to sell large volumes of new cars (see Table 2). Market penetration patterns have followed acquisition strategies. The market share of the front-runner (and peripheral) producers in markets other than those in which their production is located has been remarkably low. The acquisition of local market shares has been facilitated by the preferential treatment of governments and the preferential use of existing distribution structures. For the front runners, the local car complexes have become the distributors of their other brands as well. Thus Fiat and later Daewoo gained market share primarily in Poland. Volkswagen leads in the Czech Republic and Slovakia. Renault “conquered” the lucrative Slovenian market, the third largest in CEE. Opel managed to earn a relatively large market share in Hungary. The same is true for Suzuki, which also had to set

up a large number of dealerships, while providing a large number of repair services and second-hand car dealers with a franchise. Setting up dealerships in CEE is in any case less costly than in Western Europe. In most East European countries, state-owned sales and service outlets represented various makes. The rationale for buying into the local bargaining institutions was also to increase the chance that these “mega-dealers” could be turned into “single-franchise” dealers applying “European specifications.”

For the follower companies, entering the local market has been much more difficult than for the front runners. They had to invest in a completely new car distribution structure, whereas these markets are hardly big enough to grant widespread distribution networks. The existing dealerships—dominated by the early entrants—tend to dominate the *aftermarket* as well. Most car assemblers still earn most of their profit margins in the aftermarket by selling original equipment manufacturer (OEM) components through their single-franchise dealer networks. Control of the aftermarket is particularly important in countries where the cars are positioned in the lower end of the market. They need more maintenance. Because people in the CEECs do not have sufficient buying power, cars will be used longer and will require additional maintenance. In CEE a widespread system of garages and repair shops has developed. The margins for newcomers will remain small as long as they do not make major inroads into the aftermarket as well. But the proper institutions for this are still missing. A flourishing black market in stolen parts from often illegal garages has developed, making it even more difficult to reap profits from the aftermarket. The limited enthusiasm of latecomer manufacturers to invest in a distribution (and repair) structure will have a negative impact on sales volume.

Markets where no production sites have been located have largely been ignored in marketing strategies. This is particularly true for Russia, a potential market of more than one million units. No producer has succeeded or has been willing to buy itself into this particular market. Throughout the 1990s, the production and distribution structure in Russia has remained completely dominated by Russian producers. This position is supported by discriminatory trade policies and a laborious bargaining environment (World Bank 1997). Finally, dealers have to pay more for importing a car than do individ-

ual customers. The system thus discriminates in favor of direct imports through large importers.

TIERS AND FEARS IN CEE: BARGAINING IN THE SHADOW OF THE EU

Political conditions have influenced company strategies for investing in the CEECs. The prospect of entering into a free-trade zone with the EU—and ultimately becoming a member—encouraged most CEE governments to enter into deals with West European producers in particular. European interest groups such as ACEA (representing the automakers), national governments, and the European Commission have been active players in the region. The role of the EU and its institutions in shaping IPNs, therefore, makes the restructuring of the European region difficult to compare with (for instance) Asia.

The European integration process created substantial impediments for non-European producers of new cars and components. Tariff barriers were raised for imports from third countries on all categories of cars and components (see Tables 3 and 4). The integration process *ex-ante* led to the adoption of “European specifications.” Association agreements between the EU and ten CEECs during an interim period before (possible) full membership provided that CEE standards and regulations would approximate those of the EU as a major precondition for integration. This process followed the effective harmonization of technical requirements for new vehicles (in 1993) and a mutually recognized type-approval certification in any one member-state in 1996. The trade policy of the EU already differentiates imports from Eastern Europe against those from Asia and the United States. In 1997, imports from most CEECs into the EU became duty-free provided they had an EU certificate. This includes new and used cars and components such as tires, engines, platforms, bumpers, and gear boxes. In 1997, imports from Russia into the EU were open to small duties. By way of comparison, according to Dutch customs sources, imports from Japan and the United States in 1997 of new/used cars were open to a duty of 10 percent, whereas

most components had duties between 5 percent (for tires) and 6.3 percent (for bodies—coachwork).

Another effect of prospective accession into the EU has been that trade barriers within CEE toward the EU have largely become harmonized. In new and used cars, firms from the countries of the Central European Free Trade Area (CEFTA) have hardly any advantage over firms from the EU. Only in the area of components (with a major exception in car bodies—see below) were lower import duties established, further facilitating the integration of CEE at the lower end of the supply chain. Russia's position becomes clear from this perspective: cut off from its previous supply bases, it is the only country that has not differentiated its import tariffs of components in favor of the CEFTA countries. In addition, Russia has the highest import duties on components of the whole region.

Most CEECs were in a relatively weak bargaining position with core firms. They were under pressure to make it possible for consumers to get the cars for which they had been waiting for so many years. Most governments presented various mixtures of generous subsidy schemes, free-trade zones, and tax holidays in order to attract foreign direct investment (FDI). The bargaining dynamics of countries that were the objects of the first takeover (in particular Poland and the Czech Republic) differed from those of the other countries. Since these countries were not only a market but also a production site, the local governments developed more restrictive trade and industrial policies. Because these policies were often developed in close consultation with the new investors (which became part of the national car complex), their content mirrored the strategies of these car complexes. The CEECs that did not have their own car industry (Bulgaria, Albania) went for a much more quick liberalization of their markets (according to U.S. Department of Commerce information). Import duties in these countries are lower than in the CEECs with their own bigger production capacity. In many countries the monopoly in the form of a state-owned trading company was demolished, enabling more importers to sell on the local market.

Countries that tried to maintain an independent car industry (Romania) or wanted to build their own manufacturing capabilities (Hungary) offered a mixture of policies that also changed over time. Hungary, for instance, removed most obstacles to the private import

of cars in September 1989, very soon after the turnaround. This policy stance represented Hungary as a car market without any domestic production capacity. After only a few years, however, “various restrictive measures such as 25 percent VAT, increased import tariffs, import quotas, technical and environmental tests for cars over 6 years, etc., have been introduced again in several steps” (Somai 1993: 4–7; cited in Havas 1995: 7). This new policy position was partly triggered by the wish “to curb the outflow of foreign exchange and the influx of ‘moving wrecks’” (*ibid.*), but also neatly represented the new position of the country in which Suzuki and West European components manufacturers have built up local production.

The link between FDI and import dependence of the CEECs has been particularly clear. The largest share of new car imports originates in the countries of the most important investors. One-third of new car imports in the Czech Republic in 1995 came from Germany, whereas Polish imports of new cars were divided in comparable volumes among Italy, South Korea, Germany, and France. In Slovenia, almost half of all the cars imported in 1995 came from France. In Romania, 93 percent of all the new cars imported came from South Korea. In Hungary one-third of the imports came from Germany, the single most important source of imported cars and components. In Russia, on the other hand, not more than 12 percent of all car sales came from imports in 1995—another indication of Russia’s isolated position (Auto Strategies International 1997: 42). The following subsections explore the emergence of a tiered structure in CEE, the result of interactions among firm strategies and government trade and industrial policies.

FIRST-TIER COUNTRIES: EAST GERMANY, CZECH REPUBLIC, POLAND

East Germany has rapidly been included in the West German car industry. The Czech Republic and Poland can be considered relatively independent first-tier CEECs. They function as the apex of a regional division of labor and the front edge of the internationalization strategies of the German and Italian car complexes. They have the largest car markets and are producing the largest volumes of cars in the CEECs. These countries developed a trade surplus in units of cars (not in value) and erected more and diverse trade barriers—largely on behalf of the car complexes that invested in them. In

addition, the first-tier countries are the only CEECs that have become ingrained in the “world-car” strategies of Fiat and Volkswagen. But they are producing and developing lower-end cars and often only one model in the parent’s product range.

First-tier countries have had the most room for developing local policies and even sometimes playing off one investor against another. The Czech Republic had only one important bargaining chip in this process: Skoda. After it had played this card and rendered Skoda to Volkswagen, its bargaining space shrank considerably. The Czech government put a 14 percent import tariff on personal cars as part of the deal (EIU 1997: 102).

Poland has been in a better bargaining position with a much larger domestic market and broader production capacity spread over a number of different car complexes. Throughout the 1990s Poland accounted for over half of Central Europe’s auto sales. This made it the most important focal point for firms aiming at the CEE market. The most interesting market, though, has also remained the most closed. This is not accidental. Direct links can be observed between the ownership and design of production networks and the closure of a market. The Polish government was also prepared to take a stronger and more critical bargaining stance toward foreign investors. It successfully barred Fiat’s attempts to take over (and thereby dominate) the whole Polish car system. At the end of the 1990s, the Polish car system included three car complexes composed around Fiat, Daewoo, and GM. The Fiat and GM complexes are integrated in a binational division of labor (Poland-Italy/Germany), whereas the Daewoo complex is primarily aimed at exports to the EU and has developed into an intra-CEEC division of labor.

The impact of Fiat on Poland and on its policymaking elite can hardly be underestimated. Fiat plugged into the former state-owned FSM and—together with its subsidiaries, Magnetti Marelli and Teksid—acquired other important parts of the Polish car complex. It bought FSM in 1992 for a single dollar (Reuters, 31 March 1996). Although Poland is progressively lowering its import tariffs—in particular toward the EU, with a scheduled zero tariff by 2002—it has been slower to do so than most other CEECs. In 1996, the ministry of industry and foreign trade extended the scope of protection, thereby making Polish trade policy comparable to that of the Italian government inside the EU. Duties on imports of new cars are gener-

ally higher than in other CEECs (Table 3), discriminating in favor of local production. The policy of import substitution pursued by Fiat supports the Polish government in sustaining its tariff barriers in components and finished cars. The Polish government uses quotas in addition to tariffs, and these also tend to have a positive and discriminatory effect on the trade flows with Italy and in favor of Fiat. Another discriminatory measure favoring local producers, in particular Fiat, is the duties on bodies used in industrial assembly. They are zero, whereas bodies imported for nonindustrial assembly have tariffs as high as new and used cars. Poland's restrictive trade policies have been an important reason for firms to invest in the country. When latecomer firms were not granted comparable protection by the Polish government, they generally declined to enter the country. Poland is also the only country in the region that has no duties to third countries on the import of bodies. Allowing the free flow of car bodies is an important prerequisite for SKD assembly (in particular for Daewoo, a third-country producer).

SECOND-TIER COUNTRIES: HUNGARY, SLOVENIA, SLOVAKIA

The second-tier countries have become integrated in networks of components supply. Their assembly operations generally have a lower local content, whereas trade orientation is much more export-oriented. They have a structural trade deficit (in units as well as in value) in finished cars. Although some of these countries have tried to adopt their own developmental strategies in the car industry, their room for maneuver has been smaller than that of the first-tier countries.

Slovenia has become "Renault country." Renault's strategy has been to produce one brand almost exclusively (Clio since 1996), aimed at exports to France and Italy. The coalition is strong because the Slovene government is an important shareholder in the company (34 percent ownership). Slovenia is the most affluent car market in CEE (EIU 1997: 128), with car sales per capita not far behind West European levels. Slovakia has become "Volkswagen country," much like the Czech Republic. However, Volkswagen production sites in Slovakia are much smaller than in the Czech Republic. The export-orientation of the cars assembled is even higher than in the Czech Republic (95 percent in 1995). Exports were mainly to Germany, making Slovakia

part of a division of labor in which Germany is on top, the Czech Republic is in the middle, and Slovakia is at the bottom. The country functions primarily as a first-tier supplier of large volumes of gear boxes and transmission components for the German car industry.

Hungary, the most successful of the CEECs, is the only country in the region that has tried to build up its own car assembly capacity from scratch by attracting a non-European investor. The Hungarian government had not been satisfied with its position in the (rather unequal) barter trade with the Soviet Union before 1989. As a consequence it wanted to reestablish its own car industry. The weaker the Soviet Union became, the weaker the buying power of its car producers, the more promising the prospects looked for a domestic car industry. In the 1990s two consortia were set up by Hungarian companies to support this idea. However, only FDI eventually resurrected the Hungarian car manufacturing base in the early 1990s (Somai 1993; Havas 1995: 11). Consequently, the Hungarian car complex is centered around one relatively weak company (Suzuki) producing a small volume of finished cars (about 60,000 units). Although GM and Audi started small-scale assembly operations in the country, these were bound to stay small or even get downsized after regional reconfiguration efforts. Hungary remains primarily a components producer, which it already was under Russian dominance. The components are engines, which can be considered strategic inputs to the companies they supply. Because of the strategic nature of these components, however, we can also see that Hungary's room for maneuver is not very big. The car producers do not intend to become too dependent on the Hungarian production structure. Rather the relocation of production is primarily politically inspired—to influence the German bargaining arena and strike better deals with the troubled German suppliers and trade unions.

The Hungarian government uses tariff policy and subsidy schemes to make foreign producers invest in the country. Since 1991 Hungary has heavily promoted FDI by the establishment of customs-free zones in which car manufacturers were encouraged to locate manufacturing or warehousing sites. After 1996, this instrument lost much of its attractiveness, in particular to the front-runner firms. GM can now import its cars and components directly from the EU with only small duties. In short, the Hungarian bargaining position is much weaker than Poland's or the Czech Republic's.

UNCERTAIN STATUS: THE POLITICAL AND ECONOMIC ODDS OF ROMANIA

Romania has developed an “uncertain-tier” status. It did not participate in the rapid opening up of the CEECs. Traditionally Romanian car manufacturers were not integrated in the CMEA system. The Ceaușescu government had been rather isolated in the CMEA region. Even after the turnaround, the local contents level of the Dacia car amounted to more than 96 percent (CCFA 1995: 255). Local production could be sustained at the high level of more than 70,000 cars partly because of relatively high import tariffs (including tariffs toward other CEECs; see Table 3) and other measures favoring local production. Romania has been the only CEEC that has set *higher* import duties toward other CEFTA countries than toward the EU in new cars (Table 4).

The import penetration of the country has been—together with Russia—among the lowest of the whole region: around 10 percent of total consumption (in value). Romania’s instability has contributed to the uncertainty of car producers about whether or not to enter the country. According to EIU estimates, production could be sustained with exports to places outside the European region: China, Latin America, and the Middle East. Like in Poland and Russia, local production exceeds local consumption, so producers must count on exports in order to work at sufficient capacity. Dacia’s capacity is around 120,000 cars per year, and it produces at 58 percent capacity utilization, which is below the European average.

The relative isolation of Romania and the bargaining configuration that came with it gave the political elite somewhat more time to try to develop its own strategy. Romania has been trying to develop two car complexes (Daewoo and Dacia). Both are relatively weak, and a weak supply structure has developed. In 1994 Romanian car production was 85 percent dominated by Automobile Dacia SA, which since 1968 has been producing the Dacia, a car based on the Renault 12. In 1995 Dacia was the only remaining independent car manufacturer in CEE. It has its own production and R&D. Dacia’s main foreign markets are in other peripheral regions (particularly China). The orientation of the Dacia car complex is likely to sustain Romania’s relatively isolated position in Europe. The entry of Daewoo could change Romania’s position in Europe. Daewoo aims at 65 percent exports, primarily to Western Europe. Romania granted

various tax and duty breaks under a special law created for foreign companies investing more than \$50 million in a joint venture. The conditions for political support by the Romanian government are more than 50 percent exports and at least 60 percent local content. These conditions would spur Daewoo and Dacia as export platforms much more than as production sites for the local market. In return, Daewoo gets duty-free imports of materials, parts, etc. for seven years, a five-year exemption from paying corporate taxes, and an import duty-free quota under a special arrangement. This fits nicely into its strategy of locating primarily CKD/SKD production in CEE.

THIRD- AND RISKY TIER COUNTRIES

The remaining countries in CEE (Albania, Bulgaria, Croatia, Macedonia, Yugoslavia) have only a limited components manufacturing capacity. Beyond these third-tier countries, the former Soviet Union (FSU) states—in particular Ukraine and Russia—have a “risky tier” status from the perspective of the investing companies. More and more the FSU states are constituting a closed car system. Car production fell by 28 percent in the 1990s (Sintserov 1998: 11). Hardly any imports or exports have been maintained. AvtoVAZ, the most export-oriented Russian producer, saw its exports to Western Europe decline from over 114,000 units in 1989 to around 30,000 units in 1995 (EIU 1997: 114). Before the turnover, Russian producers exported 55 percent of all the motor vehicles they produced, but at the end of the 1990s this figure had fallen to only 17 percent (Sintserov 1998). In particular the loss of the former satellite markets has led to this loss.

Although Russian manufacturers have been eager to enter into partnerships with Western companies, the latter have been very hesitant. Concerns about political instability, organized crime, and the like were complemented by high trade barriers. Russia is the only country in the region that applies the same high tariffs on imports from the EU, the CEFTA, and non-European countries (see Table 4). Thus car and components producers from Central Europe also suffer from the high import tariffs. This has further limited the willingness of countries (Hungary in particular) to export to Russia. In turn, the supply to neighboring countries has diminished substantially as

well. In both directions, therefore, the links with CEE networks have been cut. The Russian automotive sector has become isolated.

The risky status of the country also involves the supply of components. For instance, the Moskvich faced so many disruptions in its supplies that the company worked for only 120 days in 1995, while output was completely suspended in January 1996. Furthermore, it is hard to set up a dealership network in Russia. Companies (i.e., dealers) face a much more complicated and expensive import regime than individuals. In Russia, most firms became privatized in 1992–93, but state involvement (with subsidies and the like) remains substantial. A very limited volume of company stock is traded on the open market.

Instability in the FSU adds to the unpredictability of the bargaining environment. Furthermore, the preference of local governments for joint ventures as an entry mode has made the investing companies hesitant as well. In the rest of CEE, manufacturers aimed at a controlling interest in the production companies (and got it). But the sizeable Russian market remains tempting. Thus Fiat (with the Russian GAZ plant), Opel (with AvtoVAZ), Renault (with Moskvich), Daewoo (in Uzbekistan), Ford (in Belarus), and Kia (in the Kaliningrad free economic zone near the Baltic Sea) are assembling cars for the local market. But no reimportations are planned from Russia.⁷

TRADE EFFECTS OF PRODUCTION NETWORKS IN CEE⁸

The interaction between local governments and core firm networking strategies has affected the trade orientation and trade streams of the region. Trade barriers among the CEECs have deterred intraregional trade in finished cars. Before 1990 no real trade barriers existed. As a consequence of stepped-up intraregional trade barriers over the 1990s, cars produced in the Czech Republic, Poland, Romania, and Russia hardly penetrated each other's markets any more. For instance, Skoda sales in Poland fell from 25,000 units in 1992 to a mere 1,024 in 1994 (0.4 percent of the local market; Table 2).⁹ Polski Fiat and Dacia (Romania) were popular brands in Hungary, accounting for 6.5 percent and 10.2 percent of the local car fleet. Their sales collapsed virtually overnight "because of higher prices" (Havas 1995: 8). In the same vein, sales of Ladas declined drastically, with the temporary exception of Hungary, where Lada maintained a 20 percent market

share in 1993–94. The old barter trade between Hungarian parts and Russian cars accounted for this. With the entrance of West European producers and the deintegration of the whole East European production network, the barter lost its attractiveness. Consequently, Lada sales plummeted to a market share of 3.6 percent in 1996 (only 2,646 cars) in Hungary. Other former Soviet producers like Avtozaz (Ukraine) or AZLK Moskvich saw sales in Hungary collapse as well (DRI 1997: 14).

The takeover of all major CEE car complexes has also changed intra-CEE trade in components. The takeover has been particularly harmful for the Hungarian economy, which had specialized in the supply of components. For instance, Fiat in Poland gave preference to its own suppliers over the long-established Hungarian suppliers of the old Polski Fiat models (Havas 1996: 13). The direction of component streams changed toward direct trade with the parent country. In most countries this is Germany; in the case of Poland, Italy can be included. By far the largest volume of exports of the Italian transport equipment industry go to Italy, whereas almost one-quarter of such Polish exports go to Italy. (In comparison, the German transport market takes 35 percent of the Polish exports.) In the case of Italy and Poland, this even amounted to a small trade surplus for Poland in transport equipment. In the case of Czech-German trade in transport equipment, the Czech Republic has a clear trade deficit. Polish imports in transport equipment from Germany in 1994 were ten times the volume of trade with the Czech Republic.

The leading production sites in CEE (Poland and the Czech Republic in particular) have created overcapacity, which has advanced relatively high export ratios in units. The overcapacity and the subsequent pressure to export the surplus, however, did not create a surplus on the CEE trade balances—an indication of unequal terms of trade: cheap lower-end cars and parts exports only partly compensate for expensive car and component imports. Moreover, the investment patterns of the major car companies created very specific trade patterns in the region. The countries with overcapacity trade the bulk of their products with the parent country of their most important investors. Thus the Czech Republic, Slovakia, and Hungary trade mostly with Germany. Poland does the same, but because of the Fiat connection, it has an equally sizeable volume of trade with Italy. No other countries come close to these bilateral trade streams.

These streams even represent a balanced picture. The macro figures resemble a pattern of interaction one might find between a parent and a subsidiary in which the two partners make sure that the budget and trade volumes get traded of one against the other. Substantial (more than \$100 million) bilateral trade volumes in the 1994–95 period appeared only between Germany and Poland and Germany and the Russian Federation.

Finally, notwithstanding “world car” ambitions of many front-runner firms, no significant volumes of cars have yet been shipped from CEE to regions outside Europe. This indicates that even a “world car” is intended primarily for one region—in this case Europe. The dominance of the German car industry (including Opel) in CEE is overwhelming. It has a trade surplus with all countries in the region. This shows the unequal terms of trade that are developing as a consequence of the division of labor designed by German car producers. The division of labor between Italy and Poland seems more equal; there has been a small but constant trade surplus for Poland over the 1992–96 period.

CONCLUSION: AN EMERGING EUROPEAN CAR SYSTEM?

The four types of IPNs in the European car industry have different strategic goals for the region. Followers and lock-out networks largely see the region as a still limited market. Peripheral firms primarily use the region as an entry into the West European car market. Front-runner firms have adopted the most sophisticated (and also the most difficult to manage) strategy: they see the region as a production site for cheap reimports back into the home base; they see it as a source for lower-end world cars and components; and they see the region as a market. The front runners also attach the biggest strategic value to sales (and production) in the region. Consequently, CEE has attained the largest share of worldwide sales with the front-runner networks and peripheral players. But only the peripheral players have a considerable share of their European sales in the region.

The competitive balance in the European car industry has not yet been much affected by the creation of IPNs. The most important

competitors have emulated each other's strategies. New entrants from Japan and Korea have shown rapid rises in sales, and they do make a difference for local governments. But the above analysis raises questions about the feasibility of some producers' strategies. The strategy of Daewoo in particular has been highly risky. Local governments backing up Daewoo's entry "through the back door" run the risk of getting integrated in a vulnerable car complex that is built on weak foundations in its home base. On the other hand, supply structures might appear in which local expertise could be built up. We saw that local components manufacturers tend to be locked into at best a second-tier status in the strategies of the other groupings.

Restructuring pressure on the European car industry is more acute, however. This is largely because the overcapacity problem in the European car system is exacerbated by expansion strategies into the CEEC. The extra production capacity planned by the four front-runner networks alone amounts to 1,400,000 units. With the most optimistic expectations for the whole CEE market at around 1 million units and a still limited export volume beyond the European region, the CEE strategy will contribute to additional overcapacity. The IPNs developing in the European region certainly will lead to more overcapacity and consequently to further restructuring measures, especially in the West European parts of the production networks. For the front-runner firms in particular, this effect was intended as part of the strategic plans. Only the French firms have wanted to invest in CEE and did not achieve substantial production volumes. If the extension of European production networks toward the East affects the competitive balance, this will be most detrimental to French producers. In the meantime, though, the other European mass producers have additional coordination problems.

The CEECs can be seen as helping to increase the efficiency of multinational corporations (MNCs) by hosting the lower end of the value-added chain. As Bellak (1997: 210) notes, however, it can put the CEECs into "a vicious circle of change," while it puts pressure on the bargaining circumstances of the West European car complexes at the same time. The best current example of this "vicious circle of change" is clearly GM, which uses its CEE strategy to confront West European suppliers and trade unions. GM is the front-runner company with the least commitment to the European bargaining environment, whereas it comes from a much more adversarial bargaining

network in the United States. The other front runners have been more modest in their use of the CEE link. This is also possible because they have used CEE largely as a complementary production base. The pressure on their suppliers in the home base to become more efficient and produce at lower cost has clearly mounted as a result of the CEE strategy. The major effect in terms of increased efficiency for the automakers will therefore show up in their international supply chain management.

As a mirror image of the tiered structure of the IPNs, a tiered structure can be observed among the CEECs. Being part of the first tier clearly offers the most possibilities for developing an autonomous strategy, whereas third-tier status puts countries in a structurally dependent position. The pending integration of first-tier, some second-tier, and a few of the third-tier CEECs has already had major effects on the integration process. It makes the production system more and more "European." Technical specifications get harmonized, and West and East European tariffs are much higher for third countries than for each other. Consequently, trade orientation in CEE has clearly changed from the Soviet Union toward the EU. Bilateral trade patterns have developed in which most countries share clear dependencies with a parent economy. In most cases this is Germany, which reinforces the position of the German government in the whole integration process.

Countries that have not yet been integrated in the IPNs—Romania, Russia, and Ukraine—are still in a position to adopt first-tier status. Russia might even find a "third" route to developing a car system relatively independently from European, American, Japanese, or Korean car complexes. But for now this road seems uncertain.

NOTES

1. Tables referred to in the text can be found in an earlier version of this study at <http://brie.berkeley.edu/BRIE>.
2. The authors thank Stefanie ten Napel, whose timely research support was of vital importance to this research project.

3. In addition, there were over twenty producers of trucks, buses, and other transport equipment in CEE (excluding the former Soviet Union). According to CCFA (1995:10) estimates, eight of these survived as independent producers or entered into more or less equal joint ventures with Western producers.
4. GM/Opel's 1996 DM 470 million investment in a vehicle assembly plant in Poland (Gliwice) represents the biggest greenfield site investment in Central Europe since 1990 (EIU 1997: 12); Fiat Poland is the biggest private-sector industrial enterprise in Poland (*ibid.*: 108); the mid-1990s takeover of Automobile Cariova represents the largest foreign investment in Romania up to date (*ibid.*: 111). In the Czech Republic, car-related FDI over the 1990–93 period amounted to around 25 percent of all FDI in the country (Czech Invest 1995: 5).
5. This is a universal problem. According to some estimates, Japanese automakers operate at 50 percent below capacity, and North American automakers at 21 percent below capacity (*Economist*, 10 May 1997; EIU estimates).
6. The chairman and founder of the Daewoo group, Kim Woo-Choong, stated quite bluntly, for instance, that the company denounces the intentions of other car manufacturers "whose operations suggest something not very different from an extension of former European colonialism" (*FT*, 8 May 1996).
7. In February 1998 considerable privileges were announced for foreign investors who invest more than \$250 million and agree to produce 50 percent of all the necessary components in the country before 2003. These privileges include relief from most customs duties on components and municipal and federal tax breaks. Whether this new stance will be effective in attracting foreign investments remains to be seen.
8. This section is largely based on the EIU's Country Reports.
9. This prompted Volkswagen to start a Skoda assembly plant in Poland (Poznan). In 1995, consequently, sales of Skodas in Poland increased threefold.

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GLOBALIZATION OF PRODUCTION IN THE TEXTILE AND CLOTHING INDUSTRIES: THE CASE OF ITALIAN FOREIGN DIRECT INVESTMENT AND OUTWARD PROCESSING IN EASTERN EUROPE¹

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Eastern Europe's reintegration into the world economy has involved a swift trade reorientation toward the West, especially the European Union (EU), as well as subcontracting, inward foreign direct investment (FDI), and cooperation agreements with Western enterprises. As a consequence, Eastern Europe has become deeply involved in the larger process of globalization of production, in which firm operations are becoming much more complex and pervasive than traditional arms-length trade and international investment, including both international production and sourcing. Thus the region's transition to the market appears to be ever more intertwined with Western firms' relocation strategies. This paper concentrates on Italy, one of Eastern Europe's most important trade partners, and on two industrial sectors in which Italy has specialized and which are also of paramount importance in Eastern Europe's exports.

By most measures Italy leads the EU's textile and clothing industries. In textiles, Italy accounts for 30 percent of EU turnover, the other major EU countries following at a distance: Germany (19 percent), France (16 percent), and the UK (12 percent). In investment, both total and per employee, Italy takes the lion's share (32 percent), while the second most important country—Germany—invested just half that amount, followed by France and the UK. Finally, in employment, Italy also occupies first place, with 28 percent, while the UK accounts for another 15 percent, Germany 13 percent, and France 11 percent. The ranking is similar in the clothing industry. In 1994 Italy represented 31 percent of EU turnover, 23 percent of employment

(including firms with fewer than twenty employees), and headed the investment ranking.

Italy is also a front runner in the EU's trade in textiles and clothing. In fact, during the last few years Italy has been the second or third world exporter of both textiles and clothing products, if one excludes Hong Kong due to the importance of its reexports. It is the primary Western supplier of the G7 markets for clothing and on a par with Germany for textiles. The industry represents the second largest (and growing) positive trade balance in Italian foreign trade. The two sectors together represent 11 percent of Italy's total exports but a much lower share of imports (5 percent). However, as in all EU countries, imports have tended to grow faster than exports. A growing number of competitors have gained market shares in the EU at the expense of the traditional leaders like Italy and Germany.

Import penetration, which has roughly doubled in the last ten years, is but one of the factors that, starting from the late 1980s, has exerted growing pressure on the whole industry. Production is falling and labor productivity rising much faster than in average manufacturing. The result for the EU has been 639,000 jobs lost in 1988-94, equal to almost 30 percent of all job losses in the manufacturing industry. Italy was also hit, although not as badly as other European countries for the reasons indicated below.

What is the particular place of Eastern Europe in this process? The Central and East European countries (CEECs) represent only about 4 percent of total Italian trade in textiles but a much larger share (16 percent) in clothing imports, their importance in Italian exports of the same being minor (2 percent) (Table 1). Over half of the Italian clothing imports from Eastern Europe come from Romania and almost one-fifth from Hungary, the rest being spread among Bulgaria, Poland, Slovakia, and the Czech Republic, in that order. In the 1990s, together with an increasing deficit for Italy, the share of clothing in total Italian imports from each CEEC has been increasing in all cases, and particularly so from Romania, Bulgaria, and Hungary, where it stood at 33, 18, and 11 percent respectively. The two sectors behave asymmetrically: clothing looms from two to eight times larger in Italian imports than exports, while textiles are far more important in Italian exports, with the exception of exports to the former Czechoslovakia. The Czech Republic and Slovakia are the only CEECs with which Italy runs a deficit in textiles. Previous stud-

ies conducted by the author (Graziani 1993, 1994a, 1994b, 1995) show a generalized relative specialization of the CEECs in most clothing products on both the EU and the Italian markets. Moreover, in both markets import penetration ratios for the same are on the increase.

Does this mean that the Italian textile and clothing industry is losing ground vis-à-vis East European producers? The question is whether international trade data should be taken as reliable competitiveness indicators or if a substantial part of trade flows is in some way or other tied to the importing country through the process of international relocation. From this perspective, imports into the relocating country could ideally be divided into three distinct flows: a) “untied” imports from foreign firms; b) imports derived from nonequity cooperation agreements (in particular from subcontracting); and c) FDI-related imports. International relocation of production—taken here to mean not only the physical delocalization of production abroad, but also the organized sourcing from other countries—directly affects the two latter flows and is then crucial for interpreting the meaning of trade indicators and trends.

ITALIAN FIRM STRATEGY: FROM DOMESTIC SUBCONTRACTING TO INTERNATIONAL RELOCATION

International relocation was almost completely absent in Italian textile and clothing production until at least the mid-1980s. Contrary to the growing international redeployment of its main EU competitor—Germany—Italian relations with foreign markets were mostly centered on arms-length exports. The few affiliates abroad of larger Italian firms just had the task of supporting the sales network in the recipient country. This also explains why Italy did not incur the same dramatic employment reduction suffered by Germany, where employment was reduced by half in the last twenty years.

Subcontracting has always been important within Western Europe. In 1992 the EU clothing subcontracting sector employed 800,000 workers, including 200,000 artisans and 150,000 illicit workers (Mercer Management 1994). This is equal to roughly 26 percent of EU employment in the textile and clothing industries. Nearly 30 percent were in Italy and 17 percent in the UK. However, up to the

mid-1980s Italian producers could limit subcontracting almost exclusively within national boundaries. The domestic subcontracting system flourished for a number of reasons, including the small size of most firms, the development of the famous northern "industrial districts," a retailing system that limited import penetration, specialization in up-market segments, and technological innovation, which established the highest productivity levels in the world.

Apart from the progressive erosion of industrialized countries' market shares, by the mid-1980s new features were emerging in the textile and clothing sectors. First, on the international demand side, consumption growth started to show signs of stagnation, while a general rethinking of the relative value of intrinsic quality as against style was in the making. More in general, a better quality/price relation was sought. Price elasticity also increased for the high-fashion and quality-content goods. A further factor peculiar to Italy was also at work. Domestic demand started to flatten out at the end of the 1980s, bringing it more in line with the demand patterns of the other industrialized countries. On the supply side, at the domestic level the concentration rate in both sectors was rapidly increasing, while large firms reorganized and diversified their production. At the same time, Italy became a very high-cost country, characterized, moreover, by a rather rigid labor market. Abroad, emerging countries were progressively upgrading the quality of their products through a continuous learning process. On the whole, price competitiveness tended to become more stringent. Increasing competition was stemming as well from the concentration processes affecting the distribution sector. Large distributors tended to place big orders and to intervene in the choice of styles, quality, timing, and service standards (OETH 1994). A final contingent factor favorable to the internationalization of production was the real appreciation of the lira between 1987 and 1992, which favored FDI and subcontracting.

As a consequence, even medium and small Italian firms shifted rapidly from a purely commercial approach at the international level to a relocation approach. Relocation occurred in two main ways: nonequity cooperation agreements (licensing, management contracts, and, above all, subcontracting) and equity agreements, mostly FDI in the form of acquisitions, at first in the most developed markets. These two main forms of redeployment have obviously responded to different motivations. Relocation in low-wage countries

mainly took the form of international subcontracting, primarily as a way to lower production costs. East European subcontractors have been used only in a very minor way to carry out special functions (specialty subcontracting) or else as capacity reservoirs (complementary subcontracting). At first subcontracting focused on simple agreements with local producers to buy the final product. At most, the Italian firm bought locally or elsewhere the intermediate products necessary to the productive process. In other cases subcontracting involved the export of semifinished products and the reimport of the finished ones, both without or under the outward processing trade (OPT) regime. Acquisitions in sophisticated markets allowed Italian producers to acquire prestigious brand names; to emulate the host nation's consumer tastes, especially in medium segments that absorb large amounts of production; and to gain market shares in strategic markets. They have also made it possible to penetrate third markets, to reimport part of the production; and to use existing international subcontracting networks (especially those established by German firms).

OPT

No precise data exist on the above-mentioned forms of subcontracting except for OPT, due to its special tariff regime; it will be more closely analyzed as an indirect indicator of subcontracting trends.² The EU's OPT imports of clothing products covered by the Multi-Fiber Agreement (MFA) have dramatically increased in recent years. In 1988–93 their volume in tons rose by 126 percent, while their share of total imports has risen from 8.1 to 10.1 percent. Estimates for January–September 1994 indicate that OPT imports reached nearly 12 percent of total clothing imports (OETH 1995), while “direct” imports have fallen accordingly. Germany is the leading OPT importer, with 63 percent of the EU total, followed by Italy (10 percent), France (9 percent), Benelux, Denmark, and the UK. From a mere quantitative point of view, OPT imports seem thus to have increased their role in the competitive strategy of EU clothing firms (Table 2).

The rising share of Italian OPT imports has been striking. Germany, Benelux, and France were already substantially engaged in OPT with extra-EU countries at the beginning of the period. On the

contrary, in 1988 Italian OPT was still minimal, but by 1994, and especially during the last two years under consideration, Italian producers had caught up, showing the fastest rate of increase among the countries involved. This is all the more striking if one considers that in the same period Italian clothing imports more than doubled. On the other hand, France's and Benelux's shares of the EU's OPT clothing imports declined slightly. (In fact, France was the only EU country whose share of OPT imports in total clothing imports diminished. However, given France's traditional links with North Africa, this result probably reflects underreporting of OPT imports from countries which benefit from trade agreements allowing free entry of all clothing imports.)

Since the 1980s, the CEECs have been at the core of EU OPT. Considering OPT imports in all industrial sectors, the whole region, including the former Yugoslavia, was already the most important in the world in 1988 for the EU. After the disintegration of Yugoslavia, the CEECs not only absorbed the loss in its share, but even gained another 5 percent to reach 38 percent of the world total in 1994. Their performance contrasted favorably as against 20 percent for Asia and the Pacific, 13 percent for North America, and 9 percent for the Mediterranean countries, just to cite the most important sources. An even larger part of OPT in the clothing sector is conducted with the CEECs—more than half according to official statistics, 43 percent if we take into consideration the underestimation of the Mediterranean countries (OETH 1995).

Given the profound asymmetry characterizing EU-CEEC trade (Graziani 1993, 1994a, 1995), OPT operations weigh much more in total exports of the East European countries. OETH estimates based on nineteen clothing categories suggest that OPT imports into the EU loom very large in imports from Poland (78 percent), Hungary (72 percent), Slovakia (65 percent), the Czech Republic (58 percent), Romania (53 percent), and Bulgaria (45 percent). In half of the nineteen MFA clothing categories for Poland and Hungary the share is even higher than 80 percent. Generally speaking, shares tend to be lower for shirts, T-shirts, and pullovers, while higher in categories involving tailoring operations and wool fabrics (OETH 1994).

Textiles and clothing play a key role in Italian OPT imports, and the CEECs have become Italy's main trading partner. Thus the highest share of reimports from non-EU Europe in total reimports is in

clothing et al. (87.5 percent), followed by electric lamps (87.1 percent) and textiles (83.2 percent) (see Table 3). The particular importance of the CEECs for Italian OPT imports in the textile and clothing sectors can be better seen in a more disaggregated analysis. In 1994, the CEECs provided more than half of textile reimports (including 75 percent of cotton fabrics, which were concentrated in Hungary), more than 65 percent for continuous filament fabrics (again concentrated in Hungary), more than one-third for wool fabrics (Poland), more than half of hosiery (Hungary), and more than 60 percent for knitwear (evenly spread). The data for clothing reach almost three-quarters (mostly from Romania and Hungary), of which more than 80 percent is in women's outerwear and men's underwear (see Tables 4–5).

A comparison of each CEEC's dependence on OPT in the three main subsectors of the industry shows the importance of OPT for Italian imports (see Table 6). At the world level, the clothing sector imports are dependent upon OPT for one-fifth of their growth, knitwear and hosiery for 13 percent, and the other textiles only marginally. This dependency, and consequently the contribution of OPT, is from three to four times larger if we consider the CEECs, with peaks of more than 90 percent in knitwear imports from Poland and Bulgaria, or in clothing imports from Romania (the latter from Poland and Hungary being higher than 80 percent). In all three sectors the former Czechoslovakia is relatively less dependent on OPT, while Hungary is the only country in which other textiles have contributed more than the other subsectors.

FDI

Parallel to the explosion of OPT with the CEECs, especially in more recent years, Italian FDI in Eastern Europe has started to develop in the textiles and clothing industry. Hungary seems to be the preferred location, with more than one-third of the entire operations (nine), followed by Romania and Poland with five operations each, by Bulgaria with two, and finally by the Czech Republic and Slovakia with one operation each.³ As in the case of OPT, here too Hungary seems to be the preferred partner, and Romania occupies a relatively more important position for Italy than for the EU average. However,

if we take the relative importance of Italian FDI in textiles and clothing vis-à-vis FDI in all industries, Romania and Bulgaria come first: 29 percent of all Italian FDI in these countries has been in the textiles and clothing sectors. The corresponding figures for the other CEECs are the following: Hungary, 20 percent; Poland and Czechoslovakia, 18 percent (see Table 7A). It seems plausible to conclude that Italian FDI in textiles and clothing is particularly oriented to Eastern Europe.

The textile and clothing sectors have won the largest share of Italian FDI in the CEECs. Only 7 percent of Italian world FDI in all industries is destined for Eastern Europe. This share, however, almost triples—to 18 percent—if one considers Italian textile and clothing FDI in the CEECs as compared to total Italian world FDI in the same sectors. A similar picture emerges if one looks at employment and turnover data: 34 percent of all the employees of the Italian affiliates in the textiles and clothing sectors in the world work in Eastern Europe; this share falls to 12 percent if we consider all industries. Finally, turnover follows a parallel path: 7 percent as against 3 percent (see Table 7B).

Although Italian FDI remains a recent and quite limited phenomenon, it is illuminating to analyze its character. Eighteen Italian companies, including half of the twelve major Italian groups, are involved in the twenty-three operations, with three firms making more than one investment (Cantoni—four, GFT and Romalfa—two each). FDI has been led by larger companies, which have also invested in and developed OPT imports. Local companies formed through FDI are, as expected, relatively small, with only five of them employing more than six hundred people and only two more than one thousand. Textiles and clothing operations are almost evenly split: eleven and twelve, respectively. Regarding textiles, one-third of the investment concerns the cotton industry, the others being rather evenly distributed. Textile investments may support local clothing operations in loco. There does not appear to be a precise predominance of setting up entirely new enterprises vis-à-vis acquisitions of existing ones: greenfield investment is for the moment just over one-half of the total. On the contrary, there is a definite preference for control operations: majority shareholding and other forms of control are present in 70 percent of the operations. Equal shareholding appears only once, the rest (26 percent) being minority holdings.

What motivates Italian FDI in Eastern Europe? Applying, with some minor adaptations, the subdivision proposed by Dunning (1993), we see that the majority of it has followed a “resource seeking” logic (see Table 8). In the East European case, the “resources” sought are not so much scarce natural resources but prevalently low-cost labor, plus in some cases, skilled labor. Most of the time the products obtained in the process are meant for reexport. The second motivation has been “market seeking”—that is, the penetration of recipient or other nearby markets, especially in Poland, the largest market in Eastern Europe. Finally, “support investments”—that is, those destined to favor the parent firm’s exports, distribution, and after-sales services—have been a minor motivation, having been cited only once, and then only as a motivation secondary to market seeking.

NONEQUITY COOPERATION AGREEMENTS (NEAs)

When Italian textile and clothing companies could not attain a sufficient external penetration because of a lack of resources necessary for FDI but still wanted to go beyond pure commercial transactions, nonequity agreements were the third main strand at their disposal. Their peculiar nature of being a very flexible instrument adaptable to changing international commercial strategies made them usable by large and medium/small companies alike. Because data on NEAs are scanty, caution is required, but it is nevertheless interesting to examine recent trends. Like other forms of international operations, NEAs became more numerous in the second part of the 1980s, although the CEECs still represent only about 10 percent of the world total. In the period 1989–94, it appears that Italian textile (as opposed to clothing) firms showed a very limited recourse to this instrument (see Table 9). As for their importance to the CEECs, NEAs seem to be relatively more numerous with the former Czechoslovakia (four operations), while the other countries, ranked in descending importance, appear to show a pattern similar to the one already shown for OPT and FDI, with Romania and Hungary taking the lead (three operations each), followed by Poland (two operations), and Bulgaria (only one). Finally, the content of the agreements does not seem to be especially skewed toward any particular form, productive aims just slightly prevailing

over distribution and know-how transfer (five operations as against four each for the latter two forms). It is interesting to note, however, that the productive nature of these agreements is relatively more pronounced than in the relations of Italian firms with the Far East, the United States, and Japan. All in all, the pattern of NEAs seems to confirm the above analysis of relocation trends in the Italian textile and clothing industries.

REASONS FOR AND FEATURES OF ITALIAN RELOCATION

The principal reason for sending parts of the productive process abroad is, as shown above, the increasing competition from low-wage countries and the need to combine the high productivity and technological level at home with the lower labor costs abroad. But the technical conditions allowing for it are also fundamental. In the clothing industry pre-assembly activities (that is, designing, grading and marking of patterns, cutting) have grown ever more capital-intensive through automation, while assembly operations (mainly sewing—accounting for about 80 percent of the value added) remain very labor-intensive and rely mostly on conventional sewing machines. The application of modern telecommunication networks has allowed for the separation of these two stages without sacrificing quality and efficiency (OECD 1994).

Italian manufacturers tend to keep the global study, product development, organization, and commercialization phases at home while relocating the productive phases in low-labor-cost countries. Companies tend to maintain in Italy only the productive structures that are capable of responding quickly to small runs and emergency orders or else up-market and niche production, which requires specific expertise. From the cost point of view, relocation is more convenient the bigger and more standardized the runs required. The bigger the firm, the higher the frequency of relocation tends to be.

Some changes have, however, taken place within this general perspective. Clothing manufacturers are coming to realize that it is probably less convenient to relocate just the simplest tasks since they are the ones that can more easily be automated and consequently be kept at home. In several cases, the complexity of the operations re-

quires comparatively more human labor inputs, which are cheaper in the recipient countries. The recent acquisition of 80 percent of the Slovak firm Svikon by GFT to produce men's jackets, one of the most complex clothing operations, is a clear example of such a new approach. Also, there has been a generalized growth of the average quality level of subcontractors through the learning process. This, among other factors, is pushing more and more Italian entrepreneurs to consider international relocation within a strategy of global reorganization, where subcontractors are seen as pivotal in the supply of complex and high-quality products.

Traditionally, relocation was limited to lower and/or middle market products. Today, as a consequence of the changes mentioned above, redeployment is also occurring for the up-market segments of production and is becoming part of the strategy of smaller, more specialized firms too. It should be noted that relocation is developing in a cumulative way and by imitation, insofar as smaller companies are also securing the necessary information. Generally speaking, relocation in the textile industry is of less importance than in clothing. There are mainly two reasons for this. One is that EU producers, and Italian ones in particular, are more competitive in the more capital-intensive and technology-intensive processes that characterize most textile production. Suffice it to say that labor cost is equal to roughly 35–40 percent of a final product's cost in clothing, while representing 12–16 percent in weaving and spinning. The second reason is institutional—that is, the requirement by OPT regulations that fabrics sent to the subcontractor be of EU origin. Relocation in the clothing industry is, however, also pulling relocation in the textile sector because of the need for the two industrial segments to be geographically close. In recent interviews of a sample of two hundred firms from six EU countries, 23 percent of the textile firms interviewed declared they had established or were preparing to establish a foreign production unit, Eastern Europe as a major area (Scheffer 1994). Italian producers seem to have gone a long way in a short time in this direction. The data presented above show that almost half of the FDI operations are in the textile sector.

WHY RELOCATE TO EASTERN EUROPE?

From the above discussion, the particular attraction of Eastern Europe as a site for redeployment is understandable. First, its labor costs are much lower than in Italy or the average EU country, and labor productivity differences do not offset these large cost gaps. This would still not be enough to justify the choice of Eastern Europe. China or other low-wage Asian countries would be preferred. Other factors are considered to be the determining ones for the location of production. These do not concern product quality, which is very often the same as in Italy since the fabrics, the machinery, and the working methods are those employed in the Italian factories. Instead, what makes the real difference is the geographical and cultural proximity, coupled with the quality of the labor force. East European countries offer delivery times of two or three days, as against forty-five days by ship from Asia. This general possibility of a quick response to market demand goes hand in hand with the existence in some of the CEECs of a long tradition of production in the sector: in clothing—especially in Poland, followed by Hungary; in textiles in the former Czechoslovakia, which also has a long-standing tradition in the production of textile machinery. It should be added that Romania and Bulgaria are rapidly upgrading the ability of their workforce in clothing production, thanks in part to foreign investment and technical advice.

COSTS AND BENEFITS FOR HOST COUNTRIES AND ITALY

Relocation could rightly be a matter of growing concern for host countries since several drawbacks might ensue from it. First, in the longer run host countries might get locked in their present structure of revealed comparative advantages, based on highly labor-intensive activities, while the exploitation of potential comparative advantages in higher-tech stages of production would be delayed. Second, a certain share of the national production and exports would strictly depend on foreign decisions and performance, hence increasing economic vulnerability. Subcontracting, by its very nature, makes the subcontractor very vulnerable: a change in conditions,

like a wage rise or a fall in productivity, would push the foreign partner to withdraw rapidly. Third, OPT, which requires the use of textiles produced in the EU, would prevent the East European textiles industries from developing fully. The dependence on the foreign partner is thus double-edged: input-wise and output-wise. Fourth, it might entail a lasting downgrading of some activities. The case of companies losing their former profile in order to adapt to the foreign customers' needs is not infrequent. Some functions, like R&D, marketing, and financing, might even disappear. Finally, regional inequalities might be strengthened, as these activities tend to cluster around particular zones.

Should OPT or other forms of subcontracting then be avoided? The fact is that in many instances firms which enter into such a relationship have no better way to expand their production and exports. For some of them it could even be a matter of life or death. Furthermore, it certainly should enhance employment and industrial capabilities among the labor force, while imitation and various types of backward and forward linkages could materialize with related industries. East European firms derive three main benefits: 1) a guaranteed outlet and the ability to use their customers' brand names and distribution channels; 2) the avoidance of storage costs for both inputs and outputs; and 3) the acquisition of high-quality inputs, capital, technology, and managerial experience. In this respect, the learning process stems from working at the principal's specifications, but also from direct training, often provided by Italian firms.

The crux of the matter, however, is whether local firms can stand up to international competition once nonequity forms of relocation (mainly OPT) come to an end. Previous historical experiences, like Portugal's, seem to point to a positive answer. It is, however, questionable whether the Portuguese experience, with its longer opening to the world market, is really relevant in the case of Eastern Europe, which has only recently fully reintegrated into the international economy. A recent survey of more than twenty firms in the Czech Republic and Hungary has showed that only one of them has turned a previous OPT relationship into autonomous production and sales under its own brand (Pellegrin 1997).

The impact on Italy might also be ambivalent and probably different in the short and in the longer term. Insofar as subcontract-

ing and FDI represent a substitution of domestic production and a derived demand for cheaper foreign labor, they also tend to induce a contraction of domestic production and employment, and likely of exports, plus the possible erosion of the domestic supplier base. Particular production phases (i.e., assembly activities) and lower-skilled workers tend to be penalized, while other productive segments and the higher-skilled labor force might even be favored by such a process. By influencing relative factor prices, relocation tends to influence income distribution as well. Industrial restructuring schemes, coupled with intensive worker retraining, appear here as necessary measures.

One might, however, suggest that even without relocation, the reduction in domestic employment would take place due to an increased challenge from foreign competitors. In this respect, the job losses seem to be caused by a whole range of factors, including productivity gains, competition from other EU redeployers (higher quality segments), relocation to and competition from cheaper labor countries (lower quality productive segments). The latter aspect is further going to gain in importance with the progressive abolition of MFA quotas and the consequent reestablishment of the competitive advantage of the less developed countries (LDCs). In this respect, job losses will tend to be lower the deeper the firms' process of redeployment. In the longer run, the firms undertaking the various forms of relocation could succeed in enhancing their international competitiveness and expanding their domestic production and exports, thereby offsetting the initial employment reduction. Meanwhile, relocation, especially under the OPT form, increases Italian clothing firms' flexibility, externalizes some of the production costs and risks, and certainly strengthens domestic textile producers, given the requirement that fabrics be of EU origin. Whether and how far this process will go on will be seen in the years to come. Certainly the progressive application of the results of the Uruguay Round from 1995 are bound to represent a powerful incentive to further strides in the globalization path. On the other hand, the devaluation of the lira at the end of 1992 might limit the FDI form of relocation.

CONCLUSION: IS RELOCATION IN THE TEXTILE AND CLOTHING INDUSTRIES A ONE-WAY STREET?

The textile and clothing industries are undergoing a rapid process of globalization in production, as are other industrial sectors. Even countries like Italy, which privileged domestic subcontracting and limited FDI, are now following the more general trend. The microeconomic foundations of globalization are clearly at work in this case: firms' motivations and strategies—in particular Italian firms' desire to restore deteriorating international competitiveness—appear solidly to drive the process.

Although deeply involved in globalization, some of these so-called traditional sectors seem to behave in a rather different way from more technology-intensive sectors. First of all, they do not seem to have gone very far in the globalization path. Here clothing appears less advanced if we consider two usual indicators of globalization, the international sourcing of intermediates and especially intrafirm trade. The textile industry, with its more global sourcing of intermediate inputs, seems to be ahead. The main motivation also seems different. In the more technology-intensive sectors market potential appears to be the principal aim of FDI and subcontracting, while labor cost does not loom very large. The contrary seems to be true in some very labor-intensive stages of clothing production.

As previously noted, the technical conditions of production and even more so the application of modern telecommunication networks have only eased the geographical separation between the more labor-intensive assembly phases and the capital-intensive pre-assembly stages in the clothing industry. The fact that more complex clothing operations tend to be relocated while small and medium clothing enterprises and some textile operations have joined the game reinforces the notion that low-wage industrializing countries might still consider these sectors as possible candidates for the first industrialization phase.

However, this process of international relocation might not be as linear as it could appear at first sight. The main reason is that the sectors under consideration have started to adopt the "lean" production system—that is, just-in-time deliveries, short runs, smaller orders, low inventories, and high quality. This is all the more evident

in the fashion-oriented industry, where fashion trends emerge and collections follow each other with a much higher frequency than they used to. Within this perspective, transport costs and above all geographic proximity and delivery times tend to be of paramount importance when deciding on an outward FDI or a subcontracting operation. In some cases, these factors may even offset the lower-labor-cost advantage and serve to keep the activity at home. When this is not the case, they would certainly push investors to choose the closest sites, thus reinforcing the regional agglomeration of the globalization process, as evidenced also for other industrial sectors. Such a tendency is certainly strengthened by regional preferential agreements, as is the case of the EU association agreements with the CEECs and the particularly favorable OPT regime. In this respect, as far as Italy and the EU are concerned, Eastern Europe offers rather obvious locational advantages vis-à-vis lower-wage but more distant Asian producers.

NOTES

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1. Tables referred to in the text can be found in an earlier version of this study at <http://brie.berkeley.edu/BRIE>.
2. Note that the relative boom of this type of subcontracting may represent a response to the special OPT tariff regime, which will disappear in 1998, when the last tariff and nontariff barriers to imports will disappear.
3. Another investment operation was undertaken in 1994 by Marzotto in the Czech Republic but is not included in the database.

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BUILDING PRODUCTION NETWORKS IN CENTRAL EUROPE: THE CASE OF THE ELECTRONICS INDUSTRY¹

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Since the collapse of socialism, multinational corporations (MNCs) have forged a range of production linkages in the three leading economies of Central Europe (CE): Hungary, Poland, and the Czech Republic. The initial foreign investments in the region were made by European firms, which concentrated on automotive and electrical parts manufacturing, textiles, and agriculture. Over the last few years, investments have gradually expanded into “high-tech” electronics as a diverse group of MNCs have extended their European production activities from West to East. While electronics production in the region predates the emergence of foreign direct investment (FDI), the formerly state-owned firms are generally unable to compete with advanced producers in the United States, Asia, and Europe. They are limited by weaknesses in marketing, product and process technology, organization and management, and capital resources. As a result, MNCs have become the key actors in CE’s export-oriented electronics sector.³

This chapter examines foreign investment patterns in CE and describes the nature of the region’s integration with the global electronics industry. The first section positions CE in the context of the global electronics industry. The second section traces the particular patterns of foreign investment in the electronics industries of Poland, Hungary, and the Czech Republic. The third section explores the determinants of MNC investments in CE electronics production, including the influence of Soviet-era industrial legacies and national policies toward FDI.⁴

CE IN THE GLOBAL ELECTRONICS INDUSTRY

Today, global electronics manufacturing is organized by the international production networks of a few dozen MNCs with global operations. Lured by a combination of foreign markets and competitive production environments, the lead firms have located similar (but not identical) production activities in Asia, Europe, and North America. MNC networks are most often concentrated in the home region, as geographical proximity promotes close ties between design and production. The resulting intraregional networks typically consist of firms in high-cost locations coordinating activities in medium- and low-cost countries. For example, a regional network in Asia might locate its corporate headquarters in Japan, regional headquarters and high-value-added manufacturing in Singapore, and labor-intensive production in Thailand and Malaysia. Similarly, foreign investors in CE typically coordinate their regional activities from their established European headquarters.⁵

While networked production in the electronics sector is at its most complex and extensive in Asia, CE is fertile ground to be developed. Much as Southeast Asia has become the low-cost production location for Asia's production networks, CE is becoming a support platform for advanced producers in Europe. MNCs have recognized this opportunity and have invested in many industries. As a result, FDI, with the accompanying technology and marketing linkages, now plays a leading role in rebuilding the CE electronics industry.

FDI has proceeded in distinct but overlapping stages. After the region's economies opened in 1989, direct privatization of state-owned assets allowed foreign companies to form linkages and joint ventures. From 1989 to 1991 in Hungary and from 1991 to 1993 in Poland and the Czech Republic, MNCs entered joint ventures with recently spun-off divisions of state conglomerates. Investment in previously state-owned enterprises was followed by a second phase of FDI in greenfield sites. Since 1993, the pace of investments has been most frenetic in Hungary, but both Poland and the Czech Republic are beginning to attract their share of new large-scale electronics plants.

European firms have taken the lead, motivated first by geography and lower labor costs. German firms in particular have sought out opportunities to escape stifling labor laws and high costs at

home. Europe's relatively small number of lead firms in electronics have made the earliest and most extensive investments in CE. Most notably, Philips of the Netherlands has built an extensive network for consumer electronics in Hungary and also made electrical sector investments in Poland. Siemens of Germany has invested in all three countries in telecommunications equipment and electrical parts.

U.S. firms are less in evidence but have still made significant investments. IBM established a large-scale disk drive assembly plant in Hungary, while Motorola has invested in an existing Czech wafer fabrication plant and a new software center in Poland. More recently, several U.S.-based contract manufacturers have expanded their European operations to Hungary. Japanese investments have remained gradual and cautious. Typically, several years of sales and subcontracting networks have preceded any large-scale electronics investments. Japanese firms generally did not invest during the privatization process, instead preferring greenfield plants for consumer and industrial electronics manufacturing. Korean producers, particularly Samsung and Daewoo, have moved quickly to use CE as both an opportunity for market expansion and a low-cost production platform for the European region. By comparison, electronics MNCs from the other newly industrialized economies of Asia have been much more selective.

ELECTRONICS NETWORKS IN CE

While the three CE countries exhibit similarities, FDI has taken on a specific character in each, with different concentrations in particular industries and subsectors. These concentrations result from a delicate interplay among industrial lineage, native technical skills, and company strategies. The selected case studies which follow indicate that technological know-how does not suffice as a lure for FDI, but that a robust legal framework, investment incentives, and pro-market industrial policies play critical roles.

This accounts for certain anomalies in foreign investment patterns. For example, the Czech Republic has the most experience in the realm of advanced electronics production, with expertise in integrated circuit fabrication and precision engineering. However, FDI

remains weak in electronics, which has presumably resulted from the nation's ambivalence toward FDI and unwillingness to provide special incentives. Hungary, which has taken great pains to attract FDI, is fast becoming a "supply base" for the regional electronics sector, attracting investments from suppliers of parts, components, and contract manufacturing services, as well as from final assemblers. With a substantially larger domestic market than Hungary or the Czech Republic and an industrial legacy of television and industrial electronics production, Poland has attracted very specific industrial concentrations in mass market goods such as television sets and washing machines. Its initial policy stance toward FDI has recently softened, and FDI levels have risen noticeably as a result.

The following subsections provide a detailed picture of the electronics sector linkages that have formed over the last decade from two distinct vantages. The first, which reviews local capabilities and FDI, draws a contrast between the outcomes for more skill-intensive activities and final goods assembly. The second, on CE as a regional supply base, considers the dynamic significance of the lopsided outcomes for inputs and intermediate goods.

LOCAL CAPABILITIES AND FDI

While investments in low-tech assembly of consumer electronics, computing products, and electrical appliances are spread rather evenly across the three countries, more advanced technologies have initially concentrated where there was significant prior experience. Thus, the uneven distribution of microelectronics and software activities suggests that investors are responding to local capabilities. For example, FDI in wafer fabrication is limited to the Czech Republic, which was the only country to produce integrated circuits under the Soviet production system.

Microelectronics. The fabrication of integrated circuits (ICs) is one of the most demanding industrial processes. The Czech Republic has the most developed microelectronics sector in CE, with major investments by Motorola. In 1997, Motorola bought a controlling interest in the Tesla Sezam factory and its associated wafer supplier following several years of subcontracting, during which Motorola helped upgrade the factory's operations. The American company also opened

a nearby design center for analog ICs in 1994. Total investment figures have not been disclosed but are reported to exceed \$45 million. As of 1990, the then state-owned fab was primarily using three-inch wafers and producing circuits with four-micron line widths, well behind the six-inch wafers and submicron capabilities of Western producers. Nevertheless, in 1991 a team from Motorola declared the output of Tesla to be comparable to if not better than that of its other subcontractors.

Poland's CEMI (part of the Unitra group) was also a producer of ICs. Like Tesla, it used ten-year-old technology for metal oxide semiconductor (MOS) and bipolar chips. However, CEMI's reputation for quality was poor, and it was unable to produce output at a cost that could be competitive on world markets. In 1993, CEMI was declared bankrupt and offered for sale for the price of £1 to any buyer willing to take on its debt and its outdated production system. No takers were found, and production was eventually restarted in 1995 under ownership of Poland's Industrial Development Agency (ARP).

Hungary had the least success with ICs in the Soviet era. Hungarian IC production was initiated in 1985 under licenses from the Soviet Union and East Germany, but the factory burned down the following year, destroying all the equipment. Undaunted, a new Hungarian-Soviet joint venture, Intermos, was created to carry on and began production in 1992. A second company, Interbip, was created with private funding to produce bipolar ICs for consumer electronics using technology from a small U.S. partner, NCM. The two companies survived and were recently combined into a single firm called Melcom. The main products include switching diodes, power transistors, and thin and thick hybrid circuits—more than 90 percent for export to customers such as Temic, Motorola, General Electric, and ABB.

SOFTWARE

The local presence of software engineering skills facilitates a wide range of electronics activities from chip design to plant management. Software development requires high-level skills indicative of extensive investment in human capital. It is often noted that the poor quality of computers available in the Soviet bloc under com-

munism engendered a crop of unusually creative software developers in compensation (e.g., Dyker 1996).

CE software engineers have had no shortage of contract work localizing software packages for the desktop PC and other markets. Apart from such low-level tasks, the pattern of FDI in software, as with IC fabrication, is very uneven. Although Hungary and the Czech Republic both had about 15 personal computers per 1,000 inhabitants in 1995, FDI in software engineering has been highly concentrated in Hungary—a situation which suggests that “market pull” is only part of the draw for foreign investors (see Table 1).

Hungary has a strong tradition in software and also some of the strongest foreign linkages. State-owned software house SzKI was performing commissioned work for Siemens as early as 1980. Another strong local company, GraphiSoft—a start-up dating from 1982—has carved out a niche in 3D drafting software for architects. Hungary has received several FDI in software engineering for communications networks. In the mid-1990s, Siemens established Sysdata to develop software for private telephone networks; Ericsson started a software support group in Budapest, one of twenty-five such centers worldwide; and Nokia announced it will open two Hungarian research centers to develop switching software and applications.

Poland and the Czech Republic have very capable software sectors, but they have not yet produced firms as competitive as GraphiSoft, nor have they generated the same level of activity by foreign firms as Hungary. Poland has received software-related investment from ICL (the UK branch of Fujitsu) and Motorola, which has committed to develop a software unit in Krakow that is to eventually employ some 500 engineers. The Czech Republic, which has received some investment from Swiss and French software firms, is also home to a Siemens subsidiary comparable to but about one-third the size of Sysdata in Hungary.

Computers and Peripherals. There has been minimal investment in PC assembly in CE, and the only export-scale PC assembly investment so far has been made by a Taiwanese company, First International Computer (FIC), in the Czech Republic. Although not well known outside the industry, FIC designs and assembles computers sold by better known firms such as Compaq under their brand

names. Output began in 1998 at 10,000 units per month for export, and the total planned investment is \$100 million.

Hungary has captured the lion's share of investment for major PC subsystems, hard drives, and monitors. The hard disk complex demonstrates some vertical integration, while the core component of the monitor—the CRT—must still be imported. In 1994, IBM began subcontracting the production of hard drive head assemblies to the successfully privatized Videoton, investing about \$2.6 million and employing 150 workers. Subsequent investments and expansions proceeded rapidly. By 1997, the total investment was about \$110 million, with 3,000 workers and a capacity of 3 million hard drives per year. The plant's yield is claimed to be the highest of IBM's 10 plants worldwide. In addition, a recent investment of \$27 million was made by Nippon Densan (also known as Nidec), the leading producer of disk drive spindle motors. The new factory is expected to eventually employ 800 workers.

Monitor production has also been concentrated in Hungary. The earliest investment was from Italy's Hantarex, which entered a majority-owned joint venture with the state-owned Mechanikai Laboratorium in 1991. Following closure under a cloud of scandal back in Italy, the plant was taken over by Finland's Nokia in 1995 for an initial investment of \$30 million. In 1996, the factory employed 200 workers producing about 300,000 units per year for the West European market. Nokia's monitor plant uses less than a dozen local suppliers, providing mostly packaging and plastic parts. However, at least two of Nokia's Finnish suppliers, Ensto and Elcoteq, have recently arranged to build factories near Nokia's monitor factory to supply plastic parts and subcontracting services. Elcoteq's total investment—encouraged by a three-year exemption from local taxes—is expected to be more than \$30 million. Similarly, Philips in 1996 opened a monitor factory in Hungary that is supported by a network of Hungarian plants producing plastic and other parts that Philips established with other foreign partners. The \$30 million factory employs over 1,000 workers, and capacity is one million units per year.

Audio, Video, and Television Equipment. Hungary is the leading destination for investment in the assembly of VCRs and audio equipment, with significant investors such as Philips, Sony, and Clarion.

Philips started by subcontracting with Videoton for parts and gradually expanded activities to include final assembly of VCRs. The main foreign investment in Hungary's television sector came from Korea's Samsung, which started a 40 percent-owned joint venture in 1989 with a state-run producer, Orion. Hungarian engineers were sent to Korea to study production techniques. Output began in 1990 with a 100,000-set-per-year capacity and 125 employees. Local suppliers provided packaging, frames, and wiring for local content of about 15 percent. In 1991, Samsung bought out Orion's share and steadily raised capacity, which has now reached 500,000 sets a year, primarily for export. The local supply of plastic parts has increased, raising local content to 25 percent.

Poland is the leading investment location for TV assembly, primarily because of its larger market. Small-scale plants that served the local market have given way to a series of larger investments by both European and Asian companies planning to use Poland as an export platform. Poland's television sector is strengthened by the local production of CRTs, the primary component of television sets. The key producer is France's Thomson, who took a controlling stake in Polkolor, Poland's state-owned producer of CRTs, in 1991. By 1995, the company had invested over \$90 million, raising capacity to 3 million units per year and employing over 5,000 workers. The factory now supplies both local and West European markets with small and mid-size screens.

The Czech Republic also produces CRTs, but this activity seems to be divorced from a large-scale investment in television assembly by Matsushita, who committed to a \$66 million operation in 1996 to serve the regional market. Starting in 1995, the Japanese company sourced TV tuners from Tesla Lanskroun (a passive components producer) and remote controls from Elitron Liberec (which used to make electronics for textile machinery) for use at its other European factories. However, the poor quality of other local suppliers has reportedly made it difficult for the new Czech plant to meet informal targets for local content, which will initially include only cardboard boxes and printed materials.

Appliances. The electrical appliances sector is closer to the historical mechanical engineering strengths of the CE technology base, and investments in this area have shown a decided tendency to

expand and deepen over time. A successful early privatization in Hungary occurred in this subsector. In 1991, Electrolux bought Lehel, a large (4,900 employee) state-owned refrigerator producer, for about \$65 million, subsequently turning the company into an important regional base. In 1995, a production line for box refrigerators was transferred from Spain, and the following year, one for chest freezers was transferred from Denmark. As of 1997, output was double its level prior to Electrolux's purchase, while employment is a little more than half (3,000). Electrolux has also introduced value-added activities in Hungary. As early as 1992 it put a team of local engineers to work on refrigerator insulation technology, and in 1996, product development was transferred from Denmark along with the freezer production line.

Poland has attracted several investments related to washing machines. Daewoo opened a washing machine factory with an annual capacity of 100,000 units in 1995, primarily for the export market. Bosch-Siemens opened a \$3.5 million washing machine plant in 1995 to serve the domestic market, with a capacity of 25,000 units per year using Spanish parts. In early 1998, the company opened a new 200,000-unit-per-year plant built to develop export sales, employing 300 and costing roughly \$30 million. In 1996, Electrolux initiated a washing machine assembly joint venture with Swiatowit, a small producer of appliances and enamelware, with a 50,000 unit capacity aimed at the domestic market.

CE AS REGIONAL SUPPLY BASE

"Supply base" manufacturing, the production of inputs and intermediate products, often leads to higher-value-added activities. In network terms, a country with a concentration of production of these intermediate products becomes central to nodes elsewhere in the region, which can lead to further development of valuable services such as procurement and regional headquarters functions. The presence of export-qualified activities in supply base products can also attract additional manufacturing investment. Although in many cases inputs are manufactured in CE only to be exported for final assembly elsewhere (usually Western Europe), an increasing number of investments—especially for plastic and metal parts—are

made to supply prior investors who assemble final products locally (e.g., Korea's Daidong for Sony). As part of the domestic supply base, they provide an added attraction for future investors considering locations for final product assembly. In this context, Hungary's position as a nascent regional supply base should encourage MNCs to upgrade their Hungarian activities and further cement the country's role in final assembly of numerous downstream goods, as evidenced in previous sections (see Table 2).

Electronic Components. The largest single investment in electronic components was made in the Czech Republic, but Hungary has received a continuous stream of smaller yet still significant investments. The large Czech investment was made by Japan's Kyocera. Through the UK office of its U.S.-based subsidiary AVX, Kyocera began subcontracting capacitor assembly to Tesla Lanskrout in 1992, involving about 400 workers. The following year, AVX set up its own subsidiary in a building leased from Lanskrout to produce tantalum capacitors, mainly for export—the first Japanese direct investment in the Czech Republic. The company has put in an additional \$40 million in the following years with 1,700 workers in Lanskrout and another 500 in a separate location. Some production was transferred from an existing operation in Germany, where wages are ten times higher and work rules stricter. The Czech operation is being upgraded to add more of the intermediate steps of production, currently done in the UK, which necessitates cross-hauling of the work in progress.

Although none of the Hungarian investments in this subsector are on the same scale as that of Kyocera, they are still in the \$10 million range and cover a broad variety of component types for use in end products in both Hungary and elsewhere, primarily Western Europe. In two cases—Temic (now owned by Vishay of the United States) and Siemens-Matsushita (a German-Japanese joint venture)—the initial investment was made in cooperation with local partners who were eventually bought out as the operation was expanded. At the opposite extreme, Poland has only recently received investments in this area, all in state-owned or recently privatized companies.

Electrical Parts. The Czech Republic has received several major investments for electrical parts, primarily from the European firms

ABB and Siemens. In 1993, Siemens purchased the electromechanical component division (with 500 employees producing relays and switches) of the ZPA automation conglomerate from the National Property Fund. According to one report, the labor cost was 20 percent of that in Berlin, while productivity per worker was one-third. Siemens has invested nearly \$20 million in the operation, expanding product lines to include telecom relays and fittings for optical cables. Most of the output is exported to Germany. Employment has risen to 1,000 and the plant is ISO 9002-certified.

In Hungary, Siemens is also active, having made a direct privatization purchase in 1991 of VIV, a maker of industrial switch gear. Employment has been maintained at about 1,700, and a new \$8 million plant was opened in 1996 to assemble hybrid circuits and power modules. Another German firm, Leonische Drahtwerke, is investing \$8 million for a highly automated plant to produce cable bundles for automobiles and for producers of consumer electronics. The plant will replace production previously done in Germany.

Poland's two investments in this category are both for batteries—a joint venture plant of Philips and Matsushita, representing an investment of nearly \$40 million, and another by Daewoo and one of its suppliers, worth some \$15 million.

Contract Manufacturing. One of the most rapidly growing activities in the electronics sector is contract electronics manufacturing (CEM), which can range from “board stuffing” (placing components on circuit boards) to a much wider range of activities such as procurement, design, product assembly, and shipping—all as outsourcing from a name-brand company (Sturgeon 1997).

Hungary alone among the three countries in this study has received several investments for CEM. The investor list includes leading firms in this field: Flextronics (which purchased a previously established operation from Philips and its Malaysian partner Sanda Plastics), SCI, and NatSteel. While some of these operations were attracted by prior investments of particular customers, these firms invariably seek to expand their customer base, which is helping Hungary become a major supply node in regional networks.

Subcontracting of Parts and Components: Local Firms in the Supply Base. Czech firms have the most subcontracting relations in the sup-

ply base subsectors, but the local partners are still relatively small. The absence of either larger private firms or large-scale FDI suggests that the Czech Republic has been unable to leverage capabilities into business, whereas Hungary has started from a somewhat weaker beginning and ended up with a central role (see Table 3).

Hungary's leading local subcontractor to the electronics industry is Videoton. The company was a classic state-owned enterprise, producing TVs, computers, and military equipment until it went bankrupt. With state support, it was taken over by local entrepreneurs, who decided from the outset to develop a skill set that would make the company a world-class subcontractor. It has entered into a long series of relationships with firms from Japan, Europe, and the United States, always with an eye to expanding its capabilities. Successful arrangements between Videoton and customers such as IBM and Philips led rapidly to direct investments by those firms, who also continued to employ Videoton's complementary subcontracting activities (see Table 4).

THE NATIONAL CONTEXT OF FDI

This section analyzes the national conditions and policies that have influenced FDI in CE. The Soviet-era industrial legacy is one influence, albeit of decreasing importance. At present, it is the countries that establish the most suitable investment climate, with some combination of secure property rights, investment incentives, and political stability, that are most likely to lure FDI.

ECHOES OF THE PAST

In the Soviet era, electronics production was primarily undertaken by a handful of large conglomerates, including Tesla and ZAVT in Czechoslovakia, Videoton in Hungary, and Mera and Unitra in Poland. Employment circa 1989 was roughly 100,000 each in Hungary and Czechoslovakia and nearly 200,000 in Poland. Czechoslovakia had the most up-to-date infrastructure for the industry, having launched a ten-year program in the mid-1980s to develop the sector. The program focused on components, instruments, and auto-

mation controls. Poland peaked in the 1970s as a producer of consumer electronics, electromechanical telephone switches, and computers. In the 1980s, under martial law, Poland's electronics sector stagnated for lack of both investment and technology as the country was isolated from the West. Russian distrust of the Polish regime also cut off access to the most sensitive Soviet technology. Hungary presents yet another story. Its chief electronics-related role in the Soviet system was as a provider of low- and medium-range mass-produced products and, in the IT sector, minicomputers. The country's "goulash communism" fostered a richer mix of public and private activities in the 1980s which was more conducive to absorption of new ideas from the West. Hungarian high-tech firms were also more connected to the West through trade ties.

CE electronics production was shaped by Council of Mutual Economic Assistance (CMEA) agreements that directed countries to specialize in the production of components and final products within an industrial branch. The first specialization agreement in the electronics sector, reached in 1969, called on the USSR to build large-scale machines, Hungary to fabricate mini-computers and punch-card equipment, East Germany to manufacture line printers, and Bulgaria to produce disk drives. The agreement rationalized a system in which some thirty different types of incompatible computers were being produced in CMEA countries.

During the 1970s about a third of intra-CMEA trade fell under specialization agreements, and the share continued to rise in the 1980s. An analysis of specialization agreements in electronics suggests that the CE economies occupied a middle ground between the USSR and East Germany on the one hand, and Bulgaria, Yugoslavia, and Romania on the other (Crane and Skoller 1988). Czechoslovakia focused on microelectronics and components, TV sets, and appliances; Poland concentrated on electronic components, computers, and telecom; and Hungary emphasized telecom and optoelectronics (see Table 5).

The specialization agreements have continued to influence the current pattern of production linkages, but other capabilities have also played important roles. For example, Bulgaria was the CMEA's specialist in hard drives, but Hungary ultimately became the leading producer of hard drives in the post-Soviet era because it offered a more attractive overall environment to the foreign partner, IBM.

The majority of CE electronics producers did not survive the transition from communism, but their human resources have often been mobilized by local entrepreneurs and MNCs. Such “echoes of the past” account for the development of IC fabrication in the Czech Republic, the success of Hungary’s software sector, and the strength of the Polish television industry.

NATIONAL INVESTMENT POLICIES

The Czech Republic, Hungary, and Poland are considered to be at the forefront of East European reform efforts, having made the most progress in the adoption of market-oriented institutions. Differences among their legal regimes, which reflect national political bargains, continue to influence investment patterns in electronics. Differences in the privatization process have also had enduring consequences for the structure and competitiveness of the industry, but their present influence on foreign investment patterns is difficult to trace. National policies on foreign investment, including pro-investment policies like tax incentives and the donation of factory sites, have become the major determinant of firm investment strategy. Thus Hungary, with its strong pro-FDI stance, has received the highest level of foreign investment of the three countries, in both overall and per capita terms. The Czech Republic has been far more cautious, resulting in lower levels of foreign investment per capita, but still more than Poland. Poland, which was initially wary of foreign investment, has now opened its regime to a considerable flood of FDI, raising it to second in the overall amount but third in investment per capita.

Hungary’s attractiveness to foreign investors clearly extends beyond the electronics sector. One factor which differentiates Hungary is a longer history of openness (United Nations 1992). During the 1980s, Hungary engaged in dozens of international joint ventures. By the time Czechoslovakia permitted its first joint venture with a firm from the West in 1986, Hungary had already formed sixty. Thus as communism ended, foreign firms probably knew Hungary better than most other countries in the region, and Hungary had the most extensive experience of the benefits of foreign linkages.

This historical factor is often overlooked in discussion of Hungary's aggressive pro-foreign-investment stance in the 1990s.

The Czech Republic has been far less encouraging of foreign investment. As of January 1993, it ended explicit incentives for foreign investors, switching to a policy of equal treatment for domestic and foreign investment. The national government made it a point to show that it could attract major investment without benefit of special tax incentives when it welcomed Kyocera in 1994 and Matsushita in 1996. However, this hard-line stance recently collapsed in the face of economic reality. In fall 1997, it became public knowledge that the Czech Republic was in competition with Egypt and Portugal for a \$500 million investment by Intel in a plant for microprocessor assembly and test that would employ thousands of workers. Intel was demanding tax breaks and training subsidies, possibly in violation of the republic's competition laws. In August, the government officially agreed on an undisclosed incentive package, only to see Intel put off its decision to the following year.

Poland's experience lies in between the Hungarian and Czech extremes, falling closer to Hungary's openness. Poland had permitted some foreign investment starting in the 1970s, but foreign participation in the economy was stymied under martial law. The FDI regime was formally liberalized in 1991 (one year after Hungary) by a new law which simplified the approval process and lifted repatriation limits, but it reduced tax rebates and replaced a recently enacted automatic three-year tax holiday for new FDI with a more targeted tax break favoring investments which were rich in employment or exports. By comparison, Hungary kept automatic tax breaks for major investments in place until 1994 and even afterwards continued to offer tax holidays lasting up to ten years for selected cases. Among eighteen companies receiving a five-year 100 percent Hungarian tax holiday in a January 1995 determination were four electronics firms: Samsung, Videoton, IBM Storage, and Philips Monitors.

CONCLUSIONS

The transfer of production activities from West to East is taking place against a backdrop of changes in Europe's industrial and political landscape. Recent commitments to reduce trade protectionism have created more pressure for West European firms to shift production to low-cost locations. Firms that wish to avoid Western Europe's constraining labor regulations are eager to tap into the East's cheaper and more flexible labor markets. These considerations often outweigh political pressure to maintain production in Western Europe.

The relocation of lower-skilled production represents an opportunity for a shift to higher-tech activities in the home country so that electronics production in CE will complement rather than compete with that in Western Europe. At least in the short to medium term, the West will continue to be the preferred location for investments in more capital-intensive and cutting-edge production activities, while the East will win investments in more mature technologies.

For the host countries, the nascent production linkages could take on a variety of different forms. These range from *maquiladora* investment, where foreign firms invest in production enclaves that have little interaction with the economy at large (Ellingstad 1997), to the leveraging of foreign investment for the promotion of national economic development, as is the case in much of Asia. The difference is largely in the control of host country authorities, who must implement appropriate support for both MNCs and local firms in order to achieve balanced development.

In the constantly evolving global division of labor, foreign-owned subsidiaries are upgraded in correspondence with local capabilities. For example, Malaysia continues to attract significant investments even as competing lower-cost destinations have emerged. Production in Malaysia has been steadily upgraded to reflect the higher skills (and wages) that now exist there, shifting to higher-value-added products and adding corporate functions such as product development and marketing. Local suppliers also play a larger role. Workers and managers with experience in MNC affiliates have gone on to create their own companies, frequently acting as suppliers to their former employers.

Judging from both the East Asian experience and the character of nascent production linkages in CE, we can expect a similar evolution of value added. Over time, network nodes in CE will be upgraded as new locations emerge further eastward to undertake the lower-skill assembly tasks in a more finely articulated regional division of labor. Such a redistribution of production would contribute to the well-being of MNCs, local companies, and host countries alike.

NOTES

1. Tables referred to in the text can be found in an earlier version of this study at <http://brie.berkeley.edu/BRIE>.
2. The author thanks Michael Borrus, Dieter Ernst, Andrew Schwartz, Tim Sturgeon, and John Zysman, who shared data and helpful suggestions, and Cynthia Berg, who furnished excellent editorial assistance. He assumes full responsibility for any remaining errors of fact or interpretation.
3. In this study, electronics includes microelectronics, consumer electronics, computers, electrical appliances, and electronic and electrical components for the industrial and automotive sectors.
4. The main source for this study is the BRIE FDI Database, derived from news articles and other publicly available information about network activities in the electronics sector and located at BRIE, University of California, Berkeley.
5. See for example United Nations (1993), Borrus (1994), Ruigrok and van Tulder (1995), Ernst (1997), and Borrus and Zysman (1997).

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THE AGRICULTURE AND FOOD SECTORS: THE ROLE OF FOREIGN DIRECT INVESTMENT IN THE CREATION OF AN INTEGRATED EUROPEAN AGRICULTURE¹

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The prospect of the integration of the agriculture of the Central and East European countries (CEECs) in the unified European economy is one of economic promise and political challenge. This paper explores the integration of the agricultural and food processing sectors in the CEECs and the former Soviet Union (FSU) with those in Western Europe. This process of integration will have significant effects on the pattern of production and trade in agricultural and food products. As in other sectors, the process is likely to be stimulated by the development of cross-border linkages among firms which lead to a network of production relationships throughout the region. Such linkages have been shown to have a major influence on the path of development in Asia and appear to be emerging as a factor in Europe. Though producer networks have not sprung up in farming, a good deal of interaction at the processing and food manufacturing level is taking place, giving rise to important linkages which will shape policy and influence development.

The agricultural sector is likely to play a complex but significant part in the development of an integrated European economy. The CEECs are at an earlier stage in the process of transforming and modernizing their agricultural sectors than the highly productive (if overly protected) enterprises common to Western Europe. The nature and the pace of this transformation will have major impacts on agricultural and labor markets and on the ease of removal of trade barriers within the enlarged European Union (EU). But the issue is complicated by the strains of the transition of Central and Eastern Europe (CEE) away from central planning. The collapse of the indus-

trial base in many of these countries at the start of this transition led to an increasing importance of the agricultural sector. Thus the performance of this sector is proving crucial in easing the path to a modern industrial economy in many of these countries.

Agriculture is also a key to the politics of enlargement in the existing EU. Agriculture will constrain the pace and conditions of accession of the ten CEECs (CEEC-10) that have association agreements with the EU, though it is unlikely that agricultural issues will block accession.² Much political capital will have to be expended to convince EU farmers that the door should be opened to agricultural produce from the East. Those in any case skeptical about the wisdom of a radical enlargement of the Union will be easily persuaded by fears of high budget outlays and the strain on current sectoral programs. This might lead to a decision to postpone the full incorporation of the CEEC-10 in the Union by attempting to keep two or more separate agricultural markets. Agricultural issues could also hamper the overtures to and limit the scope of trade agreements with countries further east, and in particular with Russia and the Ukraine.

Such a pessimistic outcome is not, however, inevitable. For instance, further bold reform of the Common Agricultural Policy (CAP) could dramatically ease the burdens of enlargement, by both ensuring that the incomes of farmers in current member-states are not sharply cut and removing a part of the budgetary obligation to farmers in the acceding countries. Depending upon such policy decisions made in the next few years, the process of assimilation of the Eastern part of Europe into an integrated agricultural market need not be too traumatic.

To put in perspective the difficulties of integrating Central Europe's agriculture into the EU it may be useful to consider the size of agriculture in Central Europe in comparison with the EU (Tangermann 1996). First, the agricultural sector is much more important in the economies of the CEEC-10 than in Western Europe. In the CEEC-10, agriculture contributes 7.8 percent to total GDP, more than three times as much as in the EU-15 (see Figure 1). Agriculture employs 26.7 percent of all labor, nearly five times the percentage in the EU. The share of agricultural land in total land area in the CEEC-10 is well above that in the EU. The share of food in total household expenditure in the CEEC-10 (36 percent) is more than 50 percent above that in the EU. The greater significance of agriculture in the

economy means that the CEE governments will pay close attention to agricultural issues when it comes time to consider the implications of accession to the EU, and for the CEECs the nature of agricultural policies pursued is more important than it is for most countries in the EU-15. This does not mean, however, that CEE governments are necessarily more interested in higher levels of agricultural protection than West European governments. After all, food prices are much more of a political issue in the East than in the West.

As a consequence of the large size of agriculture in Central Europe, the weight of agriculture in the overall economy of the EU will grow significantly when it comes to Eastern enlargement. Based on 1993 data for Central Europe, accession by the CEEC-10 would expand the size of agriculture in the EU very considerably. Although the overall economy would grow by only 3 percent, agricultural employment would grow by more than 100 percent; agricultural and arable area as well as cereals production would expand by around 50 percent; and livestock production would grow by around one-fifth (see Figure 2).³ As a result, the economic conditions under which agricultural policies will have to be pursued in an enlarged Union will be much different from what they are in the current Union. In particular, policies which transfer income from the rest of the economy to agriculture will tend to be more expensive. At the same time, the political weight of agricultural interests in society may gain significantly.

One factor which will become important in the assimilation of CEEC-10 agriculture into the framework of the EU is the degree to which the sector can compete in a unified European market. CEE agriculture has proved to be relatively robust during the transition process, and the sector may in fact have a comparative advantage in several countries in Central Europe. Although agricultural output has declined significantly, it has not fallen as fast as industrial production in most of the CEECs.⁴ If this robustness persists, then agriculture in Central Europe may have a promising future as an internationally competitive sector.

This resilience suggests that agriculture can play a more positive role as an element in the process of integration, as a modern, competitive sector closely integrated with the post-farm-processing activities which provides quality goods for consumers. This can, however, be achieved only through the spread of investment, the

opening up of market opportunities, and the transmission of technology from more to less developed areas. The extent to which this more positive role is encouraged and exploited will shape the development of rural economies in CEE and the FSU. Together with the agricultural input supply, processing, and marketing industries, the farming sector will provide jobs for a large part of the rural population. The question is whether these jobs will be in a sector which is attractive to investment and to the adoption of new technology. The sector can therefore be viewed as a potential actor in the process as well as a drag on the pace of integration, as part of the solution as well as part of the problem.

The way in which agriculture will become integrated within a broader Europe is likely to be different from the process in manufacturing. Transborder institutions are largely absent from primary agriculture. Farming is clearly not the province of multinational corporations (MNCs). Such MNCs as exist are concerned with the supply sector (chemicals, fuel, fertilizer, and feed), the processing activities (sugar and dairy), and marketing and distribution (grain handling and selling). Nor is production agriculture likely to become a sector dominated by large indigenous corporations. Even in the more advanced U.S. agricultural sector the median size of business is still modest by manufacturing standards. Unlike in the automobile sector, complex webs of component suppliers are not likely to emerge. Farmers do buy from other farmers, particularly animal feeds and live animals. Also, food processors purchase their raw materials from farmers, sometimes under medium-term contracts. But only a few goods, such as highly processed foods, are “assembled” from internationally traded components. Unlike the electronics industry, information networking and skill spillovers do not seem so crucial to the development of the sector—though a rudimentary version of these processes has always existed in rural areas. The path of integration lies more through the development of the food industry, which will draw agriculture along with it into a European and an international marketplace.

The trajectory of the path toward a European market is clearly of great relevance for the agricultural and food processing sectors. It is also endogenous to the policy process. Resource availability in agriculture is as much created by the actions of private and public agents as determined by an initial endowment. The provision of

market infrastructure, from transportation to quality control and grading systems, has a particularly pronounced impact on the comparative advantage of particular regions. Whether agriculture is viewed as a laggard sector with little growth potential or as a possible source of growth and competitive exports will help determine whether the sector is taxed or encouraged by public policy. Private firms will be influenced in their investment decisions by the treatment of the sector by policymakers.

The chapter begins with a brief discussion of the process of transition of the agriculture and food sectors of CEE and the FSU and the role of these sectors in the overall transition process. This leads to an examination of the competitive and complementary relationships which are likely to emerge between East and West and the determinants of the strength of these relationships in the agricultural and food sectors. The paper then describes the development of agricultural trade between these countries and the EU in the past few years and analyzes the treatment of agricultural trade within the association agreements that govern the commercial relations between the EU and the prospective members. The argument then shifts to the role of foreign direct investment (FDI) in the agricultural and food sectors of CEE and FSU and the significance of this investment for the development of their economies. This is followed by a discussion of Western firm strategy and the reasons for particular types of linkages and institutional arrangements. The paper then returns to the issue of public policy in agriculture and addresses the question as to whether CAP reform will facilitate the integration of agriculture or whether the market will remain divided as a way of postponing pressures on EU farmers. A final section places the European story in the context of global developments in agriculture and the food industry.

AGRICULTURE AND THE FOOD INDUSTRY IN THE TRANSITION PROCESS IN CEE AND THE FSU

Before the political and economic transformation began in Eastern Europe toward the end of the 1980s, agriculture and the food industry in the region exhibited the typical features of the traditional

centrally planned socialist system, though with notable differences among countries. In agriculture the former private farms had been either forced into collectives or to a lesser extent—and sometimes in a second round of socialization—expropriated and amalgamated into state-owned farms. Relatively large production units had been created in this way, compared with the typical much smaller family farms in Western countries. In the food industry, the process of socialization resulted in essentially the same structures which had been imposed on other industrial sectors. There is little question as to how inefficient the resulting structures in agriculture and the food industry were. As a result of those inefficiencies and the policies to compensate, agriculture and the food industry became major obstacles to overall macroeconomic stability and growth.

When the process of transition began in 1989, macroeconomic concerns became a primary force in agricultural policy. The removal of state subsidies (desubsidization) was one of the central elements of reform. Other major reforms, more directed toward microeconomic effects, were decollectivization and, along with equivalent transformations in other sectors of the economy, privatization, demonopolization, price liberalization, and the opening up of foreign trade. The overall effect of these reforms was to make life significantly more difficult for both agricultural producers and food consumers. The sectoral terms of trade for agriculture (producer prices relative to input prices) deteriorated noticeably, while consumers had to bear the burden of significantly higher food prices. One immediate effect of these price changes was a steep decline in agricultural output and a drop in food consumption in all countries of Eastern Europe.

Since 1989, there have also been changes in farm management, but the actual structure of farms has changed much less than one might have expected given the fundamental legal reforms which have taken place. Much of the equipment of the food industry is seriously outdated and inefficient, and even though lower labor costs than in Western countries suggest that less capital-intensive production methods are appropriate, there is a noticeable lack of the capital needed to bring production technologies up to date. Low quality standards of food produced in these enterprises are one of the resulting problems, but this is also related to a lack of managerial experience with more modern technologies. In addition, the institu-

tional framework for a modern food industry, including financial services, wholesale markets, commodity exchanges and futures markets, price information, quality standards and controls, grading systems, export marketing agencies, and transportation facilities, still needs time to develop.

Though significant improvements are being made in all these aspects, the food industry is probably that element in the whole agro-food sector of Eastern Europe where the gap in competitiveness vis-à-vis Western countries is still most pronounced. Since most farms depend on sales to the food industry, profitability of agriculture is also hampered by deficiencies in the downstream sector. Moreover, inefficiency (in both a technical and a product quality sense) and lack of competition in the food industry mean that the margins between consumer prices (or international market prices) of processed foods and prices paid to farms are larger than need be. As a result, prices paid to farmers are depressed and profitability of agricultural raw production is reduced.

COMPETITION AND COMPLEMENTARITY BETWEEN EAST AND WEST

Agriculture in the East is presently seen predominantly as a rival to that in the West for either markets or EU funds. However, in the longer term this is likely to be dominated by a more complementary relationship. This process of complementarity will be led by firms seeking profitable opportunities in internal and external markets. If short-term competition for saturated markets and EU funds is allowed to dictate the relationship between East and West, then the sector will be a laggard in integration. If the complementarities emerge relatively early in the process, the political tensions may be eased. There is evidence that the complementarities are already beginning to be exploited to the long-run benefit of both Eastern and Western economies.

This rivalry/complementarity relationship depends upon a combination of trade and investment decisions. Both trade and investment have an internal and an external dimension, and investment can in turn be from private or public funds. Trade factors have

been given most attention in the past, with the implicit assumption that agriculture in CEE will have to find markets in the West to thrive. The main threat to enlargement is seen as coming from the political opposition to such competition, and the pace of integration is assumed to be determined by the speed at which trade barriers come down. The access to markets within the EU will indeed go far to determine the trade environment for Eastern agriculture. But the food and agricultural sectors may also derive income from exports to markets outside the EU. In this respect these countries share with those in Asia, Latin America, and Africa the task of penetrating high trade barriers in developed markets. The recent strong growth of trade in high-value-added agricultural and food goods opens up the possibility of markets in these products for CEE exporters. These sales are highly dependent upon quality control and meeting international standards. Will the harmonization or mutual recognition of standards and health regulations proceed fast enough to allow for the full development of trade complementarities? Slightly less demanding are the markets in other CEE and FSU countries. Here the pace of exports will be determined by the rate of growth in these economies and in their continued openness to international commerce.

At present it looks as if intra-EU trade liberalization is a relatively slow horse which could be outpaced by other forces. If agriculture in the East is to develop, it will need investment funds. The extent to which such funds are forthcoming will in part be determined by the relationship between the agricultural sectors in East and West. But the opening up of the internal market for agricultural products may also suffice to generate significant development, and there is evidence that foreign capital is entering some of the countries in Central Europe to supply the domestic market. Some degree of domestic market development may in any case be a prerequisite for any significant investment, and this precondition is still not in place in the countries of the FSU.

Financial capital is still a serious limitation in the region as a whole. Moreover, it would be unrealistic to think of all the countries of CEE and the FSU as being equally attractive to foreign investment (see Figure 3). The Central European countries, which have the most advanced of the transition economies, are most likely to enter the Union in the first tier. They tend to sell more highly processed prod-

ucts and are more able to attract investment. At the other extreme, the countries of the FSU, which produce homogenous raw materials that are unlikely to gain free access to EU markets in the next few years, are unlikely to be a magnet for foreign funds.

AGRICULTURAL TRADE DEVELOPMENTS IN THE CEECs

In recent years both the structure of trade institutions and the conditions for market access have changed rapidly for the food and agricultural sectors. As soon as the transformation process started, the changes in agricultural trade relations with the EU which were to follow were foreshadowed by a sudden large upward jump in the EU share of agricultural and food exports from Central Europe. This growing trade resulted in part from the special trading arrangements between the countries in Central Europe and the EU, as well as the breakdown of the Council of Mutual Economic Assistance (CMEA). The EU was quick to respond by revising its trade regime vis-à-vis the countries concerned. As a first step, in 1990 the EU began to lift its previous quantitative restrictions against imports. The second step, following soon afterwards, was to provide some limited preferential market access by including countries from Central Europe in the EU's Generalized System of Preferences (GSP), originally extended only to developing countries.⁵ As far as agricultural products were concerned, the GSP covered mainly tropical products, which were of no interest to Central Europe. In order to assist these countries better, the EU also included some types of pork and poultry meat in its GSP, with a 50 percent levy reduction on limited quantities. A further step taken by the EU was the conclusion of trade and cooperation agreements with CEE which, however, did not have much economic effect.

The most important phase in EU trade relations with Central Europe began in 1992 with the association agreements (called "Europe Agreements"), which, according to their preambles, represent first direct steps toward eventual EU membership. The EU now has association agreements with the CEEC-10. The association agreements contain elaborate trade preferences, which cover agricultural products.⁶ The trade provisions under the association agreements

are, in principle and in terms of the General Agreement on Tariffs and Trade (GATT), supposed to establish free trade arrangements between CEE and the EU. They are mutual but asymmetric, in the sense that both sides eliminate trade barriers, though the CEECs have more time to do so. For most industrial products, trade will eventually be completely free. In agriculture, however, neither the CEECs nor in particular the EU had the courage to open markets completely. Indeed, the overall negotiations were close to breaking down on a number of occasions when some EU states felt that the CEECs might gain too much access to EU agricultural markets. In the end, the trade preferences in agriculture and food remained rather limited and disappointing for the CEECs. In effect, products which the pre-reform CEECs could not export to the EU, because EU import barriers were prohibitive or for any other reason, do not benefit from preferential treatment. Products for which market conditions have changed after the reforms and in which the countries in Central Europe now have a comparative advantage and therefore could profitably export to the EU have often not been granted preferential access to EU markets.

In spite of trade preferences granted under the Europe Agreements, the EU has started to run a large surplus with CEE in agricultural and food trade, a development which has caused concern on both sides (see Figure 4). Agricultural and food exports from the EU to CEE have increased significantly, while exports of these products from CEE to the EU have been much less dynamic and in many cases even decreased. These developments have come as a surprise to some observers. The growth in EU exports to CEE, it was felt, was in apparent contradiction to the falling domestic demand for food in CEE. The lack of growth in CEE agricultural and food exports to the EU was disappointing to those who had expected that EU trade preferences would result in a dynamic expansion of CEE agricultural and food exports. Will trade relations in agriculture and food between Western and Central Europe in future increasingly be a one-way road, with the EU supplying deficit markets in Central Europe? Or is this in part a result of export subsidies granted by the EU which the countries in Central Europe cannot match nor protect themselves against through trade barriers? What is the role of processed foods, as opposed to agricultural raw materials in that trade?

Detailed analysis of the data on trade between the EU and the six countries with which the EU has had association agreements for some time (Bulgaria, the Czech Republic, Hungary, Poland, Romania, and Slovakia [CEEC-6]) shows that the rapid growth of EU agricultural and food exports has not occurred simultaneously in all product categories (see Table 1). Products receiving export subsidies have a somewhat higher share than products whose exports are not subsidized. However, over the whole of the 1988–94 period, EU exports of products without subsidies have grown more than exports of subsidized products. Thus the “core” group of CAP products—i.e., raw materials with export subsidies—has only a relatively small share in both current value and past growth of EU exports. At the same time, processed foods have contributed strongly to the dynamic growth. This trend probably reflects the expanding demand of CEE consumers for modern processed foods, the production of which has so far grown only slowly in CEE.

The results indicate that the immediate concern about the flood of CEE exports to the EU, with the attendant problems for policy, has not been reflected in actual trade flows. Pressure on existing EU markets has not been widespread. Instead, the CEECs have increased their imports from the EU. But this trade expansion has not been due solely to the use of export subsidies by the EU, despite the disruption that these can cause. Trade rivalries have therefore not yet flared up to the extent of diverting political decisions on accession. This bodes well for the development of complementary production relationships, which are strongly suggested by the increased trade in processed agricultural goods. These trade trends are also consistent with the observed investment flows discussed in the next section.

FOREIGN INVESTMENT IN THE CEE AND FSU AGRICULTURAL AND FOOD PROCESSING SECTOR

The significance of investment in the development of the agricultural and food processing sector of CEE and the FSU cannot be overstated. Trade with the EU may expand further as trade barriers are reduced, but as discussed in the previous section, the trade expansion is as likely to be in the other direction. Investment can allow

the development of competitive industries in the East which can then find a market either at home, in the EU, or in third countries.

Because the return on capital in agricultural production has traditionally been rather low in CEE, this sector has rarely been a magnet for FDI and will probably continue to fail to attract foreign capital. In addition, in many countries, foreign ownership of land is illegal, although there are ways around such legislative hurdles. Even the attempts by governments to stimulate agriculture do not seem to generate private investment. For commodities where the prospect of higher support under the CAP is a factor, the investment may be anticipating membership. The investment in sugar in the countries of the Central European Free Trade Area (CEFTA) may be an example of this. In some cases the investment may be attracted by current levels of protection in the CEFTA countries, though this is generally quite low at the moment. What is striking is the virtual lack of any investment in the grains, dairy, and livestock sectors of any of the countries outside CEFTA, Russia, and the Ukraine. These sectors are clearly not headed for a rapid integration with the EU on the basis of shared markets and investment-led technology.

The more optimistic side of the picture is that FDI in the food processing sector has been strong. Although FDI has not been drawn to farm production, there has been some investment in more highly processed foods with a low raw material content. It seems that investors prefer the rather more stable conditions of markets for consumer-ready foods to those for raw materials for processing. Thus FDI has concentrated in confectionery (\$845 million), soft drinks (\$397 million), dairy (\$296 million), beer (\$280 million), and fruits and vegetables (\$259 million). Except for the first two categories, for which linkages with the farm sector are weak, these FDI can be reckoned to contribute significantly to farm income as well as to the development of marketing habits such as the provision of good quality supplies on a regular basis. The part of the sector least able to attract outside private investment has been the production of homogeneous raw materials in the countries of the FSU. These products are both readily available on the world market and tend to be in surplus in the EU. These markets are also saturated in the FSU, with high per capita consumption levels stemming from subsidized food prices. Moreover, without reasonably well-functioning distribution systems, a manufacturer is unlikely to be effective in penetrating the

FSU and Balkan markets. The latter problem is less acute in the CEFTA countries, where Western-style marketing institutions such as supermarkets are making rapid inroads. The key parameters governing investment are thus access to EU markets and the degree of market differentiation in the product. For those with the prospect of accession within the next few years, investments are already being made, in particular in subsectors that produce differentiable products for middle class consumers.

The results of this brief look at the distribution of FDI confirm the broad relationship between the degree of processing of the product and the country situation vis-à-vis the EU suggested earlier. The highest level of interfirm financial and marketing links, and hence the greatest development of trade complementarity, has developed in the front-line states which will accede to the Union before the others and become integrated more quickly in the Western markets. Western investment has the objective of either supplying the local or regional market in CEE or producing goods to export further east. Investment in these countries does not in general constitute an attempt to produce agricultural and food products at a lower cost for re-export back to the EU. Some sales to the EU from CEE will no doubt be stimulated by FDI. But the majority of instances of FDI seem to be designed to sell to the domestic CEE market or to be geared to selling to the East. This is most apparent in Poland, where the close links with the Ukraine, the Baltic republics, and Russia have given it a role in the export of a number of foodstuffs.

A second lesson is that the benefit to the farm sector may be indirect, if nonetheless significant. In terms of the complementarity of agriculture in East and West, it is clear that the farm sector is not yet at the stage where companies are able and willing to invest too closely to the farm gate. The first stage processing of agricultural goods is not at present very profitable in the countries under discussion. In some cases this is a result of out-of-date technology, and hence a potential target for foreign know-how. In other cases it is more likely that it is a reflection of the incomplete transition of the economy to a market regime. This suggests that the benefits to the farm sector will depend upon the ability of that sector to develop new marketing institutions. One would expect a growth of contracting and other forms of direct marketing which link price, quality, and reliability of supply. Those sectors that do not adjust may fall

behind in an environment where governments are much less likely to guarantee markets for farm produce.

INTEGRATING CEE AGRICULTURE INTO WESTERN MARKETS

In the process of integrating CEE agriculture more closely into Western markets, the major event will be accession of the countries from Central Europe to the EU. Trading conditions between acceding countries and Western Europe, as well as with the rest of the world, will change fundamentally once the Single Market is extended to the East. Western FDI in Central Europe will occur under completely different conditions, and technology transfer is likely to prove much easier. Institutional and legal design in Central Europe will be even more strongly influenced by the examples set by the countries in Western Europe and by the Union. Agricultural and food policies in Central Europe will no longer be pursued on a national basis. Policy pressures will not, however, all be on one side. In Western Europe the environment for policymaking in food and agriculture will change fundamentally. Indeed, many of these developments have started already, in preparation of Eastern enlargement of the Union.

One thrust of the argument of this paper is that CEE may well have a comparative advantage in agriculture, an idea that has gained support from others (see Hamilton and Winters 1992; Anderson 1992, 1995; Tyers 1993). It is important to note that the level of support provided to farmers in Central Europe is significantly below that in the EU. Even though there has been an increase in agricultural support and protection in recent years, the level of support provided remains significantly below that provided under the CAP. In particular, agricultural producer prices in Central Europe are still significantly below those in the EU, and in some cases even below those on world markets (see Figures 5 and 6).

Central Europe's membership in the EU will have significant implications for EU producers of certain commodities. The most recent and most widely publicized EU estimate, which assumes that the CAP will apply fully in Central Europe by 2005, projects that the CEEC-10 will become net exporters of cereals (7.2 million tons), oilseeds (0.7 million tons), milk (2.6 million tons), beef (0.6 million

tons), and poultry (0.2 million tons) but will be net importers of sugar (0.4 million tons) and will be about self-sufficient in pork. And the resulting extra expenditure would be around 12 billion ECU (in 1993 prices) (European Commission 1995).

Whatever particular set of projections one takes, there is little doubt that the quantitative implications of extending the current CAP to Central Europe could threaten the CAP. Both the EU and the countries in Central Europe must make a number of strategic decisions concerning the inclusion of agriculture in the process of Eastern enlargement. Given the importance of agriculture to the economies of Central Europe and their pronounced interest in free access to agricultural markets in Western Europe, it is plainly inconceivable that exclusion of agriculture from the process of Eastern enlargement would ever be politically feasible. Moreover, it would not make any economic sense.

A further issue is the time horizon for accession by Central Europe. Many agricultural policymakers in the EU appear to believe that pressure on the CAP would be less the later Central Europe joins the Union. Yet agricultural issues will probably play only a minor role when it comes to deciding on the schedule for enlargement. To a large extent, timing will depend on foreign policy considerations, on the ability of the Union to revise its institutional structures, and on progress the individual countries in Central Europe make in establishing a stable political and economic system and creating the necessary institutional and legal framework. However, at a lower level of decision-making, timing may well become a "technical" issue related, among others, to agriculture. In particular, there will be the question of whether or not there should be a transition period after accession, as in early rounds of EU enlargement. However, there are strong arguments against such a transition period, and integration of Central Europe's agriculture and food industry into the borderless Single Market may well happen on the first day of accession, as occurred in the latest round of EU enlargement to include the European Free Trade Association (EFTA) countries, in what was called a "big bang" adjustment.

It is impossible to escape the conclusion that the CAP will have to be further reformed in the context of Eastern enlargement. The two major factors forcing this development will be budgetary considerations and trade implications. As far as budget implications in

agriculture for the EU are concerned, the estimate of the EU Commission of an increase of 12 billion ECU in CAP expenditure for the CEEC-10 can probably be said to be the lower bound of reasonable estimates. Given that the spending on the CAP is well over one-half of total EU budget obligations, a large increase in the agricultural funds would be required at a time when countries will be also seeking increases in regional and structural payments to help ease the adjustments in industries such as textiles and shoes. Under the current budget guideline for the CAP, expenditure would be allowed to increase by a little more than 5 percent when the CEEC-10 join. This is less than one-fifth of the increase required according to the Commission's estimate. One can well argue that this is a too technical view of the process and that focusing on the agricultural budget cost of Eastern enlargement is not helpful, in view of the political significance of Eastern enlargement and considering the many benefits it will provide to the existing member-states. However, it is less than certain that governments of countries in Western Europe will be willing to spend that much more on a policy which many of them feel is in urgent need of overhaul anyhow.

As far as trade implications of extending the CAP to Central Europe are concerned, available estimates also differ widely. But even a wide margin of error does little to change the policy conclusions fundamentally. When the CEECs join the EU, negotiations will have to be held in the World Trade Organization (WTO) on how to merge their WTO commitments with those of the EU. It is highly unlikely that the EU's trading partners will allow it to raise CEE agricultural tariffs to the EU level. On the contrary, enlargement will probably require the EU to accept further reductions in its tariffs. Thus, tariff bindings in the WTO will prevent the EU from using the "easy" solution of more and tightened supply controls in order to avoid changes to the CAP and will make it difficult to apply the current high price supports to the new members. Another major issue to be considered is the existence of WTO commitments regarding subsidized exports. Even if CEEC-10 net exports after accession to the CAP were to remain considerably below the relatively cautious projections by the EU Commission, they would still be far above the aggregate WTO commitments of the countries concerned. As long as the EU has to subsidize cereal exports, it will find it increasingly difficult, if not impossible, to comply with its WTO

commitments. Enlargement will not augment EU commitments on subsidized cereals exports by more than 1.6 million tons. However, even the EU Commission projects that net exports of cereals from the CEEC-10 will be above 7 million tons in 2005 and nearly 11 million tons in 2010 (European Commission 1995). The situation is similar (though somewhat less dramatic) for a number of other agricultural products. In other words, even if net export availability in Central Europe grows less than projected, the likely market trends in the EU-15 mean that the Union will find it hard to comply with its WTO commitments in agriculture if it does not change the CAP.

What are, then, the options for reforming the CAP? Essentially there is only one strategy which both makes economic sense and can prepare Europe's agricultural and food sector for Eastern enlargement. This strategy would aim at improving the competitiveness of EU agriculture so that it no longer needs government support. That strategy would have three major elements. First, CAP support prices would be reduced so that export subsidies are no longer necessary. Second, supply management (quotas, set-asides) would be abandoned. Third, compensation payments to farmers, to the extent they are considered necessary by agricultural policymakers, would be completely decoupled from production and their duration limited (see Josling and Tangermann 1995).

In our view, reduction of CAP support prices toward the level of world market prices is the only practical way to eliminate the need for export subsidies. But in CEE there is now a strong political temptation to provide more protection and support to farmers. If CEE governments were to succumb to these tendencies, they might well find that they end up providing more support to their farmers than the EU does at the time the process of Eastern enlargement begins, especially if the EU reforms its agricultural policies. Governments and farmers in CEE would then have to undergo the painful process of adjustment back toward lower levels of support and protection on accession to the EU. At the same time, the food industry in Central Europe would lose competitiveness vis-à-vis Western Europe because it would have to purchase its agricultural raw materials at higher prices. However, there is a good chance that governments in Central Europe will avoid the mistakes made by the CAP in the past by keeping price supports and protection low until accession to the EU takes place.

Two categories of effects should be distinguished in discussing the differential implications of Eastern enlargement on West European countries. First, as argued above, Eastern enlargement is likely to trigger another round of fundamental CAP reform, and this will affect individual EU member-states in different ways. Second, the opening up of trade and investment opportunities implies differential threats and opportunities for private agents in different EU countries. Clearly some member-states see their agricultural interests more threatened than others. Among the large member states, Germany is the country which is most concerned about the agricultural implications of Eastern enlargement. France is split between fears and hopes. England hopes for CAP reform. The Netherlands and Denmark see new opportunities. The Southern member-states face better prospects for their specialty crops but then are afraid that Eastern enlargement will be a drain on EU structural and regional funds from which they would like to benefit more. Overall, the political balance among member-states, as far as decisions on the future of the CAP are concerned, seems to be shifting slowly over time in favor of those states which argue for more market-oriented policies. This should increase the chances of a further reform before the accession of new members.

EAST-WEST AGRICULTURAL TRADE AND INVESTMENT IN EUROPE IN A GLOBAL CONTEXT

It remains to put the agricultural trade and investment story of East-West integration in Europe into the perspective of the global development of the agriculture and food industries, and more specifically of emerging agricultural cross-border linkages in other parts of the world. The backdrop against which the agricultural sectors of CEE and the FSU develop may be significantly different from that which has surrounded the development of agriculture in Western Europe. The question can be posed as to whether agriculture in CEE and the FSU can leapfrog the stage of protection by artificially high prices and supported farm incomes to move straight to competitive production. The rules of the WTO and the schedules of tariff and subsidy reduction become a part of the environment in which policy

develops. And Europe will be under increasing pressure to include agriculture in the regional pacts which it negotiated with other countries. Thus the global context in many ways determines the path to be taken for the development of European agriculture and agricultural policy. This path leads to a more competitive agricultural sector rather than to a period of high prices under the umbrella of an un-reformed CAP.

Current trends offer the possibility for the integration of the Eastern agriculture and food systems into those of the West in a way that neither causes politically divisive pressures in the existing EU nor impoverishes the rural areas of the newcomers and those waiting in the wings. The path that the Eastern agricultural sector should follow would be one of competitive production for the integrated European market based on cost reductions, quality control, and technology from the West. The leading subsectors will continue to enjoy an inflow of foreign investment. This path is notably different from that followed by the present EU members, who defined farm prices from the mid-1960s with little regard for market value and little reward for quality. If the path toward competitive agriculture in the East is possible, the contribution to the economy of Europe will be substantial.

CONCLUSIONS

Two main conclusions emerge from this paper. First, the process of integration of the agricultural and food sectors of CEE with those of Western Europe has already begun. The process itself is different from that in other sectors. FDI and interfirm linkages will play a more indirect role. Investment in the primary agriculture sector is likely to come from farm households themselves, rather than from abroad, but capital, management, and marketing skills are being invested in the processing sector. This will help the farm sector by developing a more consumer-responsive market for farm output. This flow of investment has already started and is a sign that the private sector has anticipated the notion of an integrated market. Much of the investment is intended to supply the local market, and some is aimed at the markets to the East. This investment is devel-

oping the comparative advantage of Eastern agriculture rather than producing raw materials that are in oversupply in the West. Contrary to the fears of the EU farm sector, this integration need not in itself be deeply disruptive to markets in the West. Only if the CAP offers high guaranteed prices for low-quality products will Eastern agriculture directly conflict with farmers in the West.

Thus the second conclusion is that CAP reform is itself a necessary step to allow integration to proceed. It is also in the medium- and long-run interest of farmers in the West. Moreover, further reform is both an inevitable consequence of changes in trade rules at the international level and desirable in its own right (to make agriculture in the EU internationally competitive) regardless of the CEE accession and the WTO rules. With respect to enlargement, reform is superior as a policy to that of delaying market integration by long transition periods or continued quantitative controls on trade within the expanded Union.

The development of the agricultural trade system is itself important to the EU. One major factor which will determine the future of the agro-food system in Eastern Europe is access to international markets, together with the intensity of competition with subsidized exports from other countries, on both domestic markets in Eastern Europe and third-country markets. In spite of the significant progress that was made in the Uruguay Round of GATT negotiations, international trade in agricultural and food products remains severely restricted and distorted by trade barriers and subsidies. Thus, fundamental economic competitiveness of a country's agro-food sector, which some countries in Eastern Europe may well gain in the years to come, is no guarantee for actual success. The future development of the international trading regime for agriculture in general, and more specifically the future of the CAP, are important factors that will help shape agriculture and the food industry in Eastern Europe.

NOTES

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1. Tables and figures referred to in the text can be found in an earlier version of this study at <http://brie.berkeley.edu/BRIE>.
2. These ten countries are the four Višegrad countries (Czech Republic, Hungary, Poland, and Slovakia), two Balkan countries (Bulgaria and Romania), three Baltic countries (Estonia, Latvia, and Lithuania), and Slovenia. With the republics of the FSU, the EU still has only cooperation agreements, which do not contain any preferential trade provisions.
3. By the time Eastern enlargement takes place, some of these indicators will have changed. In particular, agricultural employment in Central Europe is likely to shrink, and GDP will probably grow faster than in the EU-15.
4. More recently industrial output has begun to grow faster than agricultural production in some of the CEECs.
5. Romania had already been included in the EU's GSP since the late 1970s. However, it had remained excluded from many individual tariff preferences under that system. In 1991, all GSP benefits were extended to Romania as well.
6. For a detailed analysis, see Overberg (1996). See also Tracy et al. (1994) and Tangermann (1993).

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DEALING WITH DIVERSITY: THE CHALLENGES FOR EUROPE

Jean Pisani-Ferry

INTRODUCTION

Article A of the Treaty on European Union states that the Union's aim is to create an "ever closer union among the peoples of Europe." Article B sets as one of its primary objectives

to promote economic and social progress . . . in particular through the creation of an area without internal frontiers, through the strengthening of economic and social cohesion and through the establishment of economic and monetary union, ultimately including a single currency.

These articles encapsulate the EU's very basic philosophy, which is to promote convergence through economic integration and the adoption of common legislation and policies.

By and large, Europe has been surprisingly successful in this quest for convergence. Most indicators point to a significant reduction of disparity among the member-states. This applies to income per capita (for both the initial members and the so-called "cohesion countries"—Spain, Portugal, Greece, and Ireland);¹ to industrial structures and trade patterns (the single market has not led to specialization along comparative advantage, but rather to the development of intra-industry trade cum vertical differentiation);² to the structures of microeconomic governance (as embodied in Community legislation—e.g., competition policy rules and principles for the provision of public service); and to macroeconomic priorities and performance (especially inflation and fiscal policy, for which the Economic and Monetary Union [EMU] treaty provisions and corresponding secondary legislation set forth numerical targets). Maas-

tricht can be seen as a major milestone in this long-standing process of convergence. Areas of nonconvergence remain but are essentially limited to the realm of the state and the field of industrial relations: tax policies, social insurance, and more generally the provision of public goods, as well as labor market policies and performance. However, there are signs that convergence might be beginning in these fields too.³ The question addressed to Europe since the beginning of the 1990s is whether and how this philosophy remains compatible with the new task of promoting integration among increasingly diverse countries, while fostering the catching up of the poorer members.

Europe's agenda is indeed daunting. It involves, in more or less chronological order,

- Implementing the (minor) revisions to the decision-making process agreed upon in Amsterdam as a result of the 1996-97 negotiations on institutional reform;
- Establishing monetary union among a subset of countries;
- Negotiating enlargement to five Central and East European countries (CEECs)—Estonia, Hungary, Poland, the Czech Republic, Slovenia—and Cyprus;
- Revising the structural funds and the Common Agricultural Policy (CAP);
- Achieving free trade in nonagricultural products with Mediterranean countries; and
- More generally fostering development and trade opening on the Union's periphery.

The official view among European policymakers is that the European Union (EU) can cope with these tasks at a relatively low cost. According to this view, Europe basically needs (i) to streamline its decision-making machinery (through reforming the weighting of countries in voting rules, enlarging the scope for majority voting, and reducing the number of commissioners); (ii) to reform the CAP and the structural funds with a view to reducing their budgetary cost and facilitating upcoming enlargement negotiations; (iii) to negotiate with CEECs an enlargement agreement that includes temporary

derogation from the single currency and part of the single market, as well as a cap on budgetary transfers. Point (i) was expected to result from the negotiations which took place in the Inter-Governmental Conference (IGC), but since these negotiations did not reach an ambitious agreement on institutional reform, further discussions on strengthening the European institutions are now supposed to take place before enlargement takes place; (ii) is supposed to be completed through implementing the so-called "Agenda 2000" program; (iii) should result from the upcoming negotiations.

Even this limited agenda is an ambitious one. Negotiations at the IGC have been notoriously difficult, and the results reached in Amsterdam are widely considered modest. Reforming the CAP and the structural funds, which taken together amount to 80 percent of the Community budget, is bound to give rise to significant distributional conflicts both among and within member-states. And successfully completing enlargement negotiations will be a far more demanding task than for previous enlargements. But a more fundamental question is whether a Union that would stick to this limited agenda would be well enough equipped to cope with the challenges it is committed to addressing. This paper argues that there is a significant chance that it would not.

ECONOMIC AND MONETARY UNION

Let us take EMU first. As things stand now, it is likely that it will start on schedule with a majority of member-states. However, two countries (the UK and Denmark) benefit from an opting-out clause, and at least the UK is likely to exert it. Sweden was granted a similar option and has indicated its intention to abstain from monetary union, initially at least. Greece will not fulfill the criteria for membership, and at the time of this writing, controversies about Italian membership had not entirely disappeared. It should also be noted that although formally committed to participating in monetary union, any member-state could escape this obligation through abstaining from membership in the Exchange Rate Mechanism (ERM), in which participation was deemed voluntary by the European Council. Since participation in the ERM is one of the criteria

for entering the single currency, abstention from it would ensure that the country would never fulfill the conditions for membership. The Maastricht Treaty notwithstanding, monetary union has thus been made an optional partnership. Whether or not it will subsequently enlarge to new members and eventually encompass virtually all the EU-15 cannot be assessed with any certainty since this will depend on each country's assessment of the costs and benefits of membership as well as on complex dynamic interactions between the "ins" and the "outs."

Furthermore, participation in EMU of the accessing CEECs is likely to be delayed because freezing nominal exchange rates prematurely would be for them a recipe for severe difficulties in their transition and catching-up process. As demonstrated by several countries in transitions, fixed exchange rate strategies have an appeal in the early stages of transition, but at some point there is a need for introducing more flexibility, if only because of the uncertainty surrounding the level and the evolution of the equilibrium real exchange rate. The conclusion is therefore that in spite of the "one market, one money" logic, membership in monetary union will for a long time be narrower than membership in the single market.

Would such a two-speed integration give rise to prolonged differentiation, over and above what is envisaged in the Maastricht Treaty? In spite of a growing body of research devoted to the economics of two-speed monetary integration, it is difficult to reach firm conclusions because the creation of a monetary core will set in motion both centripetal and centrifugal forces (see Pisani-Ferry forthcoming for a survey of this literature). There are, however, two main reasons why a lasting divide could emerge. First, the possibility must be contemplated that economic or political divergence could make temporary abstention or exclusion more lasting than currently anticipated. Countries not participating in EMU could embark on a divergent policy course, thereby increasing rather than reducing the cost of convergence (Martin 1995). The commitment to tight fiscal discipline embodied in the Stability (and Growth) Pact that was agreed upon by the European Council in Dublin in December 1996 increases the likelihood of such a divergence between the "ins" and the "outs."

Second, there is a possibility that the specific policy externalities created by monetary union will nurture closer coordination

among the members of the Euro core in fields such as fiscal policy, taxation, banking supervision, and labor standards, plus maybe in establishing specific stabilization or transfer schemes.⁴ Since the project was launched, economists have been discussing the need for such coordination, stabilization, or redistribution schemes, as well as for “political union” in a broader sense, without leveling out their differences and reaching firm conclusions. At French insistence, the European Council eventually recognized in December 1997 the need to create a policy forum for the ministers of finance of the ins (the so-called Euro-x), thereby giving its blessing to the idea that closer coordination will be needed in a monetary union. We cannot therefore rule out a scenario in which the subset of countries participating in monetary union would embark on a much deeper integration course, while those watching monetary union from the outside would eventually choose to abstain from this “ever closer union.”

The EU has barely begun to come to terms with this possibility. The successor to the ERM, whose creation was decided at the Dublin Council of December 1996, is merely a purgatory for EMU applicants. It is not a long-term solution for organizing monetary coexistence within the single market because participation in it will require a high degree of nominal convergence.⁵ Recognizing that not all EU members will take part in the single currency should rather imply laying down what kind of exchange rate policy is deemed compatible with membership in the single market.⁶ In other words, there is a need to define rules of conduct for those member-states which have no intention of participating in the single currency: by what exchange rate discipline will they have to abide for their macroeconomic policy to be considered compatible with membership in the single market? What kind of arrangements will the Union offer to those who intend to apply for membership in the single currency but for whom it is still a very distant goal? These questions have not yet received precise answers.

The conclusion from this analysis is that monetary union raises more fundamental questions than do the previous stages of integration. There are deep reasons for that: although standard trade theory states that trade liberalization and facilitation are unambiguously beneficial for participating countries (and therefore that exemption clauses can be justified only on a temporary basis), macroeconomic and monetary theories do not lead to similar statements as regards

monetary union. Furthermore, participation in a fixed exchange rate regime or monetary union is *by nature* voluntary. There is therefore no overriding reason to assume that monetary union will soon encompass all the member-states of the Union.

ENLARGEMENT TO THE EAST

The prospective accession of the CEECs should also transform the nature of the EU in a fundamental way. The Community started as a group of highly homogenous countries as regards their relative development level, with GDP per capita in the poorest country (Italy) reaching 70 percent of that in the richest (Germany).⁷ This ratio dropped to 40 percent after the accession of Ireland and Greece (in the 1970s) and Portugal (in the 1980s), but in 1995 population in the cohesion countries totaled 17 percent of the Union's population (and only 6 percent excluding Spain, whose relative development level is roughly comparable to that of Italy in the 1960s). With the accession of Poland (assuming it would take place in 2005 after some catching up) the ratio would drop to 30 percent, and the accession of Romania (in 2015) would further reduce it to 20 percent. Table 1 illustrates that even assuming that the Community will continue to function as a convergence machine, enlargement will dramatically reduce its homogeneity. As Inotai (1996) put it, with its enlargement to the East the Community will have to deal with "integration through development" rather than "integration through the market."

These transformations are bound to deeply affect the scope of internal transfers through the structural funds and the CAP. Recent academic estimates of the net budgetary cost of enlargement (i.e., the cost to the current members of the EU), which take into account both the impact of past and prospective impact of CAP reform and constraints to the absorption of transfers on the receiving side, come up with more conservative figures than the earlier estimates: according to Baldwin et al. (1997), this cost would range from ECU 10 billion to ECU 20 billion for the four Višegrad countries and Slovenia, instead of the ECU 60 billion envisaged in earlier studies.⁸ Further enlargement to Balkan countries and the Baltic states could increase this cost by at least 50 percent. These are certainly trivial figures from

Table 1

Disparity within the EU, 1965–2015*(Unweighted coefficient of variation of GDP per capita, PPP exchange rates)*

Grouping	1965	1975	1985	1995	2005	2015
EC-6 ^a	10.0	6.8	5.1	2.3	2.5	3.3
EC-9		16.9	16.1	9.4	8.8	7.7
EC-12			26.2	21.9	21.1	18.1
EU-15				19.5	18.8	16.2
EU-21 ^b					32.1	26.8
EU-28 ^c						42.2

Source: Harmonized Accounts on Trade and the World Economy (CHELEM) Database (Paris: CEPII) and other sources for observed data; author's calculations for long-term projections.

^aWith Belgium and Luxembourg counted as one country; unified Germany replaces West Germany from 1991 on.

^bEU-15 plus the Czech Republic, Hungary, Poland, Slovakia, Cyprus, and Malta.

^cEU-21 plus the three Baltic republics, Albania, Bulgaria, Romania, and Slovenia.

Note: Bold characters indicate data at the time of successive enlargements; the first and second enlargements are supposed to have taken place in 1975 and 1985 for the sake of simplicity.

an historical perspective. Furthermore, the level of structural transfers to the new member-states of the EU will result from a political decision, rather than from the mechanical replication of previous schemes, and as indicated by the Agenda 2000 program, the current attitude toward budgetary transfers suggests that the EU will attempt to avoid increasing the ceiling for Community expenditures. As the above figures would imply a significant increase (by 15–30 percent) in the contribution of the incumbent countries to the EU budget, save severe restrictions in transfers to the EU farmers and the incumbent poor countries, this is an indication that enlargement will certainly give rise to protracted controversies. The political cost of reforming the EU budget will not be trivial.

Focusing on the budgetary implications of enlargement to Central and Eastern Europe (CEE), however, misses a much more complicated issue for the forthcoming negotiations: the conditions of CEE participation in the single market. The Community started in the 1950s with an ambitious political goal but a less ambitious economic commitment to gradually liberalize trade in goods and put specified sectoral policy areas under Community guidance: this was, after all, the essence of the Monnet doctrine. Even putting aside monetary union, the Community of the 1990s is a far more ambitious venture. It involves, at least in principle, the dismantling of border controls and the renunciation of any form of contingent protection; unfettered capital and labor mobility; a near complete liberalization of trade in services, including part of the traditional realm of public services; common rules for and Commission authority over competition and state-aids policy; the opening of public procurement; a partial harmonization of indirect taxation; and a large body of economic legislation aiming at achieving a sufficient degree of harmonization of national policies to implement mutual recognition of technical, environmental, and sanitary standards, health and safety regulations, and labor standards. This is the inheritance of the single market program, which came into existence as the result of a major effort that mobilized the energy of the Community during a decade and still raises controversies in some member-states as it implies introducing competition in traditionally sheltered sectors. In spite of the extraordinary changes that have taken place in Central Europe, to what extent countries in the midst of their takeoff should participate in this system is debatable. Although no comprehensive study is available, several scholars have already expressed concern in this respect (Baldwin 1994; Fingleton et al. 1995; Smith et al. 1996; Economic Commission for Europe 1996; von Hagen 1996; Sgard 1996; Baldwin et al. 1997). A few points can be put forward.

The first issue is the administrative cost of implementing the single market in the CEECs. The Commission services reckon it will require the adoption of hundreds of pieces of economic legislation, even taking into account possible restrictions on the definition of the *acquis communautaire*. This is bound to be a significant burden for countries not yet equipped with fully fledged market systems and without the administrative resources that would ensure proper implementation. As already recognized by the Commission, institu-

tion-building on a large scale will be required. Monitoring the effective enforcement of such a large body of legislation in an increasing number of countries is also bound to be a very demanding task for the Commission. Difficulties in implementing the 1995 Community White Paper on preparations for the accession of the CEECs confirm the size of the task (European Commission 1995).

A second and more profound issue is whether swift and complete adoption of the single market legislation is advisable from the point of view of the transition countries. Implementing a legal and regulatory framework that was explicitly designed on the assumption that all participating countries had reached a high level of development (this was after all the rationale behind the “new approach” to regulatory policy, which put emphasis on mutual recognition rather than harmonization) could involve suboptimal social choices. A clear distinction must be drawn here between different types of legislation:

- Adopting Community product quality and safety standards will anyway be required for exporting to the EU market; in this respect, efforts toward upgrading these standards will be conducive to the CEECs’ competitiveness. But the participation in the single market would require that all goods (including those for domestic consumption) be subject to the same requirements; this may be undesirable for the least advanced of the CEECs, whose consumers may value quality and safety less than the affluent citizens of the EU.
- Harmonization of process regulations—e.g., in fields like the environment or working conditions—is not required for giving to the CEECs full access to the EU market; it would result only from the application of existing EU legislation and could conflict with the associated countries’ own social choices (because the implicit value of, say, environmental goods depends on the level of income); it could even significantly hamper the catching-up process. But the coexistence of different standards within the single market (in fields like the environment or social legislation) would almost certainly be challenged by producers from the incumbent member-states on grounds of unfair competition.

- Most of the CEECs have already adopted the principles of EU competition policy, and there is no doubt that this was part of the basic toolbox of a market economy; however, full implementation of the EU's competition and state-aids apparatus might be excessive (Fingleton et al. 1996).
- It is questionable whether full capital market liberalization and full liberalization of the market for services should be implemented at the current stage of the transition process.

A third issue relates to the effect of full participation by the CEECs in the single market on the incumbent member-states of the EU. A prominent topic in this respect is obviously labor mobility since the incumbents are likely to insist on controlling migration inflows for a prolonged period. This will prevent the accessing countries from participating in the Schengen arrangements. But the incumbents will certainly resist full participation of the CEECs in other fields in which uncertainty as regards the actual implementation and enforcement of Community rules would undermine the very principle of mutual recognition. As noted by von Hagen (1996), financial services are a case in point: integrating into the single market for financial services a country whose banking system is perceived as fragile could undermine the confidence of the general public in the financial system as a whole. Similar difficulties could arise for consumer products safety or sanitary and environmental standards, as well as for the operation of the VAT system, which is already subject to fraud (Lefèbvre and Guichard 1997). The "mad cow" disease has illustrated how quickly member-states could revert to national standards when health and safety are at stake.

Obviously, individual CEECs are in very different situations with respect to these issues. There is much variance in the quality of the government machinery. Some countries are already well advanced in approximating their economic legislation to that of the EU, while others are still striving to create the basic institutions of a market economy. There are also considerable differences as regards, for example, the enforcement of tight budget constraints on ailing companies and the separation between credit and subsidization. But the above issues have at least some relevance for all potential applicants. For countries whose transition strategy relies heavily on government intervention,

the gap between the present situation and the single market principles is simply too wide to be bridged in the near future.

Solutions to these dilemmas are already under discussion. One possibility would be to distinguish between those pieces of legislation that are deemed essential for the functioning of the single market and those which can be temporarily put aside. This approach would result in defining, within the *acquis*, a “core” which the CEECs would need to implement fully in order to be able to participate in the single market without disrupting it (Portes 1996). A second approach could be to enlarge the EU while “exempting” the new member-states from full participation in the single market through “temporary derogations”—i.e., to include them de jure as full members of the Community, while limiting de facto their participation to membership in a customs union without, for example, removing border controls, achieving mutual recognition, or implementing freedom of provision of services. Both approaches would imply defining a number of transitory derogations which would apply for a specified time period.

Both approaches have the merit of trying to remove obstacles to early accession. In fact, the worst-case scenario would be West European procrastination leading to East European discouragement. By laying down conditions for membership (at the European Council of Copenhagen) and a timetable for negotiations (at the Madrid Council), the EU has created expectations, and it should be careful not to disappoint them. Neither approach is, however, really satisfactory. The “core *acquis*” approach is likely to be very difficult to implement because what is at stake is the definition of the essential conditions for a proper functioning of an integrated European economy without border controls. Excluding part of the existing legislation—for example, as regards some state aids, public procurement, or labor and environmental standards—would give rise to a flurry of controversies in the name of competitive distortions and probably lead to questioning the rationale for having included these provisions in the Community law. Furthermore, even an *acquis* limited to its core provisions would represent a significant challenge for the applicant countries. Including adoption (and enforcement) of the core *acquis* among the conditions for membership would at least result in delaying significantly the accession of part of the CEECs. At worst, it would create a permanent divide between the “ins” and

the “outs” of accession and could contribute to putting some countries on a divergent path (Martin and Ottaviano 1995).

The risk of divergence could be significant since the EU has not yet been able to offer the CEECs an attractive alternative to full membership. It should be recalled that the Europe Agreements (the association agreements) currently in place do not include a commitment by the EU to the eventual admission of the associated countries; that contingent protections remain in place for industrial goods (the EU has indicated only that it could reduce contingent protections subject to “satisfactory implementation [by the CEECs] of competition and state-aids policies . . . together with the wider application of other parts of Community law”);⁹ and that market access remains restricted for agricultural products; and that participation in the Europe Agreements does not give to an applicant any form of participation in Community decisions¹⁰ (see appendix table). The alternative to membership is thus simply to remain an outsider. The creation of a European Conference, which was decided at the European Council in Luxembourg, is a recognition of the existence of a problem. It is not (not yet at least) a solution.

The “temporary derogation” approach conforms to Community tradition on the occasion of previous enlargements, but at a smaller scale and for shorter periods than would be necessary in the case of the CEECs: the single market risk was not yet in existence when Spain and Portugal became members of the Community, and the European Free Trade Association (EFTA) countries had already adopted most of the corresponding legislation when they entered it in 1995. Relying on the same approach would risk creating an extremely complicated and opaque system in which some member-states would benefit (or suffer) from tailor-made derogation while having a vote on the definition of the same policies from which they are exempt. As Baldwin et al. (1997) emphasize, the Community experience shows that, as can be expected in a system based upon majority voting, the inclusion of new members tends to tilt policy decisions toward their interests. Having the CEECs both within and without the single market would be a recipe for clouding the decision process, as if countries in the ERM were participating in the monetary policy decisions of a European central bank.

TURKEY AND THE MEDITERRANEAN COUNTRIES (THE MEDS)

The prospect of enlargement has given rise to a revival of the Mediterranean policy of the EU, which under pressure from some member-states felt obliged to design a strategy toward its Southern flank. This commitment was highlighted at the Barcelona conference of 1995 and resulted in the EuroMed agreements, the first of which was concluded in 1995 with Tunisia. The aim is to create a Euro-Mediterranean free trade area (for industrial goods) by 2007. But there were deeper reasons for such a policy than a mere concern for (artificial) symmetry. The EU's Southern neighbors are demographically dynamic but economically fragile and politically unstable. Although there have been some success stories, the Mediterranean region is lagging behind more dynamic areas of the former developing world, and the EU has reasons for being concerned with the risks of a development failure on the other side of the Mediterranean. Furthermore, U.S. initiatives toward Mexico and the Americas have highlighted the need for a European trade and development strategy toward the Mediterranean region.

Turkey is a different case because it is a candidate to accession and since 1996 has been part of a customs union with the EU (of which it is the sole non-EU member). Whether Turkish accession can be contemplated is a contentious issue: some member-states have clearly indicated their reluctance toward it, but the Turks are adamant that they should not be denied the right to membership. The Luxembourg Council of December 1997 confirmed that Turkey is in principle eligible for membership, but it did not decide to open accession negotiations.

The EU's policy toward the Mediterranean region is problematic for two reasons. On purely economic grounds, the commitment toward liberalization enshrined in the recent agreements is highly asymmetric because the EU has not made any significant move toward liberalizing access to its agricultural market, while the Meds are committed to fully liberalize their markets for industrial goods. In spite of the upgrading in Community assistance toward the region, this is likely to create difficulties (Bensidoun and Chevallier 1996). Furthermore, the nature of the partnership offered by the EU is unclear. As indicated by the appendix table, the association agree-

ments concluded with the CEECs and the EuroMed agreements, as well as the customs union agreement with Turkey, have several features in common. But they differ in many details, most notably as regards the end-goal of the association with the EU. These differences highlight the hub-and-spoke nature of the EU's trade agreements and the lack of a general concept for integrating countries with different historical backgrounds and at different stages of economic development. This strikingly contrasts with the approach adopted in Asia, where Asia-Pacific Economic Cooperation (APEC) encompasses very diverse countries with different attitudes toward trade liberalization, while setting common goals that each member commits itself to pursue (Drysdale et al. 1997). Whereas the limits to the noninstitutional approach to integration prevalent in Asia have been made apparent by the currency and financial crises of 1997, this is no reason for not drawing on the achievements reached in this region.

IS THERE AN ALTERNATIVE STRATEGY?

In sum, both monetary union and enlargement raise similar concerns: (i) for an undetermined time period, it is unlikely that all potential applicants will be able to fulfill the criteria for admission; (ii) premature admission of new members could both be detrimental to them and lead to disrupting the functioning of integration; (iii) deeper integration creates new channels of interdependence and specific needs for policy coordination or harmonization, which should best be dealt with among the participants, without involving the outsiders; (iv) excluding applicants without offering them a stable and clearly designed form of partnership would create resentment and might lead the "outs" to embark on a divergent path. In addition, the EU faces pressures to better organize relations with neighboring Mediterranean countries.

The search for a method for addressing the new challenges of integration should start from the recognition that diversity in the willingness and the ability to participate in European integration is here to stay. Instead of offering a single model for membership, the EU could explicitly acknowledge the existence of several possible

levels of integration and adapt its institutional scheme in order to make possible the coexistence of different integration circles. This “variable geometry” approach does not imply a degeneration toward a *Europe à la carte*, in which each member would be able to pick its favorite items without having to enter compromises with the others, as long as it is based upon a clear concept for flexible integration. On the contrary, it involves the definition of a *Europe au menu*, in which member-states would be offered a limited number of clearly defined options. In order for the system to be viable, each integration option should include a bundle of those policy competences that are necessary to make it sustainable.

The two main models for organizing integration in this way are (i) the integration circles approach, and (ii) the open partnership approach. The first scheme is inspired by a desire not to create a division between the elite and second-class member-states. According to this approach, which was proposed by CEPR (1995), all countries would participate in a “common base” (essentially the single market) and would be free to enter into specialized “open partnerships.” The second scheme derives from the “core” approach à la Lamers and Schaüble (1994), which could lead to the formation of concentric economic integration circles as developed in Pisani-Ferry (1995).¹¹

The appeal of the open partnership approach is that it offers a simple and clearly organized model. Its first drawback is its inherent contradiction between limiting Community integration to the single market status quo and attaching all supranational features to it. As any comparison between the EU and existing free trade areas confirms, the Community institutions were created in view of more ambitious aims than ensuring the smooth operation of the single market. If the common base were to be limited to the management of existing integration areas, the Community system (especially the Court of Justice and the Parliament) might soon prove superfluous. Symmetrically, building a monetary union through purely intergovernmental arrangements might well lead to difficulties. The German debate on the need for parallelism between monetary union and political union highlights what is at stake in transferring monetary competences to a European central bank (Issing 1996). Furthermore, there is a discussion on the implications of monetary union in the budgetary sphere, and it is sometimes envisaged that monetary union could give rise to increased fiscal coordination and the creation

of quasi-federal income stabilization schemes (Courchene et al. 1993). If this were to happen, limiting supranationalism to the common base would clearly be unsustainable. A second drawback of the open partnership approach is that it does not offer a solution for potential member-states that would face difficulties in becoming full members of the single market.

The alternative approach, that of integration circles, starts from the recognition that integration does not start with the full participation in the single market and does not stop with it. It attempts to provide a scheme for organizing the coexistence of different levels of integration through adopting and replicating at a lower level the Maastricht approach to monetary union. To each level would correspond a set of laws and specific decision-making mechanisms in which all countries participating at that level would have a vote. Graduation from one level of integration to the next would be neither mandatory nor automatic. It would require both a voluntary decision by the applicant and the fulfillment of a precisely defined set of criteria, as already decided for membership in monetary union.

The Union could thus comprise three integration levels: the customs union, which could quickly encompass virtually all the CEECs, which would in this way acquire membership status with all its political implications; the single market, which would comprise all present member-states and the most advanced of the CEECs as soon as they were able and willing to abide by the corresponding disciplines; and monetary union, in which membership could remain limited for a protracted period.

- Participation in the customs union would be open to all European countries that (i) fulfill general criteria and (ii) are willing to adhere to the Community's aims and implement the corresponding policies (such as, for example, the essential components of competition policy). It would grant its members full access to the Community goods market (but without the complete removal of border controls or the freedom of movement of factors), as well as participation in most of the Community's structural policies (such as infrastructure and regional development policies). Agriculture obviously gives rise to specific problems, but in principle there is no reason why agriculture should not be part of the customs union arrangement. Trade conflicts

would be subject to dispute settlement within the framework of Community law. Participation in the customs union would imply contributing to the Community budget and having access to Community regional development programs, but specified budgetary funds could be restricted to participants in the single market level or the EMU level (as is currently the case for the cohesion fund).

- Participation in the single market—i.e., the Community as it is prior to the formation of monetary union—would be decided upon on the basis of specified criteria (which would refer to the adoption of Community legislation in all fields deemed essential for the functioning of the single market, including process regulation, state aids, etc.) and would be subject to vote as is the case for EMU. It would give access to full participation in all Community policies except monetary union.
- Participation in monetary union would remain subject to the fulfillment of specified convergence criteria.

Such an approach would have several advantages: (i) it would remove most uncertainty as regards accession; (ii) for the CEECs, participation in the customs union would be a significant improvement on the present situation because it would grant them voting rights, as well as wider access to EU funds, and would remove the essentially bilateral, hub-and-spoke nature of current trade arrangements; (iii) instead of overloading pre-accession programs with conditions required for participating in the single market, preparation for the single market would become part of a post-accession strategy; countries willing to develop economic and political links with the EU would not be obliged to choose between being out and participating fully in European integration.

Apart from its distance from existing commitments, this approach also has significant drawbacks. It would require creating different tiers of legislation. It would imply difficulties in achieving coexistence among countries belonging to different integration circles. And a three-tier system would create difficulties for the operation of supranational institutions and might give rise to institutional confusion. (The difficulty could be especially serious as regards the European Parliament.) However, there is no easy way out of these

problems, which arise as soon as a form of variable geometry is contemplated. The underlying reality is that the Community's homogeneity is a thing of the past (Emerson forthcoming). Rather than striving to adapt diverse countries to a single European integration model, there is a case for adapting the integration model to the diversity of the Europe of today.

NOTES

This is a revised version of a paper prepared for the conference "Will There Be a Unified European Economy?," held in Vienna on 5–6 June 1997 and organized by the Berkeley Roundtable on the International Economy (BRIE) in cooperation with the Bruno Kreisky Forum, Vienna. This version takes into account decisions since the conference version was written (e.g., as regards EU reform, EMU, and enlargement), but retains the original argument of the paper, although it has in some respects been made obsolete by the course of events since spring 1997. This study was written while the author was director of the Centre d'Études Prospectives et d'Informations Internationales (CEPII), Paris.

1. See appendix table below.
2. This was a prominent result of the evaluation of the impact of the single market undertaken by the EU Commission in 1996. See Fontagné et al. (1997).
3. The Luxembourg Council of November 1997 set out common objectives and broad guidelines for employment policies. It may have initiated a process of (weak) convergence in the field of labor market policies. Tax policy approximation is also receiving increasing attention in intergovernmental discussions. More generally, competition in goods, services, and factor markets is increasingly fostering convergence in fields that were previously considered free from the pressure of European integration.
4. This is a highly disputed issue. See, for example, Fatás (1997).
5. In community jargon, it is an attempt at organizing relations between the "ins" and the "pre-ins," not between the "ins" and the "outs."
6. Whether membership in the single market requires some form of exchange rate discipline is a matter for discussion. In a recent paper, Eichengreen (1996) argues that while the economic link between the single market and the single currency is not strong enough to make participation in monetary union mandatory, there is a strong *political economy* link between the two. This is because participation in the single market implies that member-states deprive themselves from all contingent protection instruments and abide by the Commission rulings in the field of competition policy.

7. Data refer to 1960 GDP per capita at PPP exchange rates (source: Harmonized Accounts on Trade and the World Economy [CHELEM] Database [Paris: CEPII]).
8. The extrapolation of per capita structural funds spending by Courchene et al. (1993) led to a net cost of ECU 26 billion. Anderson and Tyers (1995) put the cost to the agricultural budget at ECU 37 billion.
9. 1995 White Paper on the preparation of the associated countries; cited in Smith et al. (1996).
10. Even Turkey, who is now formally in a customs union with the EU, has not gained participation in decisions as regards the common trade policy. See below.
11. Whether or not a potential defense and security circle would also be concentric is a different issue.

Appendix Table

Trade Agreements with the EU: CEECs, Turkey, and the Meds Compared

	Association Agreements	Turkey-EU Customs Union	EuroMed Agreements
<i>Principles and Aims</i>			
Date	<ul style="list-style-type: none"> • First agreement with Hungary, 1991 	<ul style="list-style-type: none"> • Principle agreed 1964, agreement 1995 • Created 1/1/1996 	<ul style="list-style-type: none"> • First agreement with Tunisia, 1995
Countries	<ul style="list-style-type: none"> • Ten countries from CEE and the Baltic 	<ul style="list-style-type: none"> • Turkey 	<ul style="list-style-type: none"> • Three Maghreb countries + Egypt, Jordan, Israel
Nature and aims	<ul style="list-style-type: none"> • Free trade area (FTA) • Agreements meant to prepare for eventual accession 	<ul style="list-style-type: none"> • Customs union • Disagreements over possible accession 	<ul style="list-style-type: none"> • FTA • EuroMed partnership and free trade; no accession envisaged
Institutions	<ul style="list-style-type: none"> • Association Council 	<ul style="list-style-type: none"> • Association Council 	<ul style="list-style-type: none"> • Association Council

<i>Tariff and Nontariff Liberalization</i>			
Nonagricultural goods	<ul style="list-style-type: none"> • Elimination of all duties (phased out over five years for EU, over ten years for CEECs) and of most quantitative restrictions (QRs) after transition period • Cumulative rules of origin for Višegrad/Balkan/Baltic states (but not across groups) • EU contingent protection remains in place; could be reduced after the CEECs adopt EU competition and state aids policy 	<ul style="list-style-type: none"> • Removal of QRs and of technical barriers within five years • Adoption by Turkey of EU common external tariff with limited exceptions (5 percent of Turkey's imports) • Adoption by Turkey of EU trade policy instruments and preferences • EU anti-dumping to remain in place for interim period • Turkey committed to adopting CAP rules, but without time constraints • No agreement 	<ul style="list-style-type: none"> • Meds already access EU market duty-free; no further commitment to eliminating QRs and contingent protection • Med liberalization completed in twelve years (end 2008) • Cumulative rules of origin for Maghreb only • EU contingent protection remains in place • No progress
Agriculture	<ul style="list-style-type: none"> • Partial liberalization • Commitment to capital account liberalization 	<ul style="list-style-type: none"> • No agreement 	
<i>Capital, Labor, and Services</i>			
Capital flows, FDI, right of establishment	<ul style="list-style-type: none"> • Liberalization of FDI and profit repatriation • Free entry within ten years + national treatment in most sectors 		<ul style="list-style-type: none"> • Commitment to capital account liberalization "when time is right" • Liberalization of FDI and profit repatriation • Right of establishment to be covered by subsequent agreement

Migration	• No liberalization	• No liberalization	• No liberalization
Services	• Weak commitment to liberalization • Cooperation and technical assistance (TA) in specific sectors	• No agreement	• No specific commitment (reference to GATS) • Cooperation and TA in specific sectors
<i>Deeper Integration Provisions</i>			
Intellectual property	• Adoption of international provisions within five years	• Swift implementation of international provisions (within three years or less)	• Adoption of international provisions within four years
Competition policy and state aids	• Adoption of basic EU rules within three years • State aids temporarily accepted for development purposes	• Adoption of basic EU rules within two years • State aids temporarily accepted for development purposes, except for textiles	• Adoption of basic EU rules within five years • State aids temporarily accepted for development purposes
Standards	• Cooperation implemented • EU to assess conformity of products • Mutual recognition sought	• General commitment to cooperation • EU to assess conformity of products	• Cooperation agreements to be concluded • EU to assess conformity of products • Eventual mutual recognition
Public procurement	• Mutual access (with ten years of transition for CEECs)	• No agreement	• No agreement

Source: Based on Winters (1996) and other sources. Note that the detailed content of the bilateral EU-CEEC and EuroMed agreements may vary from one country to another.

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COMING TO TERMS WITH A LARGER EUROPE: OPTIONS FOR ECONOMIC INTEGRATION

Helen Wallace

THE CONTRADICTION LOGICS OF PAN-EUROPE

Two contending logics have so far dominated the debate on how the Central and East European countries (CEECs) might become part of a single European economic space. One is a common sense and incremental logic of economic liberalization, and the other is the logic of conventional enlargement of the European Union (EU). The first logic starts from the simple proposition that the establishment and sustenance of market economies in the CEECs requires their inclusion in a multilateral regime of trade and payments as quickly as possible and their coverage by the kinds of market regulation mechanisms that have now been established in Western Europe through the Single European Market (SEM). The second logic requires the incumbent EU members to accept the accession of the CEECs (or some of them) as full family members. It would mean the application of the whole range of EU policies across pan-Europe.

Neither logic is straightforward. Incremental liberalization implies a form of "shallow" economic integration. It requires a degree of political engagement sufficient to enable the EU side to go beyond the terms of the current European association arrangements. These latter allow graduated market access in manufactures and some services but exclude agriculture and free movement of capital and labor; they also leave the EU side able to impose measures of contingent trade protection. A more generous and certain version of shallow liberalization would require the EU to draw a line between membership and nonmembership in terms of market access and regulatory arrangements in different ways from any that it has done in the past with other external partners. The European Economic

Area (EEA) model, devised as a link with the countries of the European Free Trade Association (EFTA), is a kind of precedent but distinctive in that it was devised for advanced industrial countries with highly sophisticated legal and administrative infrastructures. The EEA model would need considerable adaptation to provide the functional equivalent for the CEECs as the successor partnership to Europe association.

The full EU membership formula would be a big bang approach. It implies the leapfrogging of intervening arrangements, so as to include the CEECs within the "deep" integration model developed in Western Europe over the past four and a half decades. It would require the EU side to accept within the fold countries with as yet underdeveloped economic, political, and legal infrastructures and countries with still low levels of economic wealth and significant agricultural sectors. Thus the potential costs and burdens for the current EU are considerable. Moreover, the concept of deep integration goes way beyond the management of the economy in including political and security engagements that are far-reaching. For the CEECs the disciplines associated with accepting the *acquis communautaire* are considerable, though the benefit is that the disciplines are mutual (i.e., existing EU members are also bound) and the institutional framework is certain. In addition, the political corollaries are extensive for countries still in the midst of establishing independent democratic polities. One major concern on the EU side is that the steps involved are so large for both sides that they risk prejudicing the survival of the deep integration model itself.

For the moment the theory of current discourse is that it is the second logic that will prevail, in that the CEECs have declared it as their objective and the EU side has acknowledged the eventual goal of Eastern enlargement. Accession negotiations with some of the ten Europe Associates (along with Cyprus) were scheduled to follow the intergovernmental conference (IGC) concluded in Amsterdam in June 1997. Behind this formal discourse, however, lies a plethora of uncertainties over the timescale of enlargement, over which of the CEECs might in practice join, over the terms on which accession might actually be agreed (the Spanish and Portuguese were forced to accept long transition periods), and over whether each of the CEECs will hold to the course of EU deep integration.

Of the two formulae it is generally argued that full EU enlargement based on deep integration would be the first best outcome for the CEECs. How good a second best the shallow variant might be would depend on how it was constructed. The extent of the adjustments that would be needed by both CEECs and incumbent EU members to achieve an inclusive version of deep integration necessarily casts doubt on its realism. A range of scenarios can be envisaged. The CEECs might be admitted only slowly and in successive waves of “manageable” small numbers. This is the implication of the distinction drawn in July 1997 by the European Commission between a first group of candidates and those less ready. A sharp and enduring distinction might be made between Carolingian Central Europe—Poland, Hungary, and the Czech Republic—and the rest. Enlargement as a whole might stall, not least because of the obstacles to policy and institutional reform within the EU. A version of shallow integration might be devised as an alternative, but perhaps not until the conventional enlargement route has been tried and failed. The current and inadequate Europe association formula would have to be stretched and patched to cope with intervening demands for an enhanced policy regime. “Accession partnership” was adopted in autumn 1997 as the label for those in the waiting room for membership.

These various possibilities are essentially dependent on the politics of the debate about pan-Europe. What is more, these politics, so far at least, have been driven by the preferences of West Europeans, much more than by the politics of the CEECs, whose asymmetrical relationship with the EU leaves them vulnerable, dependent, and caught in a set of bilateral links that offer only limited political leverage. Yet much of the core of the problem to which a solution is sought is economic—namely, about how to provide both certainty and appropriateness to the terms of market access for the CEEC economies and to the forms of market regulation that they will develop. Economic agents—entrepreneurs and investors—in both parts of Europe would prefer a more certain basis from which to make their planning assumptions.

Two economic elements in this debate remain underspecified. One is whether we should assume that economic development in the CEECs is likely to consist of retarded imitation of the post-World-War-II West European economic model or instead expect other vari-

ants to emerge—a “third way.” Competition from lower cost CEEC products would impact in different ways depending on how their economies develop. Hence the second missing element is how we might expect economic agents in Western Europe to treat the emerging CEEC economies—as a lower cost production platform? as dynamic new markets? as a source of destabilizing additional competition? There are opportunities for some West European entrepreneurs and threats for others, as well as knock-on impacts on labor market and social adjustment in Western Europe.

More particularly in the context of how broad policy will be shaped, we need some understanding of how preferences are likely to be formulated on the EU side. The conventional wisdom is that an array of protection-minded veto groups in Western Europe stands between the CEECs and a liberal form of partnership with or accession to the EU. But here we have contradictory historical precedents. There is certainly much evidence to suggest that EU trade and market-regulating relationships with clearly “third countries” have been much influenced by the voices of vested and often protectionist interests within the EU. Similarly the EU has been prone to displace the costs of intra-EU economic and social adjustment on to third countries—in this respect EU behavior is similar to that of other powerful trading blocs or big countries. On the other hand, the devising of relationships within the family has over the history of the EU (and previously the European Community [EC]) been influenced by politics as much as—perhaps more than—economics. In bargaining within the family, broader considerations of collective interests, national political goals, and governing ideas have been powerful influences on policy outcomes. There is substantial evidence of political preferences leading economic preferences on some issues, and at least of an iteration between political and economic preferences, a process accentuated by the particular character of the EU bargaining processes and structures.

The crucial question which then follows is whether the CEECs are likely to be treated as potential family members or rather as a special category of third countries, albeit in a position of peculiarly vulnerable dependency. It is on precisely this question that the jury is still out, in spite of the formal decision of December 1997 (by the European Council) to open negotiations with some of the CEECs. The willingness to take EU enlargement as the presumed model for

the relationship with the CEECs implies a readiness to talk in terms of family membership. On the other hand, the obstacles to achieving such an outcome are such as to cast doubt on its achievability. What remains then to be clarified is what the default relationship would be. The more benign default would be a designed and deliberately fashioned version of shallow integration. The less benign default would be protracted uncertainty, in which political design was absent and economic relations were left dependent on the behavior of economic agents operating as best they could with unstable and unpredictable rules for market access and a plurality of regulatory arrangements.

DEEP INTEGRATION ON TRIAL

Shallow integration in Western Europe—for example, in EFTA and between the EC and its neighbors—has consisted of progressive liberalization in payments and trade in manufactures and services (though not fully extended to agriculture), with freed capital movements added in the late 1980s, and without free movement of labor. It has been supplemented by some policy cooperation and common market regulation and a form of dispute arbitration (in the EEA), but voluntaristic, conditional, and without direct enforcement and adjudication mechanisms. Deep integration, as exemplified by the EU, has tighter policy regimes, stronger disciplines, an autonomous jurisdiction, some directly exercised financial instruments, and a common agricultural policy. Currently EU economic integration is set to deepen further by including a single currency regime for at least some members.

It is not only the intensity and scope of economic integration that is deeper, but also that it is set in an envelope of political integration in two senses: distinctive common institutions, legislation, and jurisdiction; and complementary political and security agreements. Enlargement of the membership of this deep integration circle has in the past been conditional on the willingness and capacity of candidates to accept the disciplines and political engagements in the terms set by the incumbents. The fallback position for applicants has been a semi-detached option, softened by market access arrange-

ments with the EU, and, since the creation of the EEA, asymmetrical participation in the single market regulatory regimes (the same market rules without much voice in their framing). Each enlargement has provoked vigorous arguments among the existing membership about the merits and consequences of each candidate. Deep integration has been deliberately discriminatory among candidates.

In extrapolating from previous West European history, we can observe two different cases. On the one hand, some advanced and industrialized countries—essentially the UK and the Nordics—chose in the early 1950s not to follow the deep integration model and instead relied on the opportunities for shallow economic integration (partly steered through international institutions other than the EC). The main reservation had to do with the extent of political engagement required by deep integration and a preference either for keeping defense cooperation separate (the NATO members' view) or for neutrality. Over time, however, most of the abstainers decided that the economic costs of exclusion from deep integration were greater than acceptance of the political engagements; hence their progressive accession into the deep integration circle, although not always happily (and with a few persistent abstainers—notably Norway and Switzerland).

The second West European group comprised those (Ireland and the South Europeans) where governments decided that participation in the deep integration circle would be the route to economic modernization and political stabilization as functioning democracies. This group has provided the more successful group of late-joiners. The CEECs are closer to the South European case, so far at least, in terms of the policy targets that they have set for themselves. Much of the formal policy debate in the EC/EU since 1989 has extrapolated from this South European precedent, albeit with questioning of how many of the CEEC candidates can be envisaged as potential successes. EU members have also shown considerable prudence about what the financial and economic costs would be of changing the numerical balance within the EU between wealthier and less wealthy members.

However, the deep integration circle bounded by the current EU membership is not a stable arrangement. There are major differences among the fifteen members about what further policy and political commitments should be undertaken; hence the succession

of IGCs to negotiate reforms to the EC/EU. There is an inherent contradiction between EMU and Eastern enlargement. There are serious concerns that a massive extension of EU membership to pan-Europe would put paid to the deep integration experiment. In addition, the pressures of global competition are making it increasingly hard to sustain the sociopolitical compacts that developed in individual West European countries around their economic policies in the post-World War II period. Moreover, the changes of 1989 have exposed a vulnerability of the deep integration model, without active American sponsorship as an ingredient and without the cement of a vigorous military alliance.

Thus the configuration of pan-Europe remains uncertain. For an economic liberalization logic to prevail, it requires a willingness explicitly to separate economic integration from the political and security bargains of the past, so as to engage the CEECs in economic multilateralism. For the deep integration logic to prevail, it requires the existing EU membership to both retain a commitment to the model and accept its extension to CEECs, along with an attendant range of new financial, political, and security responsibilities. The default is prolonged uncertainty as regards the overall institutional setting, as regards both market access and market regulation arrangements east of the current EU borders, and, most likely, variations in the treatment of individual CEECs. And in the case of the CEECs the fallback options are much less clear than for the abstaining West Europeans, which at least had a guaranteed position in the broader arrangements for shallow economic integration.

CHALLENGES OF TRANSITION ACROSS THE CONTINENT

Both Western and Eastern Europe are thus going through experiences of sharp transition, at the macro formal level of restructuring of the political economy and at the micro level of adjustment. One key issue is whether these differently derived processes of transition in the two parts of Europe are complementary or in tension. A version of pan-European deep integration presupposes a high degree of complementarity (some would argue convergence), while tension between the two versions of transition would suggest that a more

fragmented Europe is likely to persist. In the former case the usual premise is that integration would be shaped by the West European inheritance, which would more or less rapidly be extrapolated across the continent eastwards. Two different variants of this could be envisaged: one would be a mutually determined (i.e., with CEEC participation in its definition) alignment of the East European political economy to the West European *acquis*; the other might be described as a form of colonization (i.e., the imposition on the CEECs of the preexisting West European policy regimes). In the case of a fragmented alternative two broad variants can also be envisaged. One might be the continuation of the familiar West European integration process, with a range of hub-and-spoke links to individual East European countries, some spokes being stronger than others. A second variant might be a wider rearrangement, in which the consequences of changes in the Eastern part of the continent would impact on relationships *within* Western Europe, thus altering—some would argue eroding—the established West European integration model.

Western Europe has changed a great deal over the past decade. Much progress has been made with consolidating the SEM and considerable industrial restructuring has taken place, though important parts of this agenda for both public policymakers and private entrepreneurs remain to be completed. The SEM has been extended partly through the EEA and partly by the full inclusion of Austria, Finland, and Sweden within the EU. Member governments of the EU have since become much preoccupied with plans for EMU, both a successor project to the SEM and a response to German unification. Political union, a much less clear, yet also more controversial aim, is another testing preoccupation. There would have been more than enough to keep West Europeans busy without the additional challenge of the larger Europe.

It is not only developments at the transnational or multilateral level that are relevant. Individual West European countries are not in stable equilibrium but are subject to powerful adjustment pressures at the country level. In particular, the social and societal dimension of adjustment to international competition is most evident as a pressure on national governments and the national political fabric, as well as being reflected in high levels of unemployment. It is not only that the social dimension of the EU has failed to develop, but also that individual country responses to the challenges of adapt-

ing the labor market and welfare system are very varied. Thus, for example, the Netherlands is going through a period of positive adjustment, while Belgium is suffering from both a huge public deficit and an internal reformation of the domestic polity. Germany is marked by accentuating tensions, between both different regions (especially east/west) and different sections of society and economy. Versions of social and political adjustment tensions are evident in most EU member-states. The exigencies of the criteria for establishing EMU are combined with both global influences and specific country features to produce new policy and political dilemmas.

ACTIVISM WITHOUT STRATEGY

Under such conditions it is not surprising that there are wide differences of view in Western Europe about where collective European policy regimes should be encouraged and where a protected political space should be retained for country-level policy. The IGC convened in 1996 found itself locked into the details of procedural, not substantive, reforms, partly as a consequence of not having developed a critical pathway to achieving policy reforms or a clear approach to the larger Europe. The responses of West Europeans to both Eastern enlargement and the implosion of Yugoslavia (and more recently Albania) have been ambiguous and ambivalent. In the latter case West Europeans were torn between activism—in the event expensive activism—and strategic policy. (It should be noted that money spent on efforts to rescue something in these countries is money not available for transfers to the peaceful CEECs.) Activism has in practice led to considerable involvement; yet strategic policy has been elusive, reflecting the absence of clarity on the West European side about the goals and cornerstones of a new European policy and about the definition of new security interests.

As regards the peaceful CEECs, the activism has been considerable at both the multilateral and the bilateral levels. Individual West European countries have developed an array of assistance programs. At the multilateral level the security organizations—NATO, West European Union (WEU), and the Organization for Security and Cooperation in Europe (OSCE)—have each been partially adapted

to take account of the new reform democracies. NATO has gone furthest in promising membership to some of the CEECs, although without redefining its own central purposes. In the political sphere the Council of Europe has attempted to develop a process of inclusion for reforming democracies as each has established basic democratic features, though it has not been consistent in the application of its own criteria. It is from this that flows the irritation in parts of CEE about the relaxation of the democracy criteria to admit Russia and Croatia.

The EU has had a two-pronged policy of technical and financial assistance through PHARE and TACIS and of association for the inner ring of CEECs and partnership with the other parts of what was the Soviet Union. For the CEEC associates (now ten in number) the promise was made in 1993 that full EU membership would eventually replace association. These ten Europe Associates have often been divided by West Europeans into distinct groups: the more “advanced” Višegrad countries—Poland, Hungary, the Czech Republic, and, up to a point, Slovakia; Bulgaria and Romania, with much less vigorous transformation processes as yet; the small Baltic states of Estonia, Latvia, and Lithuania, with their problem-posing proximity to Russia; and Slovenia, by a margin the richest of the ten. There is a further penumbra of other European countries in the Balkans, as well as the boundary countries of Ukraine, Moldova, and, some would add, the Caucasian republics. Then there is the extra complication of the complex EU relationships with Turkey, long an applicant for full membership, and with a divided Cyprus, already, though conditionally, promised early accession negotiations.

EU activism vis-à-vis this range of countries still falls well short of coherent and overarching policy. Yes, NATO will be enlarged, in the first instance to include Poland, Hungary, and the Czech Republic. Similarly, the EU will be enlarged, but when, on which terms, and with which countries remains to be specified. The issue of EU enlargement is the one with most obvious direct significance for economic adjustment and reform in Central and Eastern Europe. A clear set of decisions on EU enlargement would have direct consequences for the day-to-day operations of public policy and private entrepreneurship in the CEECs. Persistent exclusion would make clear to both public and private actors in the CEECs that they would have to develop alternative policy regimes, whether unilaterally or mul-

tilaterally. Uncertainty about timing and conditions makes the calculations extremely difficult for the CEECs and also for those from outside who already do or might in the future invest in their economic development.

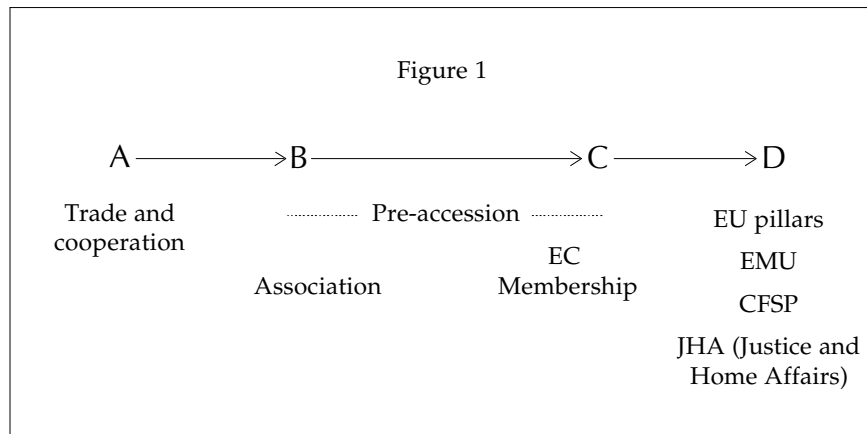
Opinions on each CEEC candidate's readiness for EU membership were issued by the European Commission in July 1997, following conclusion of the IGC in Amsterdam in June, with negotiations for membership to follow. For some time it was unclear whether the first round of negotiations would take place only with those of the CEECs that had progressed furthest toward a presumed EU norm or whether there would be a "regatta," in which boats from each of the ten CEECs would row toward the finishing line but at different speeds. The Commission indicated a firm preference for "differentiation" by opening negotiations with only five (as well as Cyprus): Estonia, the Czech Republic, Hungary, Poland, and Slovenia. In December 1997 the European Council endorsed this proposition, but, under pressure from especially the Danish and Swedish governments, accepted that annually a "critical analysis" would be made of the preparedness for accession of all ten CEEC candidates. In addition, a European conference would be held annually with all the candidates, an invitation also extended to Turkey. This last point was contested by the Turkish government, irritated by not being allowed to start negotiations for accession and by continuing issues about the divided status of Cyprus.

In the CEECs a series of individual country efforts is under way to take forward political and economic transformations, with very varied patterns and sequences of reform. The individual trajectories of reform are hugely constrained, not only by the domestic circumstances of each country, but also by the assumed impact of West European policy regimes. The absolute precondition for each of the CEECs to have a real chance of joining the EU is that domestic practices, rules, and laws governing the operations of the market imitate those of the EU. This was already a requirement under the Europe association agreements signed with each country since the early 1990s. The requirement has been tightened by the pre-accession strategy (PAS) of the EU, adopted at the Essen European Council of December 1994. It would be further embedded by accession to the EU, even though some of the rigors of the *acquis communautaire* might be softened or deferred by derogations won in the accession

negotiations. For the moment, the governing elites in each of the Europe Associates remain committed to the goal of achieving early accession to the EU, a goal which pushes them into a form of rule-dependency as regards the regulation of their markets and their exchanges with the the economies of Western Europe. It cannot, however, be taken for granted that government policies or public support in the CEECs will remain committed to this one-way adaptation process. Signs are already emerging of "Europe" as a potential cleavage in the still unsettled politics of the CEECs.

THE ROUTE FROM ASSOCIATION TOWARD EASTERN ENLARGEMENT

In one sense EU policy toward the CEECs can be straightforwardly stated as charting a conventional pathway from trade and cooperation arrangements to "normal" enlargement. The current version of Europe Association falls part way along this pathway, quite how far along is a matter of debate (see Figure 1). Experience suggests that the distance from A to B is relatively short and easily traveled, while the distance from B to C is rather long, in spite of the PAS designed to facilitate the journey at least as regards market integration. From the point of view of market access into the West European market and market consolidation in the CEECs this has been seen as the key journey to travel, with formal accession to the EU then marking certainty about CEEC inclusion in the single mar-



ket and also binding the existing EU members to guarantee their side of the bargain. However, the fact that the EC has changed into the EU means that full membership of the system presumes the ability and capacity to move from C to D—at some stage. It is around this part of the integration process that the discussion occurs of deepening and widening as antitheses.

Four complications should be noted. One is that market integration in theory ought to include all four factors of production, but in reality the PAS covers goods (not agricultural) and services, but not capital or labor. In earlier enlargements labor movement has typically been a controversial issue, richer countries fearing (often misguidedly) influxes of economic migrants from poorer countries. Thus in the case of EC enlargement to include Portugal and Spain full labor movement was deferred until many years after their formal accession because of the fears of the incumbent member-states. It should be noted that the fears proved largely groundless; before the end of the transitional arrangements Spain had become a net importer of Europeans—i.e., nationals of other EC countries. This shows the importance of both economic improvement and societal optimism in Spain generating a disinclination to migrate elsewhere, albeit with persistent internal migration from south to north.

A second complication is that a base policy of the original EC was the Common Agricultural Policy (CAP), not easily extendable to the CEECs for reasons of both substance and costs. This is one of the subjects of greatest difficulty as regards enlargement. We should note that most discussion on this issue is narrowly focused on the primary agricultural sector, although that this remains so important is a significant factor for the economic prospects of CEEC economies. The relevance of the food processing and retail industries should also be taken into account, as these too are substantial parts of the economies of the CEECs. Some of the early evidence on West European investment in the food distribution and retailing sector reveals this investment being used to boost West European food exports to the CEECs (sometimes through tied distribution arrangements) rather than to invest in or facilitate local sourcing.

The third complication is that market integration rules in the EU are not a stand-alone policy regime but embedded in, and perhaps dependent on, associated or “flanking” policies. These include the measures and funding programs agreed to promote economic

and social cohesion, which have political and social elements, as well as economic aims and financial costs. Flanking policies also include a variety of rules to promote similar process conditions for the production of goods and services, especially as regards environmental and workplace standards. A difficult policy conundrum arises here. It is self-evidently difficult for the CEECs at this stage of transformation and with current income levels to apply environmental and workplace standards comparable to those in EU member-states. Nor are such high standards necessary for products to be made that meet EU product standards. However, West European producers and publics are nervous about accepting goods that can thence compete from a lower cost base. And some West European producers are themselves investing in the CEECs to take advantage of such lower costs.

Last, the end point of what is included in full EU membership has changed from that which was relevant in any previous enlargement discussion. The additions made at Maastricht in 1991 to the *acquis* by plans for EMU, by the second pillar for a common foreign and security policy (CFSP), and by the third pillar for justice and home affairs (JHA) have raised the threshold of what EU, as distinct from EC, membership includes. Each of these elements raises distinct issues about what would be implied for Eastern enlargement. EMU as such is generally regarded as a very distant prospect for the CEECs, or at least most of them, although it should be noted that some—for example, the Poles—have the Maastricht criteria within their policy frame, and even entry into the single currency as a stated and foreseeable objective (2006?). CFSP in some respects looks easier, not least since a key objective of EU enlargement would be to contribute to the political and security stabilization of the Eastern part of the continent. Nonetheless the simultaneous discussion of creating a hard-core defense group in the EU is in tension with the objective of widening the membership of CFSP. In some ways most important, but least addressed, is the JHA pillar of the EU. The growing emphasis on this as a core objective for deepening integration in the EU tends in the direction of raising barriers and controls on the movement of individuals between the EU and the CEECs. This partly relates to problems of criminalization to the east, but also to migration, both economic and political, thus feeding on the nervousness about free movement of labor noted above. The emphasis of the Treaty of Amsterdam on consolidating EU policy on these issues has

made these also relevant to the terms and conditions of accession for the CEECs.

It follows from all these complications that it has become very hard to envisage the Eastern enlargement as simply a series of graduated steps along a familiar route. It might be tempting to separate out the absorption of the CEECs in the market integration parts of the EU from the associated political, societal, and security dimensions. It is exceedingly difficult to do this in practice. The economic parts of the integration package do not stand on their own for the current EU membership, and there is little reason to suppose that this would be possible for the CEECs. The agricultural and financial transfers are tied into the market integration package as a mix of demonstrated solidarity (however hard to define this notion of cohesion) and off-setting side-payments for acceptance by the poorer of the policy agenda of the richer.

One crucial question is therefore what steps would have to precede accession, the place where so far the discussion has been concentrated, and which steps of alignment and convergence would be part of post-accession adjustment. In all previous enlargements there have been substantial post-accession adjustments, albeit on a smaller scale than would be required for the CEECs, given their lower income levels and still uncertain reform capabilities. The current case is, however, more complicated by the number of candidates, the large differences between them, and the lack of clarity about how much of the post-Maastricht version of the EU constitutes the basic reference points for accession. The social protocol, agreed in 1991 to take account of British singularity, is an additional problem in that it explicitly separated some labor market legislation from the total EU integration *acquis*, although the "new" Labour government in the UK intends to remove this exceptionalism.

But the question is yet further complicated by the fact that the EU is not defined only by Maastricht. The implementation of EMU is already generating additional policy demands and policy rules. The 1996–97 IGC, though mainly caught up with procedural issues, debated some further policy goals, in particular as regards common defense, employment, and immigration issues. Running through the IGC debate was also the question of so-called flexibility, significantly called in French "reinforced cooperation." The difficult discussion about flexibility had two quite different objectives. One was to find

ways of enabling the more integration-minded among the current member governments to proceed with some policy commitments, even if these are not shared by all of the current West European members. The second was to alter the decision rules in such a way as to prevent additional new members from the CEECs from dictating the pace, scope, and character of future integration. However one reads the immediate outcome from the recent IGC, there is a real possibility that in the future the EU will be less homogeneous in terms of its policy regimes and less inclusive in terms of its decision rules (de La Serre and Wallace 1997). There might thus be a hierarchy of power and participation quite different from that which has characterized the old EU.

OPTIONS FOR VARIEGATED MEMBERSHIP

Full inclusion of the CEECs into the EU, with a range of transitional arrangements and derogations, would be, we have already suggested, the tidiest solution to the pan-Europe challenge. It would have the great merit of providing baseline certainty about the underlying policy regimes to be implemented, the status of new CEEC member-states would be relatively clear, and there would be legally constraining mechanisms to induce compliance by both West and East European member-states.

In the absence of early and comprehensive Eastern enlargement, we can envisage several possible alternatives. These move across the spectrum between deep and shallow integration and include the following:

- i. *Serial enlargement* for successive waves of CEEC members—for example, earlier membership for the “advanced” Višegrad group (+/- Slovakia) and Slovenia, or for those CEECs, such as Estonia, with the most determined EU patrons, leaving others until later, their links in the interim being defined by the current EU version of association;
- ii. *Tiered membership*, or a “two Europes” variant (the Delors version), with a division emerging among the existing EU Western members between the more and the less integrationist, which

would perhaps make it easier for the slower and more distanced West European group to be joined by a larger number of the CEECs, though some of these—the Poles have been most explicit on this—might be keen to aim for the inner core;

iii. *Partial membership*, in which the integration package was broken apart into a series of more or less parallel regimes, perhaps along the lines of the Maastricht pillars, and perhaps with EMU designated as a quasi-separate pillar, with different patterns of participation for individual CEECs, even conceivably with some included in, for the sake of the argument, the CFSP pillar, but not necessarily within the single market regime;

iv. *Extended association*, in which difficulties about proceeding to a form of regular enlargement might lead to a redesign of the association formula into a new pattern of association; this would be to entrench a new form of shallow integration, somewhat comparable in conception to the EEA for the EFTA countries, albeit with different content; such a formula might be designed for all of the CEECs or only for those whose full accession to the EU might be delayed for some years (or might be “inappropriate”—parts of the former Yugoslavia come into play here); important issues arise here about how multilateral any such formula might be and about what the strength of the discipline might be over compliance on the EU side (N.B. in this context the EU use of antidumping measures against Turkey in spite of the customs union agreement and against Norway in spite of the EEA.)

Variations such as those outlined schematically above might emerge as deliberate policy or as the product of nondecision. The big bang concept of early and inclusive full membership for ten CEECs demands a high measure of consensus among the existing EU members across the full range of relevant policies and the institutional consequences of enlargement. Such consensus is currently far from evident, as is clear from the decision to open negotiations with only some of the CEEC candidates. The various alternatives indicated above would be the result of dissensus or conflicting priorities within the existing EU being projected onto the relationship with the CEECs. They all assume that the main terms of the relationship

would be the result of West European policy pressures, that the CEECs will be regime-takers rather than regime-makers.

EASTERN ENLARGEMENT IN WHOSE INTEREST?

It is conventionally assumed that full accession to the EU would maximize the interests of the CEECs and their economic development. Similarly it is usually argued that on the EU side of the equation interests are dispersed between some favoring Eastern enlargement, those at risk from enlargement, and some agnostics, with the question being whether or not the first group can capture the direction of policy. The discussion tends to muddle up political, security, social, and economic definitions of interest and preference. Thus it is common on the EU side for economic analysis to downplay or misunderstand the other dimensions, as it is for those who are primarily concerned with security considerations to underestimate the economic complications, and so forth. Very little systematic attention has so far been given to the social variables that are relevant to the establishment of a deep integration framework for pan-Europe. This section examines some of these elements and their potential impact on how policy might develop.

POLICY LEADERSHIP

Generally speaking, there was from 1989 onwards, and has so remained, broad political support on the EU side for developing the relationship with the CEECs. At the macro level of discourse and long-term objectives, it has been fairly easily agreed that in the short to medium term policy should be active and encouraging, and (since the Copenhagen European Council of 1993) that, over time, it should lead toward EU enlargement. This language has come from Spanish and French politicians and policymakers (vide Westendorp's insistence in Reflection Group Report and Chirac's round of visits in 1996-97 to the CEECs), as well as from the German and British. Indeed the predisposition to promote the goal of eventual enlargement should not be underestimated and has much resonance of the

political responses in the EC to Spanish and Portuguese enlargement.

There is, however, a gap between broad support or shared symbolic preferences, on the one hand, and strategic policy definition on the other hand. The problems arise when it comes to the detail, timing, and small print, when in all member-states one finds enthusiasm tempered by points of resistance. It is important to be aware that such resistance is present across the EU—i.e., it is found in Germany as well as in Spain. The obvious assumption that the push for Eastern enlargement will come mainly from Germany should not be taken at face value. Thus symbolic commitment is diluted when it comes to the substance and choice of acceptable candidates from among the CEECs, particularly, as will be argued below, when there is no clear security imperative to reinforce the symbolic preference and when the economic balance sheet for EU incumbents is mixed.

In addition, the value preference for extending the European family of democratic countries, while repeatedly articulated by political leaders, is weakly supported by societal engagement, in that the transactions between Western and Eastern Europe remain concentrated among rather small groups of policymakers, politicians, and entrepreneurs. Also to be noted is a feature that distinguishes post-cold-war Europe from post-World War II Europe—namely, that in the latter case many of the elite transactions were through people directly involved in the public sphere, while in the current case the use of consultants on contract as intermediaries produces limited accumulation of elite engagement. Hence in the terms identified by Karl Deutsch and his colleagues (1957) as relevant to supporting policy development, the elements of security community have been so far fragmentary.

It is interesting to note that in the early period following the end of the cold war the European Commission was able to take an active role in defining preliminary forms of assistance and association. It did so within the permissive consensus of EU member governments, rather than according to a tightly defined negotiating mandate from them. Member governments legitimated the opening up of relationships at the level of discourse and symbolism but intervened with precautionary reservations on individual policy issues and economic implications for their domestic clients. Thus the symbolism was in favor of expanding the relationship, while the

client-led policy was often in favor of specific reservations or retained protection. It was often the Commission which had to intervene to mitigate such reservations.

There have, however, been limits to the capacity of the Commission to develop further the relationship with the CEECs. The Commission is not a monolith; different commissioners and services have had varying interests and preferences. It perforce has to deal with the technical sides of the relationship, necessarily therefore having to confront the details—and the problems—of potential CEEC alignment to EU regimes. Its capacity to act as the agenda-setter on this set of issues has been restricted by the wider context of competition between itself and the member-states. Its function as agent of the member-states has been reduced by the absence of a firm steer from the purported principals of policy (even to the extent that the Commission has on occasions had to remind the German government, for example, that it was in danger of forgetting its role as the assumed leading principal). The weight of precedence and previous experience for the Commission as guardian of the *acquis communautaire* has not made it easy for it to develop convincing alternative policy designs to the “normal” enlargement process, although the PAS was devised as in part offering this at the micro level of regulation.

Much of the debate about the costs of Eastern enlargement (through both agricultural support and structural funds) suggests that the coalition opposing (rapid) enlargement is easier to identify than the supporting coalition. The sources of opposition come from those who fear that their own current benefits and embedded interests would necessarily be reduced, or who argue that it would be only if these benefits could be retained that enlargement would be acceptable. Pressures on public budgets, reinforced by the Maastricht criteria for EMU and complicated by the looming reconsideration of EU budget contributions (the British abatement included), make the politics here very tricky. All in all, therefore, the evidence for overt policy leadership in favor of enlargement is sketchy.

ECONOMIC ENGAGEMENT

Yet to leave the discussion there is to focus too much on the static costs and benefits of enlargement. Indeed the early diagnoses by policymakers of the static consequences of trade competition from the CEECs overestimated the volume of low-cost competition and underestimated the openings for EU exports to the CEECs. The restrictions to trade liberalization included in the Europe association agreements at the behest of nervous EU-based producers closed windows of opportunity for phasing gradually the impact of thus enlarging the EU market.

A picture is beginning to emerge of patterns of EU trade with and investment in the CEECs which show rising volumes of economic engagement (Baldwin, François, and Portes 1997). This reflects both the recovery from the immediate economic collapse of the early 1990s and greater optimism about trajectories of further economic improvement. There has been something like a threefold increase in trade since 1989. However, there are big variations on both sides, with much larger engagement from some EU countries than others and some of the CEECs much more involved in trade extension than others (Grabbe and Hughes 1997). To summarize (mostly from 1994 figures), Germany is by far the largest trade partner of the CEECs as a group and is the first trade partner of all except the Baltic states (Russia leading in Latvia and Lithuania, and Finland, followed by Russia, in the case of Estonia). Austria, Finland, and Italy, along with Germany, are the most active traders, all with significant net trade balances. The preponderance of trade is with Poland, Hungary, and the Czech Republic, the main destinations also of direct investment. Hungary by a considerable margin has been the favored location for investment, though the figures are increasing for Poland and Romania. Estonia is some way ahead of Latvia and Lithuania in attracting investment, though mainly from Finland.

The point here is that whatever the detailed analysis of the commodity structure to trade and investment flows, only a minority of EU member-states have so far acquired a significant economic stake in the recovery of the CEECs. This is not to deny the increasing levels of economic involvement from exporters or investors from other EU countries (for example, the Netherlands or France), but volumes remain quite low, and some EU countries have been

scarcely engaged at all. Even in the case of the more actively engaged, it is not entirely clear how far engagement will predispose EU-based entrepreneurs to press governments and the Commission to force the pace of liberalization and inclusion in the single market. We are still left to speculate about, rather than to project, patterns of economic expectations in the EU about potential dynamic opportunities from intensified engagement in the CEECs.

REGULATORY COMPETITION

The single market regime in the EU rests on a mixture of rule-alignment and mutual recognition. The rule-alignment part of the regime is what generates the toughest definitions of the *acquis*, which CEEC candidates are expected to adopt in their domestic arrangements. The SEM remains incomplete in that further details remain to be filled in and the evenness of implementation needs to be improved. We should note that there are consequential pressures to define rules more stringently rather than more loosely so as to prevent backsliding within the EU.

The recent EFTA enlargement has added to the inclination to improve transparency of implementation and to tighten the application of the SEM rules, not just on product standards, but also on process standards. The new members have strong doctrinal and societal preferences in favor of high and enforced standards. Indeed both social and environmental standards were key issues in the EFTA enlargement negotiations, to the point of their reappraisal being crucial to the whole negotiating package. The EFTA candidates secured an unprecedented commitment from the EU-12 to reconsider the environmental *acquis* within the four years following their accession, with a view to a further raising of standards. The effect has been to tilt the balance further within the EU-15 toward favoring higher standards. To be noted here also is the Danish decision from the Edinburgh European Council of 1992, which reiterated the Danish determination to resort to national measures to protect high standard preferences. This was reasserted in the Treaty of Amsterdam.

It was, of course, a crucial feature of the 1992 single market program to complement rule-alignment by mutual recognition, thus favoring a form of regulatory competition. It had been expected by

some that this competition would lead to a race to the bottom, assuming that the market would tend to lead to minimum standards. In practice this has not been the outcome (Woolcock 1994; Wallace and Young, eds. 1997). For a variety of reasons, including the advocacy of high process standards by the Commission, some governments, and relevant environmental and consumer groups, in practice minimum essential requirements have tended to be set quite high.

Hence a double dialectic is set in train. There will be strong resistance to the dilution of these standards in the form of a softened *acquis* for the CEECs, combined with irritation at low-cost competition from the CEECs thought to result from lower process standards. But there are also West European entrepreneurs seeking to take advantage of less stringent rules and norms in the CEECs, yet wanting access back into the EU market. One result may be a fragmentation of producer, exporter, and importer lobbies on the EU side in relation to both enlargement and the management of the association agreements, in which the range of interests might cancel each other out, leaving policymakers in practice room for maneuver. But it would be premature to underestimate the capacity of organized industrial and trade lobbies to influence EU trade and regulatory policy toward the CEECs. Their potential for doing this is greater in circumstances where political leadership is weak or contested.

NOTIONS OF SOLIDARITY

The term *solidarity*, or various proxies for it, permeates the discourse of the EU. Sometimes it is left unspecified, but often its meaning is qualified—financial solidarity, in the case of the CAP; cohesion, as the trigger for the structural funds; the language of Community preference, and so forth. It is a product in part of continental European political traditions (not quite comfortably translated into English), as well as an explanation for concrete mechanisms of mutual support or transfer payments. Over the years since the inception of the EC it is in the language of *solidarity* that some policies have been justified. Those who take an interest-based explanation of European integration may be inclined to dismiss *solidarity* as a cosmetic rather than an operational concept. But those

who admit that ideas and values are part of what distinguishes deep from shallow integration view solidarity as part of the core understanding about the process. To recall Karl Deutsch again, forms of active and activated solidarity were crucial to his analysis of what could constitute a durable sense of community. Or, to put it another way (Axelrod and Keohane 1985), solidarity is part of the discussion about the shadows of the past and of the future, and thus about whether the basis of European bargaining can be expressed as “diffuse reciprocity.”

In the context of the relationship with the CEECs three main issues arise. First is the question of how firm the basis of solidarity is in the EU-15, compared, for example, with the original EC-6. Second is the question of whether or not at the level of values and ideas there is the basis for a pan-European form of solidarity. Third come the practical consequences—i.e., in what ways might solidarity be expressed as a planned sharing of burdens and benefits?

As regards the EU-15, it seems evident that the base for well-defined and operationally productive solidarity has become less strong. Serial enlargement may have eroded the definition of solidarity. The declining pertinence of mutual defense against a common enemy may be part of the explanation. The increasing shift to regulation-based policy set, leaving less emphasis on (re)distribution and social measures, may be another sign (or consequence). The debate in the IGC about flexibility and “hard-core” proposals was indicative of declining confidence in the probability of a retained sense of strong solidarity. Echoes of this can be found in the discussion of the relationship between “ins,” “pre-ins,” and “outs” in the EMU context. Broadly, therefore, we can observe a questioning, perhaps weakening, of the assumptions about solidarity.

Second, it follows that for a pan-European EU of, say, twenty-five members, a major issue arises of what would constitute solidarity. Although we have noted above the strong symbolic language as regards Eastern Europe, we have also noted that it has proved difficult to give strategic definition to the assertion of shared values. The opportunities to build up a firmer base are quite limited so far in terms of political and social processes of community-building in pan-Europe. If the old EC model of integration was in essence elite-driven, then we have to recognize that this has been even more so in the pan-European case, not least because of the difficulty of estab-

lishing stable interlocutors in the CEECs and the asymmetric pattern of dependency.

Most often the operational question posed about embedding solidarity for Eastern enlargement is focused on cohesion and agriculture—i.e., about the willingness of incumbents to pay for poorer newcomers. Of course, again as noted above and in all of the academic and practitioner analyses, this is a very difficult issue, especially since generosity toward the CEECs depends on a recasting of prior bargains within the existing EU membership between and within member-states. It is not hard to reach the conclusion that the base of support for substantial financial transfers to the CEECs is so far weakly expressed, though the existence of the PHARE program is rarely given sufficient weight in the debate. The European Commission's (1997) document—*Agenda 2000*—partly addresses these issues, in particular by its detailed proposals on agricultural policy reforms and revised budgetary arrangements.

But we should beware of overemphasizing these forms of financial transfer as the main litmus test of solidarity. There are at least three other topics on which the question may be at least as pertinent: the social dimension to integration, the defense and security dimension, and the issues of JHA. On the social side it must be said that this has hardly figured in the debate about enlargement except expressed as an issue, actual or purportedly potential, about “social dumping.” As for defense and security, some of this discussion is located in NATO and some in the CFSP pillar of the EU. As will be argued below, so far the discussion has not crystallized. When it comes to JHA, so far the EU debate and early policy have been more exclusive than inclusive of the interests and needs of CEECs. Indeed the temptation to reerect barriers to entry for individuals from the CEECs (or from third countries seeking to transit the CEECs) would take the EU away from, not toward, solidarity in this domain.

SECURITY OPPORTUNITIES—AND COMPLICATIONS

Briefly as regards the security issues, in the development of the old EC, security bargains and political economy bargains were closely interwoven, even though channeled through different organizations (i.e., NATO and WEU, as well as EC). Quite how they

were interwoven is less well analyzed; hence some of the confusion about the consequences of the end of the cold war and the missing paradigm for pan-Europe. Similarly quite how much was dependent on the relationship with the United States is not agreed. Nonetheless, in the debate since 1989 it has often been argued that the EU, particularly with its more explicit adoption of a defense and security agenda, provides a kind of security shadow for its members and similarly would for new members.

One of the difficulties about taking forward a security dimension for pan-Europe lies in the unspecified definition of defense against what or whom. Another difficulty is that strong security and defense relationships are closed partnerships, not open-ended and expansive relationships. There is thus a tension between laying the base for a closely aligned security community, with a commitment to a form of common European defense (especially on the assumption of declining U.S. engagement in Europe) and an open and inclusive relationship with the CEECs. This issue remains unresolved and was not settled at Amsterdam. It is a major complication in the discussion of the interconnection between NATO and EU enlargement. It causes difficult discussion of the relationship with specific countries among the CEECs. In addition, the shift of attention to soft security issues takes the topic on to the sensitive ground of the third pillar, as well as the tangled subject of the second pillar of the EU. In brief, as yet the debates over the second and third pillars have not generated the underpinning for a shared sense of pan-European security to help to shape the context and contours of an extended political economy bargain.

CONCLUSION

The more one tries to identify the elements of the big bargains that would be required to develop a conventional form of EU enlargement for the CEECs, the harder it becomes to define how the bargains would be constructed. Hence the extension of the deep integration model seems improbable, at least on the basis of past precedent. Indeed the pressures on the deep integration model for only the EU-15 are considerable and potentially about to be dis-

rupted by the emergence of an EMU of fewer than the fifteen. The scale and range of the tensions in these debates within the EU-15 are such that their early resolution seems unlikely. The modest results of the recent IGC leave open the core questions about how to provide a successor version of deep integration and thus postpone the consequential issues about the relationships with the CEECs.

What then of the chances of a designed version of shallow integration, as a potentially helpful second best? Again past experience is not encouraging on this score. Both the EEA example and the persistent difficulties of finding a viable formula for the EU relationship with Turkey are discouraging precedents. Hence in the short to medium term disjointed incrementalism seems much more plausible as a scenario. In the absence of a politically framed strategy, there are three probable patterns. One is an inconsistency of policy by the EU toward the CEECs as regards both market access and market regulation, which could include both elements of liberalization or generosity and features of protection or discrimination. A second prospect is that emerging economic and market factors will shape many of the outcomes, case by case, sector by sector, and country by country in a variegated form, unless and until the issues are grasped politically. A third is that this will leave windows of opportunity for political developments in individual CEECs to develop their own national trajectories for both good and ill. These could well include different kinds of East/West political and economic relationships in different parts of Europe, thus making the pattern in Baltic Europe take a different form from that in Mitteleuropa or Balkan Europe.

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WHY THE CHANGED RELATION BETWEEN SECURITY AND ECONOMICS WILL ALTER THE CHARACTER OF THE EUROPE UNION

Steve Weber and John Zysman

For two generations a complementary and symbiotic relationship between strategies for growth and security underpinned political bargains on which the European Community (EC) was built. Those bargains often were entangled with, framed, and shaped the terms of national politics of the member countries. With the end of the cold war, we argue in Part I, Europe's economic and security policies no longer reinforce and support each other. At a minimum they are out of synch. At worst they come into political conflict. The effective price of security goes up, particularly when these choices and tradeoffs complicate the political problem of sustaining economic growth. Part II considers why Europe's new security problem extracts an economic price. Enlarging the community and expanding NATO are two aspects of the proposed solution. But both exact substantial costs that complicate and force the recasting of long-standing and fundamental bargains internal to the European Union (EU), and between the EU and the United States. Our discussion leads us in Part III to consider not only the emerging character of the European Community, but also the interconnections and interpenetrations of European Community and national politics. This is not a matter of encapsulated but simultaneously resolved "games" at different levels that act to constrain each other. Rather politics at the national and European levels shape each other in interactive and dynamic ways that the two-level game metaphor does not capture. We suggest the need for a concept of a *regional* architecture with which to understand *national* development across time and across regions. Most important, we see a previously elite-driven, quasi-state-led institution, focused on and supporting domestic national

development, at risk of becoming a regional development instrument weakened by national politics.

PART I

FROM COMPLEMENTARITY TO CONFLICT: ECONOMY AND SECURITY IN EUROPE

The political-economic architecture of Europe changed with the dissolution of the Soviet Union and the end of the cold war. Complementarity of security and economic objectives gave way to new tensions between them.

THE EPOCH OF COMPLEMENTARITY

The postwar architecture of Western Europe rested on a political bargain that is well understood and often vividly depicted. At the end of World War II a set of once great powers and recent enemies found themselves between two new superpowers and with an unnaturally weakened Germany still in their midst. In response to this change in the structure of power, the Europeans created a regional institution with primarily economic instruments, the EC and its Common Market, and used it as a device to accomplish a security purpose. The security purpose is flippantly but accurately summarized in the phrase, "Keep the Germans down [that is, inside but controlled within the Western community], the Russians out, and the Americans in."¹ Together with the North Atlantic Treaty Organization (NATO), the European Economic Community (EEC) formed the basis of a Regional Institutional Structure (RIS) for Europe. That RIS defined the architecture of power, possibility, and constraint within which regional actors—both states and firms—would move over the next three decades.

The economic and political objectives within this RIS were generally complementary. In most instances they reinforced each other. The United States addressed the external threat from the Soviet Union, with some assistance from Europe. The West Europeans had to

address the central question of Germany, containing or integrating Germany in a way that was consistent with the requirements of the U.S.-led coalition for defense against the Soviet Union. German resources, Germany's growth potential, and a German commitment to the West were necessary to fight the cold war. Economic growth in the context of European integration was the primary tool to do this. In the most obvious sense the EEC—a culmination and extension of the basic European Coal and Steel Community (ECSC) bargains crafted around initiatives by Jean Monnet and Robert Schuman in the early 1950s—provided an institutional home for Germany, anchoring it in the West. Inside the EC Germany could be managed (rather than balanced, as in more traditional diplomatic perspectives) and integrated by promoting the joint project of European-wide growth. And just as an economic instrument served a security objective, the security purpose, the necessity of anchoring Germany in Europe, served to help build and cement Christian Democratic-led coalitions in the critical countries—Germany, France, Italy, and Belgium—of the EC. The fact of the Common Market and the coalitions in support of it were part of the politics of growth, the creation of national growth-oriented political coalitions throughout Europe.²

The EEC can thus be seen as a bargain for growth among like-minded advanced countries with complementary economic and social systems. The European bargain was, moreover, the conception and construction of a relatively narrow, cross-European political and intellectual elite. Their conception of the RIS) was then validated by governments, or more precisely by national legislatures, mostly without frequent and deep scrutiny by mass political forces at the national level. The EEC naturally evolved as an intergovernmental bargain expressed primarily through the Council of Ministers, along with an entrepreneurial executive core, the Commission, which acted as an instrument of the elite to manipulate and reframe the agenda for Europe. These same elites were also important players at the core of domestic coalitions, often Christian Democratic parties, that were committed to expansion and growth as mechanisms of creating political-economic stability and a sound anti-Communist foundation.³ Jean Monnet was the archetype of this elite class. He was a powerful figure in the creation of the French planning commission and in the growth-oriented, modernizing political coalition

in France, as well as a key intellectual architect of the European politics in the creation of the Community.

Within this context, “spillovers” and functionally driven integration were political strategies given legitimacy in their explicit formulation by academics. It was possible to think of further integration as a progressive and almost inevitable trend because the EEC did not have to pay an enduring economic price to achieve its security goals—particularly as it rested relatively comfortably under an American nuclear umbrella and within a stable, dollar-based, American-guaranteed monetary order. Integration was overall a positive-sum game because pursuing one goal, security, helped achieve the other, economic growth, and conversely the new objectives and institutions of the economy were instruments for security policy.

Thus the politics of domestic growth coalitions under Christian Democratic rule were intimately linked to the old security problem of managing German power. What European integration did was to put this in the context of the new logic of an integrated European marketplace, in which corporate actors play a game whose rules are written by an elite coalition, often influenced by French notions of political economy, with headquarters in Brussels.

The postwar project of creating the Common Market symbolized the linking of national markets through trade in goods, an essential part of that organizing logic. The first decades of building Europe mostly left intact distinct national institutional structures. Thirty years later, the Single Market project in the late 1980s took an additional step by facilitating an expansion of intra-European investment as well as intra-European trade and setting the basis for trade and investment in some services. The Single European Act (SEA) thus symbolized a commitment to a sufficient convergence of domestic rules and to an arrangement in which national structures did not in themselves constitute obstacles to trade and investment. The SEA, in beginning to define a legitimate niche for common social and environmental policies, as well as rules of competition and state aid, aimed fundamentally at muting the range of national institutional or policy elements that might prove significant in industrial competition. This was not a covert attempt to harmonize regulations—the European Court of Justice (ECJ) in the case of the *Cassis de Dijon* had recognized implicitly that harmonization was too difficult an objective to achieve if Europe were to make progress on its

internal market.⁴ But in legitimizing the use of mutual recognition for similar purposes, the court first, later the Brussels institutions, and finally the member-states agreed de facto to recognize the homogenizing nature of their project. Mutual recognition works only if all parties feel confident that they share basic values and that their differences are marginal and likely to diminish over time. It was a recognition that the European construction served to create an increasingly homogeneous economic space, one that sought to compress the range of national differences along a range of dimensions.

The logic of the *acquis communautaire* (a broad and vague notion implying the full set of rights, responsibilities, expectations, and obligations connected to community membership, the obligations of community membership that any new member would necessarily accept), follows directly from this.⁵ That logic of the *acquis communautaire* reflects the underlying drive toward relative homogenization. Jean Pisani-Ferry puts it well:

The underlying philosophy is that over the medium term all EU countries will eventually converge towards the same degree of integration and the same development level, and that they will implement the same policies. . . . The standard Community solution to the problems raised by the existence of disparities among member states is to accommodate them through temporary derogations and to aim at reducing them through budgetary transfers.⁶

Europe is, in this formulation, a single package. Member-states unable or unwilling to accept elements of it at any given moment are given time and assistance if necessary to “catch up,” but the underlying assumption of a drive toward convergence is not questioned—at least it was not until Maastricht.

THE EMERGING CONFLICTS BETWEEN SECURITY AND ECONOMY

Maastricht looks in retrospect like an interregnum in the development of Europe. It began by addressing, indeed completing, one agenda and revealed another. That second agenda will define a new epoch for Europe. The older agenda—reformulated as the Berlin Wall came down—was to continue to anchor in the West a now

unified and even larger German state. This part of the Maastricht undertaking conceptually was more like an addendum to the 2+4 talks on German unification than a treaty on European union *per se*. The new agenda was forced as the Soviet empire broke apart and then made all the more urgent a few years later by the dissolution of the Soviet Union itself. The new problem was stabilizing the East and reintegrating the once and future Central Europe.

But Maastricht barely touched on the new agenda, focusing instead on the dynamics of European Monetary Union (EMU). A cynical view would be that it was necessary to do something with the EU at the same time that German reunification was completed. EMU was the thing to do because it had been prepared. EMU (whatever its relationship to economic policymaking) became the primary institutional and political means for expressing a commitment to create the core of an enlarging community—that is, to continue and perhaps complete that first agenda of anchoring Germany. Discussions of foreign policy questions and political union at Maastricht produced little of substance. The authors of Maastricht recognized how little was accomplished: it was the only time the EU had ever ended an intergovernmental conference (IGC) by scheduling another IGC—a blunt recognition that the real work lay ahead and was being postponed. But on its own the monetary project did not address, indeed could not address, the second agenda forced by the transformations to the East.

Maastricht did allow for the 1995 enlargement to Austria, Sweden, and Finland by fitting these states within an outdated European decision-making structure that was clearly now stretched to its limit. This matter of decision-making structures is fundamentally about the meaning of the *acquis communautaire* in the future. It is a question of whether the whole package of European policies would have to be accepted by each nation—of whether Europe would move forward at a single speed toward a single objective—or whether the several nations would move at individually negotiated paces toward customized architectures. It is not simply a matter of how to arrive at decisions, of who might lead the process or block the process, and of how national coalitions within the community would have to be built (though it is certainly all of those things).

Larger visions of what Europe will look like as a region imply, and in practice demand, very different decision-making rules and

structures. Traditionally, a single-speed Europe spoke of derogations as exceptional delays in moving toward a common objective. But if the future is one of Europe *à la carte* or a variable geometry of policies, then the decision-making structures of Europe will need to reflect a different logic. This will be driven by the question of who is in and who is out of various issue-areas and what the linkages between them are.⁷ It is a huge agenda, intimately linked to the question of new members in the East.

Of course it was Germany that pressed hardest at Maastricht for both enlargement and progress on political union at the same time. But without a clear argument about the terms and meaning of enlargement for political union this bundling of issues was destined to fall flat. For some it still seemed as if the question remained open of whether Europe was moving toward a political union with a single political community including a single foreign policy or, alternately, would remain a community of nations linked up by free trade and investment.

The reality, though, was that whatever the pretense of the Maastricht treaty to have provided a blueprint for a new security-economy bargain, the terms of a new bargain were yet to be imagined, let alone struck. Europe remained a community of the economy intertwined with its traditional postwar security bargain, and there was little movement even conceptually toward a single political community with a common foreign policy.⁸ Of course, the security problem had changed fundamentally, which meant that a new political bargain had to be struck and a new regional architecture constructed. The political union debate in its larger frame is the question of enlargement to the East and how that will work to stabilize all of Europe. There are a number of problems hidden within this political debate about the EU's move East. The postwar era of rapid growth ended some twenty years ago, and the domestic political infrastructure in the form of policy instruments for a new era and political coalitions to support a new growth path is not in place, neither within the principal countries, nor within Europe as a whole. Now the EU is no longer to be a rich countries' club. It will soon include a bloc of poor countries, probably with voting power strong enough to block action unless their interests are accommodated. It is not simply that the Maastricht interregnum postponed the hard choices,

but rather that the difficult issues were then still being formulated and had not yet been posed directly.

PART II

THE ECONOMIC COSTS OF THE NEW SECURITY SYSTEM FOR EUROPE

The new strategic problem, we suggest, has two critical elements: first, recasting the position of a new Germany in a new Europe and, second, stabilizing Europe's Eastern borders. Both tasks were created as the cold war unwound. Each produces new tensions between security and economic purposes. America's contribution will not ease these tensions very much because the primary route through which America contributes—NATO—is not sufficient for and often not relevant to the strategic tasks. The available set of economic instruments are principally European. How they are deployed will represent choices by and about the EU, specifically who is a member and on what terms, and how Europe is to be governed.

THE ENDURING PROBLEM OF GERMANY, THE COSTS OF EMU AND MAASTRICHT

EMU is an economic project driven first and foremost by political goals, not by strict cost calculations of economic benefit. Indeed, EMU was accelerated and sustained in recent years by political changes coming with the end of the cold war, not by the economics of growth or a clear logic requiring new monetary arrangements.

Certainly there are economic arguments that favor EMU. A single money may give a more solid foundation for long-term noninflationary growth to a unified European market and investment space. It may do so by reducing transaction costs and other uncertainties connected to currency fluctuations. More important, the institutional binding of central banking in member countries to Bundesbank-like discipline may also reinforce the political basis for long-term growth with price stability in countries like France and even more so Italy. Adjustment costs then are simply to be borne as

part of the short- to medium-term price for a more stable and expansive future. There are also a bevy of economic arguments against EMU.⁹ But to some extent this debate—while helpful in clarifying the costs and benefits of EMU—misses the point.

EMU is—and is commonly now regarded in Europe to be—first and foremost a political project. The end of the cold war submerged in the spirit of “Europe 92,” with its European-oriented business coalition committing to a market-driven strategy of growth as a means to revive competitiveness and create jobs. Maastricht intervened with EMU, the linchpin of an economic strategy with the primary political purpose of anchoring Germany in Europe, through both a technical bond and a compelling expression of common and linked fates. European states are ready to pay a price, in some cases a substantial price (at least in the time frame within which politicians can calculate), to go forward with EMU for exactly these political purposes.

Using currency union to create a more integrated Europe as a means of binding Germany itself induces domestic political challenges in each state. One kind of challenge comes from a nostalgic center-right political element that expresses its concerns in the language of sovereignty and national integrity. This element of the right was a critical part of the Tory government in England. In France and elsewhere it is on the margins of and perilously (for Europe, that is) close to power. A second set of challenges comes from the belief, widely held among both left and right, that EMU as an urgent objective and, most important, the terms of adhesion laid down principally by the Bundesbank impose restrictive macroeconomic requirements that are contributing to excessive unemployment and economic dislocation in Europe (and most recently and severely in Germany). For some the short-term price (even if it were to ensure long-term gains, which is of course uncertain) is intolerable. At a minimum, the economic costs associated with gaining German (and particularly Bundesbank) agreement to monetary union threaten the ability of governments (ironically even in Germany) to hold together the domestic political coalitions and strategies they need to promote growth.

THE NEW STRATEGIC PROBLEM OF THE EASTERN FLANK

Clearly the anchoring of Germany in Europe is only part of the new security story. The dissolution of the Soviet Union left a set of countries on the eastern flank of Western Europe that present a new set of problems. They are not yet stable democracies or entrenched market economies, and they do not have clearly defined security relationships with their former imperial "master." The future trajectory of Russia's political relationship with the West is still unclear and probably will remain that way for some time. Optimists argue that the dissolution of the Soviet Union is the first step in constructing a secure and stable European space that sweeps at least to the Urals and perhaps beyond. Pessimists argue that the events of 1989 and 1991 have simply moved the tank defense line several hundred miles to the east, probably to the eastern border of Poland. What was Eastern Europe could become a bridge between East and West, a buffer zone, or a fortified barrier, depending on the outcome, which is certainly out of their control and may not even be subject to much influence from the EU states or the United States.¹⁰

Deterring any conceivable aggression by Russia is a straightforward task, easier now than ever during the cold war. The Europeans can probably continue to rely on American power to maintain a barrier to Russian ambitions or miscalculations. The continuing American presence in the form of NATO extension, ironically, hinges on European fragmentation to a greater extent than in the past, reflecting as it does the European difficulty in agreeing even in principle on a common security policy. That American presence complicates the creation of common European positions even in areas where the United States is not going to act decisively. This is particularly true for a range of smaller-scale threats, with Bosnia presenting the case of civil war among rivals mobilized politically along ethnic lines, Albania an instance of political disintegration, and both creating the problem of migration more than outright military threat.

In these types of cases, the United States will have a much harder time defining compelling national interests that would bring it into an active role within internal European conflicts. There is no easy way to square this circle. Consider, for example, the present ambivalence toward the combined joint task force concept. The

United States agreed in principle that NATO's European members could join together without the United States in missions that served their particular interests and use NATO resources for that purpose. Then the United States declared that it could not imagine circumstances in which the concept would actually have to be invoked. This ambivalence will likely continue whatever the administration. A sufficient explicit political commitment to dissuade military aggression or civil war is going to be required to sustain stability in some of the newest parts of Europe, but we doubt that the United States will provide it in the form of unequivocal military guarantees. Clearly an important part of an unequivocal commitment could come in the form of an institutional declaration of a shared political and economic future that expanding the EC implies.

**GOVERNING AN ECONOMIC COMMUNITY FOR SECURITY PURPOSES:
ENLARGEMENT, EXTENSION, PARTICIPATION**

The present vocabulary of European enlargement tends to obscure the tie between enlargement and security issues by blurring together several types of expansion of community membership. That blur obscures the choices that must be made. There are really two versions of this process: enlargement to include the formerly "neutral" countries such as Sweden and Austria (for whom the decision to join essentially was made—on both sides—with the end of the cold war) and enlargement or extension to the East.¹¹ For the rich neutrals, it was a package deal, relatively easy to negotiate and implement within the current structure of the EU. Not so for the Eastern countries, where membership necessarily involves several different issues. We need to distinguish at least three sets of possibilities on this score:

Umbrella Extension: Extension of the *security umbrella*, which is primarily a NATO issue but will be reinforced and sustained by the depth of the European commitment.

Economic Participation: Participation in the *economic community*. For the East that means first and foremost improved access to European markets and market rules, but also involves credibility for investment and the entrenchment of a capitalist system as it emerges in the East.

Political Admission: Participation in the *governance of Europe*. As the European political community is as much about democracy (at least in domestic institutions) as it is about trade and capitalism, for the East this implies entrenching democratic institutions, as they emerge, and moving on from there toward full and equal participation in EU-level decision-making institutions.

When Europe took on in 1995 three rich capitalist economies with democratic politics—Austria, Sweden, and Finland—as after Maastricht, its primary concern was about organizing the rules of community governance to accommodate a larger number of member-states. Still Maastricht dealt only minimally with this problem of governance, and as a result older arrangements were stretched to nearly a breaking point.

EU officials now openly acknowledge that further enlargement (even if it were to involve rich capitalist states) requires a revision of basic rules of governance, simply because the community's decision-making procedures have become so unwieldy. But the next phase of enlargement brings up questions of governance more fundamental than the efficiency of current decision-making with larger numbers. As "poor" countries, the new Central and East European countries (CEECs) can be expected to use their voting power to extend the range and magnitude of economic transfer payments that the EU provides to their populations, just as poor countries have done after previous enlargements.¹² But the new members are not just poor countries and transition economies. They are also transition polities, struggling to establish market institutions and democratic political structures while undertaking dramatic reorganization of their production units and restructuring of what is produced all at the same time. These countries extend the range of national economic and security positions occupied by member-states, possibly in unpredictable ways. What is certain is that these new members will have a different set of national interests that must be accommodated if they are to be full EU members. It is of little surprise that there are various proposals floating around to establish an elite core management of the system. While these proposals are mostly unofficial and do not reflect any kind of broad European consensus, their presence indicates that many of the questions with which Maastricht avoided dealing are bubbling up to force consideration:

- Who should participate in the economic community and on what terms?
- Who should be a member of the political community and with what kinds of decision-making power and prerogatives?
- What security issues are addressed by extending membership eastward and what kinds of guarantees are implied?
- How will the system as a whole be governed with a more diverse membership?

These questions point to two major considerations for Europe in this new phase of enlargement. The first is the future of the *acquis communautaire*. Even as they support reform in the East, the Western states will have to consider that convergence (if it does indeed happen) is a long way off. The notion that except for temporary delays, the European countries would move forward in the integration process together and at one speed was breached (quietly) at Maastricht and will now have to be explicitly recognized as obsolete. Variable geometry, the notion that countries will move forward with distinct but different packages of integration, will become a necessity.¹³ But variable geometry risks degenerating into an almost endless series of ad hoc arrangements that ultimately could fragment the overall European bargains. That fragmentation, in turn, would undermine the objective of anchoring Germany in Europe. There are no easy answers to this dilemma. The second question is simply the cost associated with underwriting the transition economies' move toward democracy and market institutions.

**DOES THE NEW SECURITY PROBLEM REQUIRE EUROPE TO BECOME A
LARGE-SCALE DEVELOPMENT BANK? THE ECONOMIC CONSEQUENCES OF
ENLARGING EUROPE**

The difficult question of governing an enlarged community comes on top of the very fundamental matter of how much political stability and growth in the East will cost. Consider as an imperfect but revealing analogy the German case, where unification has proven enormously expensive. Perhaps a trillion dollars will have been spent in the Eastern *Länder* during a decade after the fall of

the Berlin Wall, but even that will not have solved the task of assuring self-sustaining competitive companies rooted in the East or anything approaching real integration of the two German communities.¹⁴ The analogy is imperfect. Certainly the EU's collective objectives toward the East will be more modest than Germany's toward its integration. Even an enlarged Europe will not have a single wage structure. Institutional arrangements and rules can and will remain distinct, while some flexibility on exchange rates can maintain cost differentials between the developing East and the richer West.

Nonetheless, the price of securing Central Europe will be very substantial, and the image of the German costs is politically significant. Income disparities are symptomatic not only of a lower level of development, but in the case of the CEECs they are also symptoms of the nature of the development that did take place under central planning. Comparative Gross Domestic Product (GDP) numbers capture only part of the broad and deep social structures and business infrastructure that needs to be in place for modern economies to function efficiently. This is part of the reason why estimates of what it would cost to "rebuild" East Germany proved to be so unrealistic. It was not just bad data (although that was part of the problem). It was also an overly narrow conceptualization of what was actually missing there.

Jean Pisani-Ferry clearly presents the disparities between the present EU membership and those to the East who would now join, arguing that although there is an analogy in the experience of Portugal and Spain, the present disparity of real incomes between the richer members and those being considered for membership is a magnitude larger than that of the rich and the poorer members when Greece and Portugal joined. The Pisani-Ferry evidence suggests that while participation in the community has seemingly created some convergence among the participants, the broadening membership now facing Europe will lead to radical divergence of economic circumstance.¹⁵ Jeffrey Sachs and Andrew Warner offer the following poignant calculations. If the Czech Republic and Poland were to maintain their current policies, it would take them 23 and 194 years respectively to achieve GDP per capita 70 percent of the EU average. To reduce these numbers significantly, even the most well off CEECs would need to sustain growth rates upwards of 6 percent, an accom-

plishment rarely achieved in Europe.¹⁶ Without taking away credit due these countries for their massive and generally quite successful reform programs, public spending in these economies is still among the highest in the world, at over 50 percent of GDP, and investment remains very low. With policies like these it is hard to see how growth can continue for long at current rates, much less increase to levels achieved consistently only by the very fast growing economies in Asia.¹⁷

The disparities of income and social/business infrastructure across what used to be the iron curtain will be felt directly in the budget of the EU through even a reformed version of the structural funds, and indirectly from pressures of migration through wage-based competition. There will surely be significant disparities of interest on matters such as environment and social policy as well. Accelerated development in the East could relieve some of these pressures. If one believes that (a) growth is essential to the institutionalization of democracy and the enduring commitment of the former Central Europe to the West (and seemingly most European policymakers do), or (b) that rapid growth and convergence of interests are essential to the broader European program, then the European community becomes of necessity a nascent developmental institution. The question becomes at what price a sufficient degree of convergence can be achieved. Apart from the direct financial transfers to the East, costs will be felt in the form of economic dislocations in the West. European adjustments to imports from the East are inevitable—adjustments presently muted by specifically negotiated restrictions on agriculture, steel, textiles, and the like. These amount to concessionary trade.

There is a more optimistic case that can be made using similar numbers and slightly different political assumptions. Baldwin, François, and Portes argue, for example, that enlargement could exact a net cost of as little as 5–7 billion ECU net, an enormous bargain in that this is about one-hundredth of one percent of current EU GDP.¹⁸ As long-run calculations, these are reasonable numbers, and it is clear that a coherently functioning polity with decently strong and inspired leadership ought to be able to invest these kinds of resources for a compelling purpose. Germany was able to do much more than that for East Germany. But this depends on political will and leadership, the articulation of the compelling purpose in a

way that can convince those who pay much more substantial gross sums in the short and medium term, and probably fiscal mechanisms to compensate long-term losers and (just as important) smooth out the time inconsistency of costs (which accrue early) and benefits (which show up later) for existing member-states. The EU is weak in these areas. And overall Europe's concrete capacity to respond by supporting these efforts viewed as investments has almost certainly diminished over the years. Increased domestic pressures in the form of unemployment enormously complicate the problem and make it much less likely that Western publics will accept the short-term costs, whatever the value of the long term may be. Moreover, economic dislocation and disruption are often translated disproportionately into political resistance, and indeed the sense that the "outsider" is disrupting national community finds expression in the opposition of many of the hard right movements to the European community. Radical right leaders—Jean-Marie Le Pen, leader of the National Front in France, and Jorg Haider, leader of the Freedom Party in Austria (Freiheitliche Partei Österreichs, FPÖ)—have captured significant working class support by attributing unemployment and dislocation to political choices about the EU in particular and the national relation to international markets more generally.

Europe is confronting its own version of the post-World War II American difficulty: what economic price to pay for security purposes? The dilemmas here are familiar ones, but for Europe it is a new game. European security hinges on the economic and political development of its neighbors, and that development must be supported with financial and trade contributions. Supporting the development of allies through open markets and assistance may produce development gains over the years as markets expand, although CEEC markets are small and will remain so for the foreseeable future. In the immediate present expansion creates budget pressures and adds to domestic adjustment. America made its choices in an expanding market when its growth, wealth, and dominant competitive position muted or hid the real economic prices. Europe must make similar choices—what economic price in the form of market access and subsidy to pay for security—but it must make the choices with high unemployment, Maastricht pressures to contain budget expenditures, and intense international competition. More impor-

tant than the cost, though, the present coalition for security does not permit the constitution of a parallel coalition or policy for growth. It is not simply the ambiguous character of the current threats or the difficulty of defining a security doctrine in the absence of a single clear threat, but rather that there is no clear policy solution to the economic problems on offer and no clear coalition to support it. Hence the question of costs, both direct budget costs and the indirect costs of accelerated adjustment, becomes central. Significantly, if the countries in the East represent a source of migrants or product that accelerates the pressures of structural adjustment in the West, then the economic/security tradeoff is accentuated.

The development game is not necessarily a trap for Europe any more than it was for the United States. But the ways out of the trap are not presently central in the debate. The underlying parameter is that the new European architectures will be built on what is now a heterogeneous region, a region which will remain heterogeneous for a long time to come. The economic and political consequences of that heterogeneity are intertwined. In theory it is straightforward to see how economic heterogeneity represents a solution, not a problem—for example, if a new division of labor, possible with the heterogeneity provided by the former CEECs, helps maintain production in Europe that might otherwise have left for Asia in particular, brings back production from Asia, or permits new production to expand in Europe. The possibilities for mutual gain through such reorganization of production are not lost on either side. (Interestingly, despite the struggle over employment and wages in Germany, the unions there have not systematically opposed segmenting some low-wage operations for location in the East. The muted opposition is of course in part because the unions do not wish to draw attention to the wage differential between Germany and the East.)¹⁹ The central question is the political framework within which this division of labor becomes situated. That is the EU conceived of broadly. We need to develop a framework to address this in analytic terms.

PART III

ESTABLISHING A NEW STABLE RIS: TOWARD A RESOLUTION OF THE TENSION BETWEEN SECURITY AND ECONOMY

Can Europe resolve the emerging tension between economy and security? To do so, the European community must create a new political bargain and the institutions to implement that bargain, a RIS. This will be a difficult task. The bargains and institutions of a new RIS that channels and structures politics among governments in Europe must at a minimum

- 1) Define an approach to the new, diffuse security threats that characterize the present era;
- 2) Provide a decision about the mix of military and political arrangements that will represent a security umbrella over the East, and at the same time clarify the place of the United States in Europe's security affairs;
- 3) Evolve a growth strategy that is an employment engine for the West while permitting Europe a policy role as a development bank for the East.

The obstacles are clear, and the solutions are not. Consider:

- NATO extension, now imminent to at least the Czech Republic, Hungary, and probably Poland, may relieve some of the pressure on the EU to act quickly, but it is not, and is now clearly recognized not to be, any kind of a broader solution.
- Europe's difficulties to act even in a foreign policy/security problem setting of direct interest is evident in the Albanian and Bosnian crises.
- Brussels has no consensus about a development strategy for the East and relatively little discussion of the links between that set of problems and on-going economic dislocation in the West. EMU takes first priority, which results in the bracketing off of other major issues until this (admittedly critical) piece of the puzzle is anchored.

The obstacles to a resolution of each matter are substantial. And the European choices must at the same time generate or at least be supported by national coalitions in the major states. Without a resolution of issues such as these and supportive arrangements within national politics, there will be a continuing and fluctuating struggle to define the new Europe. The terms of a bargain are not yet evident, and there is no guarantee of a stable and institutionalized resolution. In sum, there is no longer an integrating vision, let alone strategy which leaves an effective decision to proceed on an incremental basis with the reconstruction of the European bargain.

EXAMINING THE INSTITUTIONAL TRANSITION

Delineating the issues to be resolved is a simple matter compared to the task of understanding what a final bargain will look like or how it will emerge. One conventional approach would be to conceive the transition as the resolution of a two-level game—one game conducted as statecraft among governments and one conducted by governments seeking support from their polities.²⁰ Beginning with this metaphor reveals the real difficulties ahead. In the conventional analysis, states, the principal actors, have divergent interests. They bargain among themselves toward “solutions” and cooperative arrangements. This interstate bargaining game is constrained primarily by a second-level game that each state must play out among its domestic political interest groups. Successful outcomes rest in the intersection between the domestic “win-sets” of each major state actor and the international win-set of overlaps between them. European institutions may play a role in the working out of the game (although in some arguments they are almost absent). In some interpretations, EU institutions set agendas and/or influence the process of bargaining. In others, they act occasionally as entrepreneurs or the carriers of spillovers; they are independent driving forces which pull states along to a limited degree. There are also some differences among analysts as to what the main structural features of the domestic game are likely to be—interest groups, national courts and parliaments, political or business elites. But the central metaphor remains two-level games, compartmentalized stories, but with inter-

governmental bargaining as the main determinant of international outcomes.

The notion of separated games each with its own isolated politics, is heuristically useful as long as the games remain stable and compartmentalized. But this rests on the assumption that the parameters in each game, the institutions and actors, remain the same, as well as that the two games remain separate—that is, developments in one game do not affect the structure of the other game by altering the political institutions, actors, or interests.²¹ Interests may change as a result of larger trends in the domestic political economy or in response to shocks. But what follows is normal bargaining on the foundation of these revised interests and on a state-to-state basis. Indeed, Andrew Moravcsik used the phrase “conventional statecraft” to capture this notion and conceived of bargaining in the European context as an “elite affair . . . since Europe is a low-priority issue for the voters of the three largest member-states.”²²

When the EC was focused on the economic liberalization and incremental institutional reform package of the mid- and late 1980s, these assumptions were certainly reasonable. European integration was, after all, primarily an economic project aimed at building an economic community and not a political project to generate a supranation of citizens sharing a common political heritage or destiny. It was largely a bargain among internally well-structured states, which gave life to the intergovernmental focus in explaining their cooperation. The Council of Ministers was front and center in most of this bargaining, and even most significant spillover dynamics had to travel through that intergovernmental body at some point. It is probably defensible to assume that national elites were not deeply constrained or even strongly influenced by mass politics in their approach to European integration. They managed the domestic game in large part by pushing to the side core debates on security that would have necessarily involved publics. And they kept economic growth debates primarily in the realm of the technocrats. The Commission acted sometimes as an important entrepreneur. The targets of entrepreneurship were almost entirely states and major business actors. “Domestic politics,” then, was relatively easy to manage and relatively easy to understand in a way that could be incorporated into the two-level game framework. In practice a narrow, well-

organized, and easily defined segment of domestic politics was involved.

THE NEW POLITICS OF EUROPEAN INTEGRATION

The politics of European integration in the 1980s moved away from an era of an entrenched regional institutional structure, stable national political competitions, and largely elite bargains about Europe to one of party political debate and—increasingly—political mobilization around European issues. The public reaction to the Maastricht Treaty shocked and surprised elites, who thought they had already played out the two-level game, an intergovernmental bargain at the EU and elite deals at home, and would thus be able to walk the treaty through domestic procedures just as they had done with similar agreements in the past. The intergovernmental bargains are themselves fueling significant domestic mobilizations and generating political challenges to European institutional development. For example, the politics of monetary union are forcing budget deficits downward toward Maastricht-compatible criteria, and in so doing, limiting the possibilities of expansionary policies during a period of extended high unemployment, thus creating the fears of economic dislocations easily ascribed to the politics of integration. Integrating the East likewise creates fears of economic dislocations and perceived threats to national values and culture.

The firewall between European intergovernmental politics and national politics has been ruptured, giving way to significant domestic political debates about European choices and consequences. Consider, for example, the recent Renault decision to close a Belgian factory: it both provoked a firestorm in Belgian and French politics and drew the Belgian European Commissioner into an effort to use subsidy rules to penalize the French corporate decision. The politics of Europe's regional development become enormously uncertain and complex. It becomes harder and harder to conceive the story as two separate, stable, and simultaneously resolved games rather than as a story of the interconnected recreation of domestic politics even as a European regional bargain is struck.

The democratic deficit in EU institutions used to be a concern for a few scholars and die-hard Euro-enthusiasts. Most of the discus-

sion of the democratic deficit was a funny nostalgia of a remembrance of democratic practice that never existed and an opposition to particular choices couched in the form of opposition to the process. It is no longer only a vague matter of political legitimacy, but a very practical matter of where to root essential political enterprises.

European debate increasingly is shaping domestic politics. Consider how actors' interests may be reshaped by new European issues. A standard approach would by assumption define the actors and their positions and infer their interests. For example, this is often done by taking the production profile of a country, the economic groups as the units of social analysis, and deriving from their market position their interests.²³ Then the SEA, for example, represents changes in market position with consequences for the position of the several players that can be analyzed in this light.²⁴ When radical markets or political changes require basic recalculation of market strategies, the responses of the particular actors become much less predictable. The actors themselves may be reformed—that is, parties or interest groups may change orientation and strategy—or new actors may emerge. In fact, socioeconomic “groups” such as agriculture or steel always consist of subsectors (be they agricultural segments by product or production style, integrated steel plants or specialty steel plants, semiconductor producers or developers of final electronic systems). The questions arise in drawing the political map on top of the production profile. How industries are politically composed and decomposed depends on which subsector dominates politically. Put differently, which subsector organizes an industry around the issues it prefers will depend on the political tactics and organizational methods it adopts, and only rarely on a logic of relative economic weight or interests. There is simply no way of deducing the political map from the production profile, particularly during periods of rapid political and economic change. The political meaning of the costs of the new Europe depends on who specifies them, on perception and definition. Neither political actors nor political interests are inherent and logically discoverable. Both actors and interests are political creations.

Because there will be a sequence of such debates and a series of crises, political analysis becomes even more complicated. Political actors understand that in complex negotiations such as the multifaceted discussions that are moving Europe away from one RIS and

toward another, initial moves always set the direction and bind later choices. The risk is of anchoring some issues in ways that constrain and reshape possible solutions to others. As important as the management of the interplay of issues on a complex agenda is the matter of which European issues may mobilize national political responses. This is no longer a matter of simply isolating the “winning” intersection of possible outcomes of two games. Rather it is a matter of how the politics at each level are redefined and recreated, which is in turn a function of how the sequence of issues affects who the political actors are and how they conceive their interests. Several steps into the game, the actors and their interests become unknowable because who the domestic players are and what their interests will be depend also on the sequence in which the issues are addressed and how they mobilize domestic actors.

THE ECONOMIC COSTS OF SECURITY IN THE POLITICS OF THE NEW EUROPE

To understand the consequences of the sequential development and of actors and interests, let us consider very briefly some economic aspects of the new RIS. As a device to anchor Germany, EMU imposes costs today and captures many of its gains either tomorrow or in the noneconomic realm of amorphous security. The political interpretation of the EMU is therefore an open issue. The political meaning of the Eastern transition and move to join the West is even more open. As many analyses have shown, the economic impact of Eastern Europe is too small, at least on aggregate, to drive substantial economic change in the West. Costs and benefits, as well as the distribution of both, are ambiguous and difficult to calculate—for participants just as for analysts. And if such industrial dislocation is blamed on extension to the East and slow growth on rigid adherence to the EMU Maastricht criteria, if it becomes the visible and visceral manifestation of domestic changes forced by international competition, then although the actual economic impact of the East may be limited, it can become the focus or instrument of political mobilization.

The metaphors and images used to depict the integration of Eastern Europe into the Western economies will, therefore, matter greatly to the politics of mobilization. Helmut Kohl and Haider cer-

tainly hold different conceptions of Europe's future, and each would align his following behind those notions. With this in mind, consider just two possibilities of how Eastern Europe's development may relate to the West. Does East European growth mean a series of new rivals—East European dragons whose analogies would be Taiwan and Korea, whose growing industries will displace Western producers? In this version of the story of Eastern growth, the Western investment in Eastern development simply creates a larger industrial dislocation over time. Or, alternately, will new Eastern producers permit a substantial reorganization of European production that makes companies rooted in the "European region" as a whole more competitive internationally? In that case the analogy would be third-tier Asian producers such as Malaysia and Thailand, who have entered global markets as component and subsystem producers or low-cost assemblers in an era of American and Japanese production reorganization in Asia. In this version of the story, the economic heterogeneity provided by the East allows Europe to reposition itself in global markets to the benefit of all.²⁵

PART IV

CONCLUSION

Political-economic visions of how Europe would be reorganized after the cold war ended have changed substantially since 1990. There was an early, hopeful vision in 1990–91 that the EC, newly revived by the spirit of the SEA and the dramatic (and peaceful) end of the post-World War II division, would now move forward to extend its achievements in a straightforward way to the East. The United States made clear that Europe would take primary responsibility for this task.²⁶ The Commission in turn organized aid and technical assistance programs under the acronym PHARE, negotiated the terms of a European Bank for Reconstruction and Development (EBRD), and began a new phase of planning for the next great expansion of the Community to take on new members. Clearly this process would be neither easy nor cheap, but it seemed achievable,

and achievable in a delimited time frame of perhaps ten years. There would be dislocations in the short run, but rather quickly the transition would become a rising tide to lift all boats.

What lay beneath this vision was a confidence that the EC could engineer a discrete, planned, well-organized set of political/economic and security solutions to the new problems raised by the Eastern neighbors. The vision of “concentric circles,” promulgated mainly by the French in 1990 and 1991, captures this mood. There would be neat packages of arrangements organizing the EC, the European Economic Area, and the “associated” states of the East. Negotiations to bring the circles together would proceed according to a discrete timetable and clear set of requirements. In the interim, an equally tidy division of labor on security issues would be worked out among NATO, the Conference on Security and Cooperation in Europe (CSCE, now called OSCE), and a newly revived West European Union (WEU), which would rather quickly be integrated into the EC to take charge of the defense component of a nascent EC foreign policy. When political leaders during this period used the term “adjustment,” the image was of an interregnum between one equilibrium and another. Although the precise terms of that future equilibrium could not be seen, the belief was that it would indeed be reached, in not too long a time frame and by a rather neat and well-controlled process in which one step would follow logically after the next.

That vision is gone. It may have been buried prematurely by events in the Balkans, but ultimately it was doomed by more fundamental issues that would have emerged in any case. One aspect was that the problem, discussed above, was on a larger scale than seemed evident to start. Comparative GDP and other quantifiable measures simply did not capture the difficulties of creating social, political, and business infrastructures that would be compatible with Europe. A second aspect was that the questions now at issue reached much more deeply into the domestic political foundations of Europe than anything the EC had attempted perhaps since the Treaty of Rome and the (failed) European Defense Community. The end of the cold war put back on the table a set of questions that Jacques Delors had bypassed (intentionally) in his design for revitalizing Europe through the SEA. The question of Europe’s status as an evolving polity had been kept mostly on the margins by Delors, while energy

was concentrated on “completing” the single market. The end of the cold war decimated that strategy, and its death was confirmed by the near collapse of Maastricht in public referenda. The political mobilization game around European issues was no longer an elite affair of economic interests.

Since the “master plans” have collapsed and have not been replaced, the game is highly uncertain and stays open in this way for some substantial time to come. Consequently, the story of Europe’s transition will be one of crisis and political mobilization creating a new politics, not intersecting win-sets among two-level games that are stable and separable. A consequence is that politics in the West will not be settled quickly enough to define clearly and discretely the ways in which markets evolve in the East. The West Europeans might, for example, make two sets of decisions that shape the nature of Eastern market development. Failing to resolve a new RIS affects each set. One set of decisions is about market access and subsidies. Here it is very unlikely that in the absence of a clear vision about the final institutional arrangement any substantial assistance would emerge. A second set of Western choices is about the rules of business in Eastern Europe. That is, if the Eastern states join the community, it would provide certainty for business: a) certainty about the rules of the market since there would have to be an extension of Western rules, and b) certainty about security of investment behind the European guarantees. For those who would build the East into their production structures and into production reorganizations, political uncertainty risks disruption of their production. This must inevitably slow the production reorganization of Europe as a whole

One consequence is that the emerging market relations are likely to develop interests and political programs that define the politics of the final arrangements. As the market relations evolve they will create some real interests, both material interests and mobilized political interests. But as noted above, neither the actors nor their interests can be read off a production profile, but are rather political creations born of conflict and competition. Therefore, rather, the sequence of business decisions and political or security crises will be key to the process of reformulation of interests. “Implicit development strategies” of Eastern states, along with unplanned (and probably unpredictable) market developments, will set the context within which new actors formulate plans, strategies, and ulti-

mately interests and identities. The politics of any “final” arrangement, or at least the possibility of a new “equilibrium” of sorts, will be subject to and constrained by the creations and recreations of actors and interests as political crises and market realities unfold. Indeed the terms in which the emerging market relations are defined may be critical, and the Asian optic of cross-national production networks may prove critical not merely to identify business opportunities, but also to give political meaning to the emerging market relationships.

At a minimum, a new RIS for Europe that embeds bargains about Europe’s future, predictably channels disputes that may arise, and recreates the two-level games separating domestic and European “political games” into walled off compartments is a long way off. Take the extreme case first. It is unlikely, but not unthinkable, that the current institutional arrangements of the EU could collapse of their own weight for failure to reform. The political and economic consequences would be significant, although not necessarily all for the bad. The organizing logic of EU institutions is one important factor (among several) that now differentiates the European region from Asia. Might Europe ten years hence more closely resemble certain aspects of Asian political economy—with cross-national production networks flourishing despite the weakness or absence of political organization? Alternatively, and probably more likely, Europe will remain saddled with vestiges of an older RIS. In many ways these act as constraints on necessary tasks of development, and they do so at this point without providing a reasonable payoff in security or broader political confidence for relations between West and East. Investors will find ways around these roadblocks, but slowly. Meanwhile, political mobilization will emerge around new crises and possibly in surprising ways. Europe’s inability to act collectively, as a polity, at this point opens the game widely for new visions of what that polity ought to be or whether it ought to exist at all.

NOTES

1. Wolfram F. Hanreider, *Germany, America, Europe: Forty Years of German Policy* (New Haven: Yale University Press, 1989).
2. For example, see John A. McKesson, "The Schuman Plan" *Political Science Quarterly* 67, 1 (March 1952): 18–35; Alan S. Milward, *The Reconstruction of Western Europe, 1945–51* (London: Methuen, 1984); Neill Nugent, *The Government and Politics of the European Community*, 2d ed. (Durham: Duke University Press, 1991); P. A. Reynolds, "The European Coal and Steel Community," *Political Quarterly* 23, 3 (July–September 1952): 282–92.
3. For general reading on the first decades of the EC's history, see David M. Harrison, *The Organisation of Europe: The Development of a Continental Market Order* (London: Routledge, 1995); John Pinder, *European Community: The Building of a Union*, 2d ed. (Oxford: Oxford University Press, 1995); Derek Urwin, *The Community of Europe: A History of European Integration since 1945*, 2d ed. (New York: Longman, 1995); Hans Von der Groeben, *The European Community: The Formative Years* (Brussels: Commission of the European Communities, 1987). Von der Groeben is a founding member of the Commission and high-ranking civil servant in Bonn. He shows in a few short pages that the major pro-Europe players in France and Germany were also the major players in Brussels. Helen Wallace, "The Institutions of the EU: Experience and Experiments," in *Policy Making in the European Union*, ed. Helen Wallace and William Wallace, pp. 37–68, 3d ed. (Oxford: Oxford University Press, 1996); F. Roy Willis, *France, Germany, and the New Europe, 1945–1967*, rev. ed. (Stanford: Stanford University Press, 1968). Willis offers a well-documented account, which includes discussion of industry's initial opposition to the Schuman Plan in both Germany and France. In fact, as he tells it, only after the ECSC experienced such good rates of growth did business get on the bandwagon. Willis does show, however, that the elite architects of Europe were also the major players in national politics. Jean Monnet, *Mémoires* (Paris: Fayard, 1976).
4. For text of the case, see Case 120/78, *Rewe-Zentral AG v. Bundesmonopolverwaltung für Branntwein* [Preliminary ruling requested by the Hessisches Finanzgericht], ECR 649 [European Court of Justice 1979]; see also Geoffrey Garrett and Barry R. Weingast, "Ideas, Interests and Institutions: Constructing the European Community's Internal Market," in *Ideas and Foreign Policy: Beliefs, Institutions, and Political Change*, ed. Judith Goldstein and Robert O. Keohane, pp. 173–206 (Ithaca: Cornell University Press, 1993); and Nugent, pp. 179–80.
5. For a good definition of the term *acquis communautaire*, see Anna Michalski and Helen Wallace, *The European Community: The Challenge of Enlargement*, 2d ed. (London: Royal Institute of International Affairs, 1992), which provides a succinct overview of the different ways the term has been used, particularly regarding enlargement debates.

6. Jean Pisani-Ferry, "Variable Geometry in Europe"; paper presented at the conference on "Reshaping the Transatlantic Partnership: An Agenda for the Next Ten Years," College of Europe, Bruges, 20–22 March 1996.
7. Helen Wallace, "Coming to Terms with a Larger Europe: Options for Economic Integration"; paper prepared for the BRIE/Kreisky Forum Collaborative Project Investigating Foreign Direct Investment and Trade in Eastern Europe: The Creation of a Unified European Economy, 5–6 June 1997.
8. Colette Mazzucelli, *France and Germany at Maastricht* (New York: Garland, 1997); Kenneth Dyson, *Elusive Union* (London: Longman, 1994); Richard Corbett, *Treaty of Maastricht* (Harlow: Longman, 1993).
9. Martin Feldstein, "Europe's Monetary Union," *The Economist* 323, 7763 (13 June 1992): 19–22. Feldstein argues that the single market makes economic sense and does not require a single currency to function effectively. A single currency, on the other hand, may diminish trade within Europe, raise unemployment, increase cyclical volatility, and raise inflation. He argues that the political advantages (small) do not outweigh the economic costs of EMU. Charles R. Bean, "Economic and Monetary Union in Europe," *Journal of Economic Perspectives* 6, 4 (Fall 1992): 31–52. Bean reviews the arguments for and against monetary union. He concludes that the case is not as drastic as either proponents or opponents make it out to be. The real problem remains the convergence criteria's contractionary effects, which may undermine the economic boost of the single market. Bernhard Winkler provides a review of the arguments pro and con; the author, however, comes down in favor of the EMU and even the Maastricht criteria ("Towards a Strategic View on EMU: A Critical Survey," *Journal of Public Policy* 16, 1: 1–28). Winkler (at the EUI, Florence) reviews the economics literature on the merits of a single currency (optimum currency area) and the conditions for a stable currency (credibility). He then argues that when taken together, one can better appreciate the design of the convergence criteria.
10. Our thanks to Manuel Castells, whose insightful comments have influenced our thinking.
11. For good overviews written before the 1995 enlargement was decided upon, see Helen Wallace, ed., *The Wider Western Europe: Reshaping the EC/EFTA Relationship* (London: Pinter, 1991), and Thomas Pedersen, *European Union and the EFTA Countries: Enlargement and Integration* (London: Pinter, 1994). For a discussion of EC member-states' preferences on the EFTA enlargement, see Thomas Pedersen, "Community Attitudes and Interests," in Wallace, ed., pp. 109–23. For an overview of the terms of the actual negotiations, including sticking points, see Francisco Granell, "The European Union's Enlargement Negotiations with Austria, Finland, Norway and Sweden," *Journal of Common Market Studies* 33, 1 (March 1995): 117–41.
12. For discussions of the behavior of poorer states after enlargement, see David Allen, "Cohesion and Structural Adjustment," in Wallace and Wallace, eds., pp. 209–33; Jeffrey J. Anderson, "Structural Funds and EU Policy," in *European Social Policy: Between Fragmentation and Integration*, ed. Stephan

- Leibfried and Paul Pierson, pp. 123–58 (Washington, D.C.: Brookings, 1995); Frances Nicholson, and Roger East, *From the Six to the Twelve: The Enlargement of the European Communities* (Harlow: Longman, 1987); Ingeborg Tömmel, “The Effects of EU Structural Policies on Policy-Making and Power Relations in the Member States”; paper presented at APSA Conference, San Francisco, 29 August–2 September 1996; Richard E. Baldwin, Joseph François, and Richard Portes, “The Costs and Benefits of Eastern Enlargement,” *Economic Policy: A European Forum*, Twenty-Fourth Panel Meeting, London, 11–12 October 1996.
13. For “intellectual history” and an overview of variable geometry, etc., see Petra Brunner and Wolfgang Ochel, “Die Europäische Union zwischen Vertiefung und Erweiterung,” *IFO-Schnelldienst*, no. 32 (1995): 9–20.
 14. For discussion of costs of public transfers from West to East Germany, see Rudiger Dornbusch and Holger Wolf, “Economic Transition in Eastern Germany,” *Brookings Papers on Economic Activity* 1 (1992): 235–72; Stephan Eisel, “The Politics of a United Germany,” *Daedalus* 123:1 (Winter): 149–72; Fritz Stern, “Freedom and Its Discontents,” *Foreign Affairs* 72, 4 (September–October 1993): 108–25.
 15. Pisani-Ferry.
 16. Jeffrey D. Sachs and Andrew M. Warner, “How to Catch Up with the Industrial World,” *Transition* 7 (September–October 1996): 1.
 17. Note that the poorer economies in the EU have not achieved good growth rates for long periods of time. While Ireland, Portugal, and Spain each grew rapidly in the last five years of the 1980s, only Ireland has sustained that growth in the 1990s. Greece has never achieved sustained rapid growth in the past two decades. For the period 1980–95, not one of these countries achieved 5 percent per capita GDP growth on an annual basis. Jeffrey D. Sachs and Andrew M. Warner, “Economic Convergence and Economic Policies” (Cambridge, Mass.: National Bureau of Economic Research, 1995); Working Paper Series, No. 5039.
 18. See Baldwin, François, and Portes. For additional estimates of the costs of admitting the CEECs into the EU, see Richard E. Baldwin, *An Eastern Enlargement of EFTA: Why the East Europeans Should Join and the EFTA Should Want Them* (Geneva: Graduate Institute of International Studies, 1992); Paul Brenton, and Daniel Gros, *The Budgetary Implications of EC Enlargement* (Brussels: Center for European Policy Studies, 1993); CEPS Working Document No. 78); Stefan Tangermann and Timothy E. Josling, *Pre-Accession Agricultural Policies for Central Europe and the European Union* (Göttingen and Stanford, 1994); Kym Anderson and Rodney Tyers, *Implications of EC Expansion for European Agricultural Policies, Trade and Welfare* (London: CEPR, 1993); CEPR Discussion Paper No. 829; *Is Bigger Better? The Economics of EC Enlargement* (London: CEPR, 1992).
 19. Our thanks to Susan Sienna, whose dissertation work is producing these findings.

20. For more on two-level games, see Robert D. Putnam, "Diplomacy and Domestic Politics: The Logic of Two-Level Games," *International Organization* 42 (Summer 1988): 427–60. See also contributions in Peter B. Evans, Harold K. Jacobson, and Robert D. Putnam, eds., *Double-Edged Diplomacy: International Bargaining and Domestic Politics* (Berkeley: University of California Press, 1993).
21. See Putnam; it is reproduced as an appendix in Evans, Jacobson, and Putnam, eds., pp. 454–56.
22. Andrew Moravcsik, "Negotiating the Single European Act: National Interests and Conventional Statecraft in the European Community," *International Organization* 46 (Winter 1991): 19–57 (quote is from p. 52).
23. Robert O. Keohane and Helen V. Milner, eds., *Internationalization and Domestic Politics* (Cambridge: Cambridge University Press, 1996). See especially their introduction and conclusion.
24. For an extreme example, see Ronald Rogowski, *Commerce and Coalitions: How Trade Affects Domestic Political Alignments* (Princeton, N.J.: Princeton University Press, 1989); also see Peter Gourevitch, *Politics in Hard Times* (Ithaca: Cornell University Press, 1986).
25. For a discussion of these issues, see John Zysman, Eileen Doherty, and Andrew Schwartz, "Tales from the 'Global' Economy: Cross-National Production Networks and the Reorganization of the European Economy" (Berkeley: Berkeley Roundtable on the International Economy [BRIE], University of California 1996); BRIE Working Paper No. 83.
26. Steven Weber, "Origins of the European Bank for Reconstruction and Development," *International Organization* 48 (Winter 1994).

“IMPLICIT” DEVELOPMENT STRATEGIES IN CENTRAL EAST EUROPE AND CROSS-NATIONAL PRODUCTION NETWORKS¹

Ellen Comisso

Not entirely without reason, East Europeans have been prone to view the region's long- and short-term political evolution in terms of various “national tragedies” suffered at the hands of any number of larger and more powerful entities centered outside the region's borders.² Similarly, economic development—and especially the lack of it—has often been regarded as the result of decisions made by external political and economic actors in pursuit of their own interests, with scant concern for local consequences, sensibilities, or welfare. Not surprisingly, then, one encounters a certain amount of local skepticism about the ability of either economic agents or governments in ex-CMEA (Council of Mutual Economic Assistance) states to influence the terms on which East-West integration occurs.³

That both political and economic interaction between Western and Eastern Europe has expanded dramatically in the wake of the 1989 regime changes is undeniable. Indeed, by 1995, over two-thirds of the foreign trade of the four “Višegrad” countries (Poland, Hungary, the Czech Republic, and Slovakia) was with European Union (EU) members, compared with about 20 percent a decade earlier. Moreover, much of that massive trade reorientation is directly traceable to policy decisions made by post-socialist East European governments, whether it was the agreement to put CMEA trade on a hard currency basis (a key factor in the trading bloc's collapse in 1991), the dropping of trade barriers to facilitate import competition, the signing of association agreements with the EU, or (most recently) the submission of applications for formal EU membership and the acceptance of Poland, the Czech Republic, Hungary, Estonia, and Slovenia as candidates. Hence policy choices and changes of ex-

CMEA states themselves have clearly had an effect on the direction and quantity of the region's trade and ties since 1989; their impact on the quality of trade, the economic and technological benefits of trade, and particularly the degree to which increased East-West interaction takes the form of the cross-national production networks so significant in Asian trade and development are a somewhat different question.

In fact, the quality of economic relations between EU and ex-CMEA economies appears to be quite different from the trading arrangements which characterize East Asian newly industrialized countries (NICs) with each other or with their more highly developed trading partners. The reasons for these differences are multiple. They reflect different starting points and cultural traditions, both of which have militated in favor of development strategies in Central and Eastern Europe (CEE) quite different from those followed in Asia. Further, current differences between the quality of East-West European trade and Asian trade patterns are a product of the relatively recent (re) introduction of private property, corporate law, and market competition in CEE, as well as of the somewhat different international economic and domestic political conditions in which they are evolving. On the one hand, there is as yet no large "third market" that can duplicate the role the American market performed in Asian development. On the other, development strategies with profound distributional consequences must be adopted by governments subject to electoral accountability—as opposed to the "pre-pluralistic" conditions under which most postwar Asian NIC development was initiated. Finally, and not to be minimized, the reaction of Europe-based Western firms and governments to the region's attempts at transformation appears to reflect motives and patterns of interaction different from those of Asian counterparts.

This analysis will begin by outlining the reasons why post-socialist policymakers in the CEE states never seriously entertained Asian models of development in fashioning economic strategy in the 1990s. That discussion will highlight the similarities among the three CEE states on which we focus—Poland, the Czech Republic, and Hungary—as well as the ways in which all of them differ from even "third-tier" Asian NICs.

Within broadly similar transition/transformation objectives and strategies, economic policy toward microeconomic actors has

differed in important ways among the three CEE states, as manifested in contrasting approaches to privatization. As a result, the types of enterprises that seem to be the most dynamic sources of growth and innovation in each country vary. In Poland, a rapidly growing set of small and medium-sized firms, many of which are relatively recent start-ups, appears to be leading the country's economic growth; in the Czech Republic, the voucher-privatized firms are at the economic heart of the transformation, while in Hungary, foreign-owned firms or enterprises with substantial foreign participation seem to be at the core of economic growth. The second part of this analysis will thus focus on each state's "implicit" development strategy and its consequences for the types of entrepreneurial activities that seem to be emerging, particularly in the export sector.

The final part of this analysis will summarize some of the general trends in East-West trade that have emerged in the 1990s. We shall then go on to speculate on the microeconomic consequences of these trends. To the degree expanding intra-industry trade is *prima facie* evidence of the existence of cross-national production networks (CPNs), one can indeed infer the existence of this form of East-West linkage. Yet if CPNs are understood as highly articulated networks of producers engaged in multilateral cooperation with each other, involving elaborate cross-border subcontracting arrangements and technology transfer, their appearance has been quite limited to date.

DIFFERENT STARTING POINTS

Our inquiry will focus on Poland, the Czech Republic, and Hungary for several reasons. First of all, their geographic position alone suggests that to the degree links among enterprises in Eastern and Western Europe form, they are likely to begin in these states. Or, put somewhat differently, if CPNs are not present in these three states, they are unlikely to be present elsewhere in the region.⁴ Second, to the degree domestic policy decisions affect the quantity, quality, and scope of inter-enterprise cooperation, Poland, the Czech Republic, and Hungary have undergone the most thorough economic, political, and legal reforms in the area. Along with Slovenia and some of the Baltic states, they have become the models other

countries in the region are exhorted to imitate. Although the reform process in even the Golden Triangle is still far from complete, the respective patterns and directions of change are relatively clear at this time, such that one can at least describe them as variants of a distinctive "model." Finally, to the degree this analysis broadly seeks to shed light on EU enlargement, it would seem to make sense to concentrate on the leading candidates for inclusion and examine how and why they came to acquire this status and how it affects the links among producers.

As we shall see below, the elements making up an "implicit" development strategy vary somewhat among each of the states in our sample, but all differ rather substantially from the path taken by states in Asia in all tiers. Whether one points to taxation and budgetary issues, the proportion of national income that passes through government hands, recruitment into key state agencies, human capital concerns and social service provisions, industrial policy, or trade and regulatory practices, the so-called Asian model(s) of development has—for better or worse—not figured prominently in either the thinking or the decisions of policymakers anywhere in Eastern Europe.⁵ On the contrary, the model of development to which at least the Central European trio we are examining appears headed is that of the West European welfare state, Germany and Austria being the primary examples emulated.⁶

Part of the reason for the choice of models is, of course, cultural, historical, and geographic. Germanic influence in the area is longstanding, dating back as far as the invitations of medieval kings to German settlers for the purpose of populating and modernizing their realms. Indeed, the population of cities in the area was predominantly German until the nineteenth century, and the start of modern economic growth occurred in the framework of the imperial states of the Hohenzollerns and Hapsburgs, with capital contributed by banks headquartered in Berlin and Vienna.⁷ In a certain sense, the role of the German and Jewish populations of Central Europe in the area's initial modernization was reminiscent of the role played by the overseas Chinese communities in Asia more recently, in which informal networks of family, ethnicity, and cultural ties were critical in reducing transaction costs, risks, and uncertainty. As these historical relationships have manifested themselves in the CEE states since 1989, it is entirely understandable that new commercial, financial,

and corporate codes and the legal forms and rights surrounding private ownership tend to be local adaptations of German codifications. The heavy reliance of enterprises on banks for financing—as opposed to raising capital through equity offerings—is partly a reflection of this framework.

A second reason for the tendency to turn westward for economic and policy models is related to the level of development attained in the CEE states by 1989. Unlike third-tier states in Asia, Central European states may have been “misdeveloped,” to use Paul Marer’s felicitous phrase,⁸ but they were not underdeveloped. This can be seen from Tables 1–9. These tables reveal both rapid modernization in Indonesia, Malaysia, Thailand, and (to a lesser extent) the Philippines in the 1980s and with little change in the economic structure in Hungary, Czechoslovakia, and Poland during the same decade. At the same time, however, significant differences between the two groups persisted, despite the stagnation in the East European set. The social indicators of modernization—urbanization (Table 1), infant mortality (Table 2), literacy rates (Table 3), and life expectancy (Table 4)—remain higher in Eastern Europe. The economic indicators—per capita GDP (Table 5), the employment structure of the labor force (Table 6), the sources of GDP (Table 7), and even telephones in use and road density (Tables 8 and 9)—reflect differences between industrializing and industrialized economies. To the degree the impressive growth rates attained by Asian economies in the past decade were related to the transfer of excess rural labor into more productive manufacturing and industrial activity, that process had already occurred in Hungary, the Czech Republic, and even Poland much earlier, and not surprisingly, policymakers did not seek to reproduce examples of how to pass through experiences they had put behind them. In short, the CEE economies in 1990 were not starting from a position in which resources and capacities had first to be created. Rather, substantial capacities were already present, and the task was determining how to redeploy and reorient them and who should be the prime mover in the process: the public sector and the state or the private sector and a relatively open and competitive market.

The third difference between the CEE states and the East Asian economies that influenced policy choices and strategies in the former is, of course, the experience of state socialism. On the one hand, the

disintegration of the ruling Leninist party in 1989 meant that the central political mechanism of regulation in the state socialist economy was no longer present, making a continuation of the old system impossible. On the other hand, the strong repudiation of the past on which opposition parties and movements rode to power in 1990 entailed a deep determination to drastically reduce the role of the state in the economy, be it as an owner of assets, a regulator of prices, or a source of subventions for favored activities. The desire to establish an economy based on "self-regulation" in response to the hierarchical direction of the past was a key factor in the relatively liberal pattern of measures adopted in Poland, the Czech Republic, and Hungary to deal with the immediate economic crisis. Accompanying it was a national aspiration to "rejoin Europe," a project which entailed distancing both the state and the economy from the Soviet Union and Russia.

At the same time, however, the bulk of the population had become accustomed not only to the full employment economy and subsidized price structure of socialism, but also to a substantial array of social services, many of which were distributed through the workplace. If anything, reliance on state-provided social services—especially pensions—increased as the "transition recession" began. While reform of social service delivery became a hot political issue, abandoning the provisions altogether was not a viable political option anywhere given the electoral constraints faced by policymakers. Hence, even as the state began to relinquish its role as a direct producer in favor of a more limited one of simply enforcing a framework for voluntary transactions, its centrality in the supply of social welfare remained more or less intact.

The legacies of socialism at the level of enterprises was equally substantial. Large, vertically integrated, monopolistic enterprises were the norm, and secondary sector activities—especially in heavy industry—were typically in a privileged position vis-à-vis primary and especially tertiary sector development. Especially in Poland and Hungary, cutbacks in investment in the 1980s meant the capital stock was badly in need of modernization, and depreciation rules combined with a sellers' market so typical of the shortage economy had encouraged keeping outdated equipment in operation everywhere. Firms thus contained substantial, if antiquated, productive capacities, together with human capital reserves concentrated on the pro-

duction and engineering side of manufacturing.⁹ It was the economic side of the production process that had received short shrift in state socialism, with marketing and sales departments absent even in companies that had some experience producing for Western markets. In effect, the internal structure of enterprises mirrored the larger structure of the economy: an exaggerated attention to supply and production of physical commodities at the expense of economic activities catering to transactions, consumption, and demand.

As for the private sector, it was nonexistent in Czechoslovakia but increasingly vibrant in Poland and Hungary as the 1980s drew to a close. In the latter cases, limits on legal employment and other restrictions tended to keep private firms small, and the most obvious opportunities to exploit were in the service sector, where private entrepreneurs tended to congregate.¹⁰ Yet even in Poland and Hungary, the health of the burgeoning “second economy” typically depended heavily on the operation of the state-owned “first economy” as long as socialism survived.

The story of CPNs—or in practice, their relatively limited appearance to date—is in large part the story of the reaction of these two very different types of enterprises to policies aimed at opening markets, creating competition, expanding trade with the West, and controlling inflation while maintaining as much as possible of the old social safety net intact.

“IMPLICIT” DEVELOPMENT STRATEGIES: COUNTRY ANALYSES

“Development” in each of the three countries in our sample has by and large been defined by post-socialist governments along two dimensions. First, it is seen as a process of “Westernization,” involving increased trade and political involvement with Western countries, culminating with membership in NATO and the EU. A corollary of this process is a distancing from the “East,” manifested by the precipitate collapse of CMEA and especially Soviet trade, despite the difficulties the loss of traditional buyers caused so many East European firms. Second, “development” has been equated with the creation of an economy based on competitive markets and pri-

vate ownership, a so-called "normal" economy in which a clear boundary separates the public from the private sphere.

As such, indicators of progress toward these goals have not centered around the traditional elements associated with "development" elsewhere, such as economic growth, the structure of employment, the sophistication of the technological base, or increased living standards—factors which have only very recently become of concern to policymakers. Instead, evaluations of the past few years have frequently defined "progress" in terms of a rather peculiar set of variables: declining rates of labor force participation, increased unemployment, a declining share of national income originating in industrial and manufacturing activities, a drop in real earnings, increased income and wealth disparities, and other such counterintuitive measures.¹¹ Such an anomalous situation makes sense only once we realize that overcoming socialism and moving out of a Soviet cum Russian sphere of influence are perceived by policymakers as the core tasks much more than is combating underdevelopment, for both economic and especially political reasons. As a result, if transition/transformation strategies have varied somewhat within the three states in our sample, they have all centered around the holy trinity of liberalization, stabilization, and privatization, together with a massive reorientation of trade from East to West. We begin with a country by country summary of the main policy steps and results. We shall then move to compare them in the context of the responses of domestic firms and the degree to which East-West production and financial networks have emerged in each state.

POLAND: FAVORING THE SMALL¹²

The characteristic that distinguished Polish post-socialist economic policy from that in Czechoslovakia and Hungary was the feature that earned it the title of "shock therapy"—namely, the immediate and simultaneous introduction of liberalization and stabilization in a single package of policy measures adopted by the Sejm in 1989. Economic policy since that date has largely been a process of tinkering with and modifying some of its elements to make it more palatable to the highly vocal domestic interests harmed by its effects—agriculture and the peasantry being the leading exam-

ples—without altering the core strategy embodied in the 1990 package. Not surprisingly, this has led to a lively debate over whether the resumption of growth in 1992 was due to the initial Balcerowicz plan or to the modifications subsequently made to it.

The Balcerowicz “shock therapy” was adopted under circumstances unusual even in Eastern Europe at the time: near hyperinflationary conditions, the “honeymoon” period of the region’s first non-Communist government in forty years, and lingering uncertainty over how the Soviet Union would react to the regime changes on its borders. The package of measures that went into effect on 1 January 1990 has been widely discussed elsewhere; we limit our account to its main elements.

The “big bang” of 1 January 1990 involved a 40 percent devaluation of the zloty to a fixed rate that would serve as an anchor for other macroeconomic measures and domestic prices, virtually all of which were freed the same date (the exceptions were for fuels, transportation, utilities, and housing). Major cuts were made in government spending, including the virtual elimination of producer subsidies, coal being the only major exception. The goal of fiscal policy was to reduce the budget deficit from 8–10 percent to 1 percent of GDP in 1990. Equally important to efforts to dampen inflation was a stiff excess wages tax (the highly unpopular *popiwek*) imposed on all state enterprises; real wages thus fell 25 percent from their 1989 levels. Significantly, the *popiwek* did not apply to private firms, enabling them to compete with state-owned enterprises (SOEs) on quite favorable terms for qualified labor. Monetary policy was also sharply restrictive, as positive real interest rates came into effect and banks’ reserve requirements increased. The result was a “near cessation of bank lending in the first two months” of the program and a consequent increase of “forced” lending by enterprises to one another.¹³ Finally, foreign trade underwent a major liberalization: not only were quantitative restrictions on imports and exports removed, but also tariff rates were set at exceptionally low levels.

The package certainly succeeded in its basic goal of “monetizing” the economy, which almost overnight moved from one in which individuals flush with cash queued up in front of stores with empty shelves to one in which stores were well stocked but potential buyers lacked the income to make purchases. But there was also a sharp decline in output, with GDP dropping by 12 percent in 1990 accord-

ing to official estimates. It was followed by a further shock in 1991, when CMEA trade plummeted and unemployment began to mount to double-digit levels. And while inflation was brought under control, it remained substantial, such that the undervalued zloty quickly appreciated in real terms, an additional factor contributing to the poor export performance of 1991. Indeed, practically the only silver lining in the 1991 cloud was the government's agreement with the Paris Club that reduced the heavy hard currency debt of about \$45 billion by about half.

By the end of 1992, however, the economy had bottomed out, and growth resumed, reaching levels as high as 5 percent in subsequent years. Moreover, the structure of the new Polish economy differs in significant ways from its socialist predecessor. In contrast with the past, the most successful (i.e., profitable) emerging branches are labor-intensive, consumer-oriented, and heavily populated by small and medium-sized firms. The outward-processing trade (OPT) has certainly played a role here: while clothing and footwear manufacturing have expanded, textiles and lumber industries are operating at sharply reduced levels. Employment in services has expanded, while the proportion of the labor force in industry has declined. Both the direction and composition of foreign trade have reflected the change as well: Germany replaced the Soviet Union as Poland's single largest trading partner, and by 1995, the EU as a whole accounted for two-thirds of foreign trade, up from 25 percent in 1987. Whereas the electrical and mechanical engineering sector had dominated exports previously, the collapse of the CMEA reduced its relative weight in exports by some 40 percent.

Finally and perhaps most important, the domestic private sector appears to be the driving force behind the resumption in growth. Thus, despite the relative decline of industry in GDP, the share of the private sector in industrial sales increased from 16.2 percent in 1989 to 37.4 percent by 1993. Investment by smaller, typically private, enterprises has increased substantially, and there were other signs that different patterns of economizing were taking root between the state and private sectors as well:

State-owned firms have managed to increase labor productivity by 11 per cent almost wholly by decreasing employment by some 10 per cent, but in the private sector labor productivity has in-

creased by around 20 per cent at the same time that employment has increased by 13 per cent.¹⁴

Economically, then, the radical and sudden combination of “all at once” liberalization and stabilization proved—to the surprise of many Poles—quite successful. Politically, however, it was extremely unpopular, producing a wave of fragmentation in the legislature and a series of fragile coalition governments. One consequence was that the recurrent controversies and conflicts even within governing coalitions made it impossible to move forward systematically on Phase 2 of the original program—namely, privatization. Disagreements surrounding the mass privatization program were a key factor in bringing down the Suhocka government in 1993; the new SLD government then procrastinated on its implementation. Thus the program has only gotten into operation recently, with the number of enterprises involved reduced from original projections. Overall, by 1996, relatively few large enterprises had been sold to either private domestic or foreign investors. And despite a relatively liberal law on foreign investment passed in 1991, foreign direct investment (FDI) has been slow to arrive, particularly in light of the size of the domestic market and relatively favorable labor costs. The reasons for this reluctance vary and include Polish labor’s reputation for militancy, resistance by some of the enterprise councils to ownership by a foreign entity, the continued political debate over how privatization should be done, and the conditions Polish governments at various times have felt obligated to attach to sales.

Nevertheless, if direct sales of major enterprises and banks have been few and far between, this does not mean that privatization has not occurred on a fairly significant scale in other ways. In fact, Poland appears to have a *de facto* privatization strategy, built largely on the burgeoning small-scale enterprises that have emerged in the last decade. First of all, between reforms made in the 1980s and the fact that agriculture was always more or less in private hands, Poland actually had a private sector that accounted for 30 percent of national income even in 1989. Second, “small” privatization—the auctioning off of thousands of retail shops, restaurants, repair shops, and other small services—occurred very rapidly, thanks to the highly decentralized method employed.¹⁵ Third, early deconcentration policies caused many large SOEs to split into smaller units, facilitat-

ing spinoffs into private ownership. In addition, a considerable portion of assets transferred from state to private hands has occurred by "liquidation sales" and leasing, either to independent entrepreneurs or to private companies formed by the management and employees of the unit concerned. Finally, a speculative bubble that occurred on the Warsaw stock exchange in 1993–94 gave potential investors—local and foreign—a taste of the possibilities that could be realized by backing small start-ups and encouraging them to grow in order ultimately to take them public; hence, even if the bubble itself eventually burst, it encouraged outsiders to invest in promising small ventures. The "implicit" privatization story in Poland is thus one of allowing the highly dynamic small business sector to expand through absorbing formerly state-owned assets and putting them to more productive use. Indeed, Poland's basic development strategy is very much one of building on new start-ups and clearing away obstacles to their development. As far as the large, traditional SOEs are concerned, we come to the second consequence of the political unpopularity of shock therapy.

The basically neoliberal and noninterventionist strategy favored by the architects of the "big bang" soon proved unsustainable, both politically and even economically. For example, the first year of the program actually witnessed the balanced budget it had aimed for. But the causes for the small surplus turned out to be the same factors which quickly caused it to go into deficit. That is, the undervalued zloty combined with price liberalizations and inventories piled up from 1989 allowed enterprises to pass on hefty price increases, which turned into high profits despite a precipitous drop in sales. The excess wage tax also made its contribution to profitability, as labor costs did not keep pace with inflation and still controlled energy prices lowered production costs as well. But the government, insofar as large portions of its revenues were derived from enterprise taxes, had a one-time-only windfall.

In 1991, the situation was reversed: the now overvalued zloty encouraged import penetration, domestic demand continued its decline, and for many SOEs, profitability evaporated, in most cases never to return to 1990 levels. Not only did the tax base decline, but SOEs frequently simply failed to pay taxes at all in order to meet even reduced payrolls and maintain the minimum liquidity needed to keep their operations going. At the same time, rising unemploy-

ment and the decision of many individuals to opt for early retirement over a potential layoff put increased pressures on expenditures.

As a result, the balanced budget aspirations of the stabilization program had to be abandoned, and the main effort came to be directed more to controlling the size of the deficit than to eliminating it. The introduction of the personal income tax in 1992 and a value-added tax (VAT) in 1993 diminished the budget's vulnerability to enterprise profits without entirely eliminating it; thus the "back door" industrial policy contained in allowing some of the larger SOEs to accumulate tax arrears has continued.¹⁶ Only very recently have the problems of some of these enterprises come to be addressed directly by the government through an explicit industrial policy of consolidation and restructuring, another departure from the original shock therapy program. Thus an Intervention Fund was created in 1993 for enterprises whose restructuring would be "socially sensitive," and in the same year, programs were begun in coal, steel, energy, and agriculture, with shipbuilding, defense, and heavy chemicals to follow.

Nevertheless, the overall structure of government expenditures has shifted significantly away from subsidies and investment in favor of debt service and social welfare maintenance. The social costs of the transition have caused expenditures for social services—especially pensions—to rise considerably, even as wages of state employees have lagged. As a result, payroll taxes have made a significant contribution to labor costs.¹⁷ At the same time, it is worth noting that if some of the larger SOEs have received a back door subsidy in their accumulation of tax arrears, the private sector has often escaped paying taxes and social security contributions altogether.¹⁸ Hence if explicit industrial policy has targeted the socialist behemoths, implicit industrial policy has worked to the advantage of small business.

The impact of monetary policy has been similar. Interest rates have remained high and more or less positive in real terms, and after 1991, bank lending policy became increasingly risk-averse. As a result, credit to the enterprise sector declined in 1992 and again in 1993—while credit to the budget mounted. The cutback affected SOEs disproportionately since unlike the private sector, profitability rates after 1990 provided little in the way of retained earnings to be used for restructuring or modernization. Even when the banks re-

sumed lending, it was largely to cover working capital needs, not to finance investment. The government's adoption of an industrial policy was thus partly forced on it by the reluctance of the banking sector to take the initiative. Meanwhile, one way in which the state enterprises sought to cover their immediate liquidity needs was by leasing or selling facilities to private entrepreneurs—another factor in the latter's expansion.

Finally, foreign trade policy was modified after 1991. The first change was to move the currency to a crawling peg system in late 1991; abandoning the fixed exchange rate may have removed an anti-inflationary anchor, but it also facilitated export growth. Other changes in trade policy were more directly in response to popular discontent and protest. Farmers were the first to mobilize, receiving concessions as early as mid-1990. Tariffs—on manufactured as well as agricultural commodities—began to shift upwards, rising to average levels of 15–20 percent by 1994. Significantly, duties are higher on finished products than on raw materials and intermediate goods, thereby favoring OPT, the many small firms that sprung up to assemble electronic goods (from radios and TVs to computers) from imported components, and other small producers relying on imported inputs. Fiat's decision to purchase FSO was also contingent on tariff protections for domestically made cars.

How much protection—and for how long—Poland can provide for domestic producers remains rather limited due to its association agreement with the EU, its accords with the European Free Trade Association (EFTA) and the new Central European Free Trade Area (CEFTA), and its adherence to the Uruguay Round. Hence the basic trade policy changes initiated in 1990 remain relatively intact, despite continued domestic pressures and growing trade deficits with Western Europe.

THE CZECH REPUBLIC: BETTING ON THE STRONG¹⁹

Economic policy in the Czech Republic can basically be regarded as a continuation of the transition strategy initiated in 1990, while Czechoslovakia still existed. Unlike Poland and Hungary, there was no prior history of reform after the brief interlude of 1967–68. Enterprises were not only state-owned in a legal sense, but

also state-controlled in a practical sense, lacking autonomy and with virtually all key decisions being made or approved by supervisory ministries. Nor was there a private sector to speak of in this most orthodox of Marxist-Leninist regimes. At the same time, the absence of reform also meant the absence of a monetary overhang, while aversion to Western trade prevented the accumulation of a large foreign debt.²⁰ In short, the economy that presented itself to policy-makers in 1990 was, in effect, the economy of a prudently managed centrally planned economy (CPE): highly centralized, concentrated, and lacking dynamism, but nevertheless with a reasonable standard of living and without severe shortages, heavy foreign debt, or serious macroeconomic disequilibria.

Industry—especially producer goods—played an even larger role in the Czech socialist economy than in Hungary or Poland, accounting for 50 percent of GDP versus 30 and 40 percent respectively. Agriculture was accordingly less important, although the country was basically self-sufficient in foodstuffs. Most industrial production had been geared to domestic and CMEA needs and secondarily to Third World markets. The socialist government's refusal to take on hard currency debt in the 1970s meant that the severe cutbacks in investment repayment necessitated in Poland and Hungary in the 1980s were not characteristic in Czechoslovakia. As a result, plant and equipment were less likely to correspond to Western norms, but they were generally in better condition and of somewhat more recent vintage than in the other two states.

In part, the centrality of industry was a product of state socialist priorities. More profoundly, however, it also reflected long-standing traditions in Bohemia and Moravia, which had been the industrial powerhouse of the Hapsburg Empire in the nineteenth century and had achieved a standard of living slightly above Austria's between the two world wars.²¹ Recapturing the status of an advanced industrial country by playing on these traditional strengths in manufacturing and engineering was one of the implicit goals of economic policy as the post-socialist era opened. The key to accomplishing this in the eyes of the team assembled around the then minister of finance, Vaclav Klaus, was to move productive assets out of the state sector and into private hands as rapidly as possible. If the cornerstone of economic policy in Poland was simultaneous liberalization/stabilization and the growth of small business, Czech economic

strategy centered on privatizing SOEs through a mass voucher program, and other policy measures were geared to accommodate it.

While planning for the mass privatization began almost immediately—even prior to the 1990 election, when the Calfa caretaker government was still in power—liberalization measures did not take effect until January 1991, fully a year after Poland began its shock therapy. It began with a 64 percent devaluation of the currency and making the crown internally convertible; most prices (with fuel and housing being the primary exceptions) were freed, and subsidies to enterprises were decreased or discontinued entirely. Unlike Poland, where trade liberalization began with very low tariff rates which then crept upward in response to producer pressures, the Czech Republic opened its markets with a 20 percent import surcharge which was gradually lowered. Even so, neither exchange rate nor tariff protection was sufficient to compensate for the loss of CMEA markets and the deterioration of terms of trade that occurred: between German reunification, CMEA's collapse, and the contraction of domestic demand, industrial production fell by one-third and GDP by over 20 percent before a recovery began in 1994.

Maintaining the nominal exchange rate became an important anchor for other policy measures, including cutting government expenditures to keep the budget balanced and restrictions on wage increases in the state sector. Unlike the Polish situation, labor unions proved relatively cooperative (indeed, some might say docile), despite the drop in real incomes that followed the elimination of price controls. Part of the reason for this stance was economic—i.e., unemployment remained low. More profoundly, however, it was political: the Czech unions had been so compromised by their association with the socialist regime that they were willing to trade militancy for even a weak but legally protected institutional position in the new order.

Monetary policy was also tight initially, and bank credit to enterprises dropped sharply in 1991, the first year of stabilization. Predictably, inter-enterprise debt tripled that year. Interest rates also rose substantially, but they nevertheless remained below the inflation rate, such that the inter-enterprise "queuing" worked implicitly as a means for creditor firms to subsidize debtors. Hence while the decrease in state subventions relieved pressure on the budget, it did not have as big an effect on the allocation of resources within the (state) enterprise sector as might otherwise be expected.

In subsequent years, monetary policy eased somewhat, and insofar as the restrictive fiscal policy lowered the government's need to borrow, lending to enterprises began to resume. Undercapitalized banks were able to build up reserves by establishing a sizable spread between interest rates on loans and deposits and by selling nonperforming loans to the government *Konsolidacni* (Consolidation) Banka, established in 1991. By 1993, \$4 billion in nonperforming loans—almost 20 percent of total bank credits at the time—had been disposed of in this way.

The implicit rationale behind these and other measures seems to be that of granting SOEs a breathing space in which they could adapt to new conditions and prepare themselves for the centerpiece of the strategy—namely, the mass voucher privatization. Hence the government sought to avoid liquidations or bankruptcies—and even major restructurings—until the new “private” owners were able to take control.

The voucher privatization program was preceded by a wave of breakups and spinoffs: the number of state enterprises doubled or tripled in many branches of industry. While it would be tempting to attribute this to a liberal government's sponsorship of deconcentration, the evidence indicates that the splitting of firms was largely driven by management. Although the spinoffs allowed wages to rise in the parent enterprise, they did not produce improved performance in either the parent or the breakaway unit(s).²² Hence the main motivation behind the breakups was that of management positioning itself for voucher privatization—not surprising in light of the fact that the privatization “projects” (i.e., how many of the assets would be sold by voucher, how many to foreign partners, how many to employees and managers, etc.) submitted by management were far more likely to be approved than proposals from other sources.²³ The interest of older managers in rapid privatization was increased once the lustration law passed. It barred individuals who had participated in various activities (e.g., the enterprise *milice*) from holding top posts in state agencies, including, of course, state-owned enterprises. But if the same state-owned enterprise was privatized—be it by vouchers or any other method—lustration rules no longer applied.²⁴

Voucher privatization went on in several waves. While its economic effects are still debated, the program was a huge political success. Nevertheless, the program did not include many of the largest

enterprises, and the National Property Fund (NPF) often retained a share of ownership in many of the other firms which were privatized through the vouchers, although it is gradually selling its shares on the open market. As the recipient of the revenues received from privatization, the NPF is an important source of extrabudgetary funds, which have served a variety of purposes: transfers to the state budget to cover potential deficits, financing investment projects, even improving schools. In addition, it has been a key player in attempts to strengthen the banking system, both by floating bond issues for bank recapitalization and as a major owner of the three largest, voucher-privatized banks. For example, the recommendation of the government banking council in 1995 "to pay bank dividends below the amount proposed by the management was implemented in the banks where the NPF held a commanding stake, with the purposes of strengthening the reserves of the banks."²⁵

A few major privatizations took the form of direct sales to foreign companies. These include the sale of the Skoda works to Volkswagen, the main tobacco enterprise to Phillip Morris, the oil refineries to a Western consortium, and a large bloc of SPT Telecom shares to a Dutch-Swiss partnership. But outside the occasional spectacular privatization of a major company, FDI does not appear to play a major role in the Czech Republic, particularly when one contrasts it with Hungary. Interestingly enough, most of the Investment Privatization Funds (IPF) have not sought to aggressively market their shares in privatized companies to foreign buyers. A possible reason for this is that insofar as each IPF is limited to a 20 percent ownership share, foreign firms are reluctant to buy into an enterprise in which they would be unable to control key decisions.²⁶ Alternatively, there is some evidence that the IPFs which are wholly owned subsidiaries of the largest Czech banks have become a useful tool to generate business for the parent bank itself, even if the enterprise might well be better off taking its business elsewhere. Finally, most accounts see the Czech government itself as far more resistant than its counterparts in Poland or Hungary to granting the concessions major foreign investors have demanded. Certainly in the last year or so, there has been a major capital inflow into the country, but most of it appears to be the result of foreign borrowing by banks and enterprises. The latter have found that interest rates are often lower abroad, and the country's relatively strong credit rating and recent

move to full convertibility facilitate taking advantage of it. The heavy borrowing activity, in turn, fueled an import boom in 1995, the cause of a major increase in the trade deficit.

The expansion of small, private businesses over the decade has been impressive; the tourist industry, highly underdeveloped under socialism but generating 4–5 percent of GDP by 1995, has been a major source of earnings for this sector. The growth of small business was also given an impetus by a surprisingly problem-free restitution process and a rapid auctioning off of storefronts and retail premises by local governments at the start of the transition. Nevertheless, the core of the Czech economy is its industrial and manufacturing sector, and it is the activity of this sector—much of it voucher-privatized—that seems to set the tone for all other undertakings. In contrast to Poland, it was large enterprises that led the way to growth in 1995, with output and labor productivity rising substantially in engineering, manufacturing, and transport equipment sectors. “Networks” seem to be operating largely within this sector and between it and the domestic small and medium-sized firms that are often the products of earlier spinoffs. They do not appear to extend very much beyond the country’s borders, with the possible exception of Slovakia. Meanwhile, government policies—from lax enforcement of bankruptcy laws to resistance to foreign buyouts—have contributed to the survival of these ties. One suspects that hardly coincidental to this approach is the fact that Czech firms, unlike their Polish counterparts, have not fallen behind on their payment of taxes—and that a large number of current managers were appointed on quasi-political criteria after 1990.²⁷

Fiscal policy remains “conservative,” and the Czech Republic has distinguished itself from Poland and Hungary by its ability to maintain a balanced budget. The surge in imports that occurred in the last two years saw the government react by cutting government expenditures in order to dampen demand. It moved rapidly to reduce planned wage increases for state employees and decreased planned investments. It is possible that a more flexible bargaining position toward potential foreign investors may also result as a means of countering the trade imbalance. Meanwhile, despite the government’s neoliberal pronouncements, the social safety net has been maintained and attempts—not entirely successful—to simply modernize and reform it are the norm. Low unemployment has cer-

tainly been a factor enabling the government to avoid budget deficits without making major welfare cuts; the cessation of transfers to Slovakia, too, provided somewhat of a windfall gain in 1993. Unemployment has remained low, despite quite extensive "labor-shedding" by formerly state-owned firms (as well as those still in state hands). Such an accomplishment has been a great political aid to the governing coalition and is due primarily to the creation of new jobs in previously undeveloped sectors like tourism and financial services, the small size of the labor force employed in agriculture, a decline in labor force participation, and a relatively effective job training program combined with penurious unemployment compensation.

HUNGARY: SELLING TO THE RICH²⁸

Post-socialist economic policy in Hungary differed from Poland's in that a long series of carefully managed partial reforms allowed it to avoid a sudden and radical shock therapy. Liberalization thus occurred gradually, accelerating toward the end of the 1980s so that prices and foreign trade had essentially been decontrolled even before the political transition took place. As for stabilization, here too the main program had been initiated under the outgoing Nemeth government in 1988–89, partly to satisfy IMF requirements. It was only when those measures were relaxed in 1992 that a growing internal deficit and rapidly deteriorating current account balance prompted a major new stabilization effort in 1995. Likewise, various reforms made in the 1980s had already seen the rise of a vibrant "second economy," which grew rapidly with its full legalization at the end of the decade.²⁹ The tax burden also had begun to shift from the enterprise to the household sector thanks to the introduction of a personal income tax and VAT in 1989. Moreover, much (if far from all) of the legal infrastructure needed to accommodate a market economy and private ownership was already on the books when the first competitively elected government took office in May 1990.

As in Poland, however, the down side of the many attempts to decentralize and reform the socialist economy was macroeconomic disequilibria; heavy foreign borrowing in the 1970s led in the 1980s

to a series of on-and-off austerity measures, a decline in investment, as well as the highest per capita foreign debt in Eastern Europe. The precariousness of the Hungarian situation became only too clear in 1989, when the prime minister suddenly revealed that the real budget deficit and foreign debt were actually far higher than previously acknowledged. Moreover, the structure of Hungary's foreign debt differed from Poland's in that it was owed primarily to private creditors, making debt relief far less accessible. Combined with awareness of the country's need to continue borrowing abroad, it made debt relief an option successive governments all rejected. But the internal and external debt burden were important factors shaping privatization policy and "implicit" development strategies in Hungary, both of which were geared to attracting outside investment as a means of making at least the net debt manageable.

Such a strategy was not uncontroversial. In fact, bowing to pressures from its right, the moderate nationalist Antall government began to modify its privatization policy to better accommodate domestic investors after 1992.³⁰ Even these relatively minor deviations, however, were reversed by the center-left government that took office in 1994. Thus the basic privatization strategy in Hungary has, on balance, been relatively consistent: assets should be sold to those who can purchase them on the most favorable terms offered rather than being given away. Given the level of domestic savings and the size of assets up for divestment, such a strategy necessarily advantaged foreign buyers. The contrast with the Czech Republic and even Poland, with its limited mass privatization program, is sharp. In sum, Hungary sought to privatize SOEs on a cash basis in order to use the proceeds to relieve internal and especially external indebtedness.

Consequently, FDI was welcomed in Hungary to a much greater degree than in either the Czech Republic or Poland. The trend was apparent even before the landmark 1990 elections. Not only did Hungary pioneer the first sale of an SOE to a Western buyer, when GE purchased a controlling share of Tungsram in 1988–89, but it was also the first state in the area to place a stock flotation on a Western exchange (shares of IBUSZ, the state travel agency, were simultaneously offered in Vienna and Budapest in 1990). Indeed, FDI was perceived by both investment-starved enterprises and the heavily indebted state as the only viable solution to the undercapitalization

of industry resulting from the austerity measures of the 1980s and 1990s. Symptomatic is that the decline of direct subsidies was accompanied by generous tax allowances for joint ventures and other forms of FDI.

Monetary policy contributed to the search for foreign partners. The National Bank's commitment to reining in inflation amid continued state budget deficits soon led to a situation in which the commercial banks began to avoid lending to enterprises in favor of purchasing government securities. As in Poland and the Czech Republic, the curtailment of lending to the enterprise sector produced the predictable wave of forced inter-enterprise crediting. Even more important, however, it meant that enterprises without foreign partners lacked the financial means to modernize and restructure. The collapse of CMEA in 1991 aggravated the situation further; although Hungary had already made significant strides in reorienting exports westward in previous years, heavy industry, engineering, and agriculture were hit very hard by the loss of the Eastern market. At the same time, inflation rates—driven by the state budget deficit—remained high enough to produce a substantial real appreciation of the currency, making trade balances increasingly problematic after 1992. In addition, unlike either Poland or the Czech Republic, price liberalization in Hungary included the price of labor; wage rates were decontrolled in the state firms as well as in the private sector. Consequently, both nominal and real wages increased for those who managed to find or keep their jobs, while growing unemployment levels reflected the situation of those who could not. A relatively generous unemployment compensation system, in turn, put additional pressure on the state budget. But on the positive side, labor productivity began rising substantially after 1992.

A second stabilization policy became imperative by 1995, entailing major budget cuts, tax increases, a significant devaluation of the forint and a shift to a crawling peg system with regular devaluations anticipated for the future, an import surtax, and an acceleration of privatization-for-cash. As a consequence, real wages dropped by about 10 percent, putting at least a partial brake on import demand. The draconian measures came on the heels of a major bank recapitalization program in 1993, itself a consequence of a wave of bankruptcies that swept through the economy in the wake of a staff bankruptcy statute enacted in 1992. Recapitalizing

the banks, assuming part of their bad loans, and encouraging them to sell off the remainder at a discount made them immediate candidates for privatization, and most were sold off to strategic foreign investors, together with energy and utility companies, by the end of 1996. Meanwhile, it is estimated that close to 25 percent of SOEs were liquidated in the bankruptcy proceedings, with many of their viable assets purchased by private and foreign investors.³¹ Although the bankruptcy statute was subsequently altered to make it more lenient, it did have the impact of greatly diminishing inter-enterprise arrears.

Privatization, however, was only part of the FDI story. Hungary also attracted large greenfield investments, particularly in the automobile industry, but also in other sectors.³² Frequently, a large investment by one multinational corporation (MNC) would then attract a network of subcontractors from Western states.³³ Hence although “foreign capital accounted for 34.85 percent of privatization in 1990–94, privatization probably contributed less than 15 percent of total imports of direct investment.”³⁴ Joint ventures (JVs) have been another important source of capital inflows. For example, in 1993, JVs accounted for 34 percent of fixed investments and 34 percent of net sales, greater than the combined totals for investment or sales of fully foreign and/or still state-owned companies.³⁵ In addition, foreign-owned firms—greenfield and privatized—have become among the country’s largest exporters. Their use of imported parts and components has been facilitated by the government’s policy of granting them the status of a “duty free zone” wherever they are located; hence components can enter without customs duties or VAT, provided they are turned into exports. On the other hand,

Firms embodying a foreign investment are more strongly represented in imports than in exports, so that they contribute to the trade deficit. . . . In 1993 and 1994, when the country reported an extremely high trade deficit, foreign participation companies generated 40 percent and 56 percent of this deficit respectively.³⁶

If the glamorous side of Hungary’s transition strategy is the country’s attractiveness to foreign investors, the situation in the domestic firms—both public and privately owned—has not been static. Despite what is usually regarded as a gradual transition, output declines in industry were on the same 30+ percent order as in Poland

and Czechoslovakia. As for the state sector as a whole, its main accomplishment over the 1990-94 period appears to be that of diminishing the size of the losses many of its large firms have incurred. As noted above, high interest, high spreads, and risk-averse behavior by the banks have meant investment for restructuring has largely been unavailable unless a foreign partner supplies it. Thus improvements in labor productivity have been due more to cuts in employment than to improving overall factor productivity. Interestingly enough, the OECD reports that "the bankruptcy law which came into operation in 1992 only marginally affected the largest loss-making firms."³⁷ Part of the reason, it would appear, is that many such enterprises are located in regions lacking other employers, and subventions—at lower levels than in the past, of course—continue to be granted. As in Poland, the accumulation of tax arrears (especially in social security contributions) is one form such implicit subventions take.

The process of deconcentration within the state sector was actually begun in the 1980s. Escaping the supervisory authority of the State Property Agency after 1990 also led to significant de facto decentralization of enterprises, typically to the benefit of the management. By "commercializing" a large enterprise into the form of a holding company (i.e., transforming it into a joint stock company with all assets owned by the state), central authorities had rights of control only over the "shell," whose subsidiaries were often partly and even primarily owned by the management—purchased, of course, at prices they negotiated with the holding company headquarters (namely, at prices they negotiated with themselves).

While the state sector's size and contribution to national income are steadily diminishing—be it through privatization, management buyouts (MBOs), or even occasionally closures—the number of domestically owned small ventures has increased. As in Poland, the size of such ventures is small (fewer than twenty employees), partly because it facilitates tax evasion. The resulting picture is of an enterprise structure that can be compared to a vase: a large number of very small enterprises, a significant number of very large enterprises, and a relatively small proportion of medium-sized firms.³⁸ As expected, the service sector—especially retailing and personal services—is where many private firms are located, although 1993 data indicate the domestic private sector also accounted for 41 percent of

exports. Generally, such firms have financed themselves from retained earnings and to the degree government actions have facilitated their growth, it has been essentially in the failure to effectively implement tax measures on this sector.

Nevertheless, it appears that the connection between domestic firms and those owned by foreign companies remains rather minimal, creating a curious sort of dual economy. The Western firms tend to deal with each other, and the domestic firms tend to trade with each other. The relationship is perhaps symbolized by the resistance of the foreign firms to join the employer association that participates in pattern-setting collective bargaining arrangements or even in the domestic employers' lobbying group in favor of creating their own council to bargain with the government.

Hungary continues to provide an extensive network of social services, although they have become more targeted toward the poorer segments of the population as budgetary pressures have made it increasingly difficult to maintain universal coverage. Payroll taxes are thus quite high, although roughly comparable with those in Poland and the Czech Republic. Serious regional disparities between the eastern and western halves of the country have persisted and indeed grown quite substantially; not coincidental to this is the concentration of most Western investment in the western border regions and the capital city. Agriculture went through a steep decline as input prices rose sharply, Eastern markets collapsed, and imported food goods from Western Europe flooded in. While the Antall government (1990-94) waged what was close to a covert war against the cooperative farms, the center-left successor attempted to ameliorate the situation, raising farm subsidies to levels still far below those of the EU or even the Czech Republic. But the result was that for the first year since the transition, farm output began to grow, with major gains being made by the cooperative farms, now somewhat reduced in acreage from earlier levels.

Overall, then, the implicit development strategy in Hungary has focused heavily on seeking integration with the West through ownership and foreign investment as much as through trade and commerce. While the country's macroeconomic indicators have often suffered from a tendency to bail out whatever cannot be sold, most observers seem to feel the microeconomic situation is on a much firmer footing thanks to FDI inflows. If the small enterprise

sector is the most dynamic in Poland and the voucher-privatized enterprises the economic heart of the Czech Republic, it has been the ability to attract foreign investment that has been the distinguishing feature of the Hungarian transition.

THREE STRATEGIES: DOMESTIC AND INTERNATIONAL ECONOMIC IMPACTS

Despite variations in their approaches to the transformation problem, Poland, the Czech Republic, and Hungary shared some broad similarities in overall economic developments after 1990. As already noted, all three countries underwent a massive trade reorientation; all three saw GDP decline by about 20 percent between 1990 and 1994, with policy measures affecting the timing more than the size of the drop. Similarly, there was about a 30 percent decline in industrial output during the same period, although again, in all three countries, the decline in industrial employment, while sharp, was significantly less than the decrease in output. In each country, the expansion of the service sector from its depressed socialist levels helped to mitigate the losses in industry; as a result, all countries saw manufacturing account for a smaller portion of GDP than had been the case prior to 1989. In addition, it was performed by smaller enterprises than had been the case: all three economies saw a significant number of large state firms splitting into multiple units in the 1989-91 period, as managers positioned themselves for potential privatizations. Agriculture was invariably a calamity, although the relatively small role it played in the economy and as a source of employment in the Czech Republic somewhat mitigated the difficulties in that state. Finally, the private sector expanded rapidly in all cases, accounting for over 50 percent of GDP by 1995 in each country.

Overall structural change thus seems to reflect broad macro-economic strategies of liberalization and stabilization, as well as the shift to hard-currency trade. One further similarity among the CEE trio should be noted as well, however, and that is the pressure put on the supply of social welfare by the social costs of the transition. Here all states tried to at least put a floor on incomes and welfare, with the result that in aggregate terms, various forms of payments

(pensions, family allowances, health provision) increased. Even when efforts were inadequate to the size of the problem, consumption levels presumably dropped less than they would have without such aid, and one reflection of these efforts in the foreign trade pattern was consumer-demand-fueled imports.

Turning to the evolution of trade with Western Europe, here too we find some common characteristics which, for the most part, are different from those of Asian trade and development. At the same time, variations in the way each of the three economies has slotted itself into the European division of labor have begun to appear as well. In part, those differences reflected somewhat different comparative advantages and long-standing manufacturing traditions (e.g., engineering industries in the Czech Republic); in part, they also were a product of the variations in the implicit development strategies described above. In particular, as we shall see, the growth and type of inter- and intra-industry trade that characterizes each state appears to be related to the firms able to engage in it, a factor strongly affected by a given state's approach to privatization.

If we look first at investment flows, FDI has been relatively slow to arrive in the area: "The annual influxes into the Central East European countries [in the 1990s] remained lower than Singapore's alone," and over half of them went to a single country—Hungary.³⁹ Moreover, early investments in third-tier Asian countries began by taking advantage of differential factor prices (i.e., lower labor costs) for exports to third markets and only subsequently turned to capturing local producer and consumer markets themselves. In the CEE economies and Eastern Europe more generally, the FDI pattern was reversed: initial FDI, much of it in the form of privatization buyouts, primarily saw "Western firms seek[ing] access to the market and expansion of their business,"⁴⁰ and it has been only in the most recent period that taking advantage of lower production costs in the area has become a more prominent motivation.

Receptivity to FDI has been a critical factor differentiating Hungary's approach to privatization from that of the Czech Republic and Poland and may account for its being the leading recipient to date of foreign investment among the CEE states, both absolutely, on a per capita basis, and relative to overall GDP. In the Czech Republic and Poland, the volume of FDI appears to be closely related to the occasional spectacular privatization (e.g., of telecommunications or

vehicle manufacturers), and major greenfield investment has only begun to come to Poland in large amounts in the past year or so. Because of Hungary's lengthier and more extensive experience with FDI, our analysis of its domestic and foreign trade impacts will focus primarily on that country.

Here one would expect FDI to provide an important base on which CPNs would be built, as MNCs build, modernize, and use East European facilities and labor to maximize comparative advantage among subsidiaries. In theory, such strategies would seem to make sense for the companies concerned, and it should entail spillover effects for local producers as well. Moreover, insofar as FDI-based CPNs involve intrafirm trade, they should generate political support in favor of closer economic integration and against protectionist barriers in all states concerned.⁴¹

Hungary's experience illustrates some, but not all, of these hypothesized relationships. Overall, FDI in Hungary has certainly had positive effects. It is perhaps significant that the likelihood that an enterprise will have restructured its operations seems to be directly correlated with foreign involvement.⁴² FDI has led to significant modernization of plant and machinery, as well as streamlining the production process; in addition, it has provided quite significant employment opportunities for many, typically at wage rates above the national average.⁴³ Thus in Hungary, it is estimated that foreign firms account for 20 percent of employment in the commercial sphere, at salary levels that are 40 percent higher than the average. Foreign-owned firms have also been significant exporters, accounting for over 60 percent of exports in 1995.⁴⁴ Moreover, FDI amounted to a whopping two-thirds of all investment in manufacturing by 1994;⁴⁵ in following years, it spread to the financial services sector as well, as the main Hungarian commercial banks were bought out by foreign concerns.

The impact of FDI on the technological upgrading of exports also appears to have been substantial. According to one study, "By 1995, the representation of R&D intensive exports in Hungary's exports to the EU was similar to that of overall exports from the rest of the world to the EU," while Hungary's "representation in both [skill-intensive] and capital-intensive exports has been rising sharply."⁴⁶ Examples here include GE's purchase of Tungstam, which saw a modernization and rebuilding of the former SOE's R&D

work. Although the initial impact of the acquisition was to drastically reduce employment in all areas of activity, once the enterprise had been turned around, it began expanding its highly skilled research staff. Significantly, GE not only took over Tungsram's already established Western and domestic markets, but was also able to increase them through its own extensive distribution channels. In another case, Ericsson set up a software house in Hungary whose work is used for the entire Ericsson group. GM had such success with its initial assembly plant at Szentgotthard—essentially a glorified OPT operation—that it is now building a plant in nearby Győr to produce engines. And IBM recently opened a plant to manufacture disk drives in Szekesfehervar.

The examples noted above are important not only as cases of upgraded exports, but also insofar as they represent the establishment of intrafirm trade and production networks across national boundaries. In this sense, FDI can indeed be seen as leading to the emergence of CPNs and as a critical factor in deepening and sustaining the East-West integration process.

Nevertheless, there is another side to the story as well. Foreign-owned firms also tend to follow what can only be called an enclave strategy, such that multiplier effects on local producers who are domestically owned and managed have been far less than originally expected.⁴⁷ For example, although Hungary has suddenly found itself with an automobile industry, neither GM, Ford, nor Audi use local suppliers very much. Rather, they tend to import components from their suppliers based in Western Europe or, at best, attract their Western partners to set up shop locally. VW's purchase of Skoda in the Czech Republic might appear to be somewhat different—but here the "local" suppliers to Skoda kept up their business with the firm largely to the degree they were absorbed by companies who were VW's suppliers in Germany—at VW's rather explicit request to both.⁴⁸ The main exception to this pattern seems to be Magyar Suzuki, where EU local content requirements literally forced the firm to work through local suppliers, whom Suzuki then aided to acquire the necessary licenses and technology. Daewoo's recent mammoth acquisition of several SOEs involved in vehicle production in Poland may represent a similar pattern.

The Hungarian automobile establishments are greenfield investments, but the experience in privatized firms has not been dis-

similar. Unlike FDI in Asia, gaining market access seems to have been a major early motive for establishing wholly owned subsidiaries in Eastern Europe, and often the markets and connections of the SOEs acquired were as valuable as the assets themselves. For example, the Electrolux-Zanussi venture (or perhaps adventure might be more appropriate, as responsibility for the clean-up costs of the toxic waste dump on the plant site has yet to be determined) began with the purchase of Lehel, the sole manufacturer of refrigerators and other white goods in Hungary. The technology the new owners used was all imported, as are the appliance components, and previous suppliers simply lost their business. R&D is centered in the home countries; final products are exported or sold in Hungary from imported components. Siemens' purchase of the sole Hungarian telephone manufacturer is a similar tale: the plant went from employing several thousand to a few hundred; the technology and equipment are all imported, and the workforce basically does assembly. Not coincidental to Siemens' decision to take over the plant was the privatization of the Hungarian telecommunications company, MATAV, to a Deutsche Telecom/Ameritech alliance since it guaranteed Siemens the ability to coordinate its production with that of a complementary firm with which it had long-standing business relations in Germany. A similar phenomenon appears to have taken place in the pharmaceuticals industry, where production facilities were modernized but R&D was moved to the home headquarters. The primary advantage for the foreign company on the Hungarian market—its ability to supply drugs already acceptable to the state health service—was, of course, retained.

The multiplier effect of FDI is thus mainly on smaller, Western suppliers to larger companies, who often expand their operations to Hungary with the hope of gaining orders there as well. Because such companies already have a track record with an MNC, they do not have the problem of proving their reliability as suppliers the way a local firm would—nor do they often need the financing a Hungarian competitor would require. What one has here is less the creation of a CPN than the transplantation of already existing ones.

In addition, the reliance of foreign firms on imports has often been problematic, at least as far as the management of trade balances is concerned. Much FDI has come in the form of imported capital goods, which presumably is only a short-term cost, able to pay itself

back once capacities are erected and production begins. Moreover, by modernizing the country's technological base, it contributes to economic growth. But other kinds of importing are less salutary. In some cases, foreign firms will assemble products for export out of expensive imported components; when the goods leave the country, they appear to have been produced at a loss. But since the components are produced in another MNC subsidiary in Western Europe, the company itself has actually made a profit on the operation. Other examples concern foreign-owned firms that have taken over distribution networks (e.g., retail chains); they often turn to traditional Western suppliers even when local substitutes are available at lower cost. Many of the collective farms were extremely concerned over foreign purchases of food processing establishments, anticipating a switch to imported foodstuffs.⁴⁹ Certainly local retailers are likely to sell imported goods as well, and in many ways, such practices offer an incentive to local producers to upgrade their assortments. But sustaining the constant trade deficit is becoming increasingly difficult (see below).

As to the commodity composition of trade, "the trade of the Višegrad countries has remained predominantly inter-industrial, although there has been a shift toward intra-industry trade more recently."⁵⁰ That shift draws attention to the fact that the growth rate in intra-industry trade has been significantly higher than the rate of growth of East-West trade as a whole, although one must bear in mind that it also began at an extremely depressed level. Intra-industry trade has taken a number of forms. Much of it has been in the form of OPT and concentrated in labor-intensive light industry (clothing and footwear in particular); the EU's preferential tariff treatment of such imports gave such trade impetus, and it was "at the core of the CEEC export drive up to 1993."⁵¹ Only in Hungary has the OPT share in engineering increased significantly since 1992; the main factor here would seem to be the greenfield plants for the assembly of automobiles established by several major Western producers. At the same time, insofar as OPT is highly sensitive to labor costs, it has tended to decline in recent years in the economies characterized by higher wage costs. Thus while it remains an important source of activity in Poland, the centrality of OPT in clothing and footwear in Hungary has lessened significantly since 1993 as alter-

native sources of exports emerged at the same time that Bulgaria and Romania began to capture a larger share of OPT.

While OPT can be thought of as a kind of production network, it carries mixed benefits for East European producers. The most obvious advantage is that it has enabled the enterprises engaged in it to survive—no mean accomplishment in the last few years. Occasionally, firms have also been able to upgrade their technology without making extensive new investments, as suppliers have leased equipment in order to better ensure the quality of the finished product. Precisely because of the low investment it involves, OPT has been a focal point for the small private sector as well, especially in Poland. In the state-owned and privatized sectors, too, OPT has allowed enterprises to put their excess capacities to use, allowing them a certain financial stability they would otherwise lack.

Nevertheless, these gains have also carried significant costs. As individual enterprises have been drawn into CPNs, often the domestic networks they previously supported have disintegrated. Again, the situation is quite different from less industrialized countries, where no prior domestic production chains existed. For example, the garment industry in all three countries has relied very heavily on OPT, but the textile industry that once supplied it has collapsed, partly because its former buyers are committed to purchasing yarns and fabrics from Western contractors. Engineering firms have also turned to OPT to keep their capacities operating; generally, however, the work has not been technologically challenging and has rarely led to the kind of product or process innovations they would ultimately need to stay economically viable. For example,

Tesla Pardubice, the Czech communication equipment producer that developed the sophisticated Tamara surveillance system . . . received a considerable proportion of its income from assembling toasters and coffee-makers for a German firm, destined to sell on third markets. One of the steps they performed was to engrave on the back of the equipment: "Made in Germany."⁵²

Indeed, in cases like these, rather than enhance capacities for innovation, the OPT work needed to keep a firm financially afloat makes its R&D work an expensive luxury it can no longer afford. In short, OPT has certainly proven financially important for many enterprises, whether privatized, private, or even state-owned, but it tends

to be part of the same deskilling phenomenon evident in much of the pure commodity trade.⁵³ In this sense, OPT presents a rather different kind of opportunity for CEE economies than it did in Asia: in the latter, it was associated with the first step of moving into manufacturing; in the former, it is associated with adaptation of some existing capacities and the retirement of others.

Another major source of intra-industry exchange has been the large number of JVs established between CEE companies and Western producers. Hundreds of such ventures have been announced, although many of them are very small and one suspects the primary purpose they serve is tax evasion. But there are "real" JVs as well, in which the East European enterprise often supplies the production skills, while the foreign partner provides the marketing, distribution, and even some of the financing. For example, a 1992 study of *Desta*, a Czech manufacturer of forklift trucks, describes a JV about to begin with *Linde, A. G.*, the dominant European manufacturer of such vehicles: "*Desta* would supply the high quality but lower-priced components, using its own production capacities, and *Linde* would reinforce its competitive position in the international marketplace."⁵⁴ Such a relationship is fairly typical of the genre and does indeed indicate a kind of nascent "production network." As the *Desta-Linde* venture suggests, entering into some sort of JV can be critical for a local company's ability to move into new foreign markets, partly for the connections it affords and partly because it allows the relatively unknown East European producer to piggyback on the reputation of the partner. This is as true for hardware producers in electronics as in traditional manufacturing industries. As one observer recounts of the former, "We were particularly impressed by the statement of the general director [of a Latvian electronics firm] to the effect that you need a Western partner even for the Eastern market."⁵⁵

In some cases, JVs also involve a technology transfer, but this is fairly unusual since normally foreign companies are unwilling to transfer proprietary technology unless they have far more control than the JV format permits. Nevertheless, JVs are often an important factor in an enterprise's ability to restructure and streamline its operations to improve performance:

A foreign joint venture partner presents the opportunity for an outside evaluation of the manager, thus raising the manager's incentive to perform well. Moreover, the foreign JV may reduce the uncertainty about the enterprise's prospects under restructuring (for example, by providing access to finance for investment), thereby raising the manager's incentive to restructure.⁵⁶

At the same time, since some of the larger East European enterprises are simultaneously involved in several JVs with different foreign partners, it allows them to use the knowledge and experience gained in any one for their own objectives, enhancing the flexibility of the firm itself in multiple markets.

JVs can thus be thought of as a kind of halfway house between OPT and full-scale acquisition and help to explain why so much of what is described as intra-industry trade takes the form of vertically differentiated products rather than the exchange of horizontally differentiated products of equivalent quality. But JVs are also often an introductory step in a buyout by the Western partner; this has most often been the case in Hungary, which, as noted, has attracted by far the largest amount of FDI in the region.

Finally, a third form of intra-industry trade—as well as inter-industry trade—has occurred through the vast enlargement of straightforward exchanges of intermediate and final products, as well as of services, that has gone on apace since the opening of trade channels. For example, one of the main Czech steelmakers, Nova Huta, currently supplies aluminum wheels to BMW, while Hungary's RABA produces axles for International Harvester and Rockwell. On the import side, Poland's Optimus got its start by importing computers for the domestic market and rapidly switched to importing components from the Far East, assembling them itself, and marketing them under its own name. Optimus is currently the largest domestic producer of PCs in Poland, with a market share many times larger than IBM or Compaq. Moreover, realizing that a new law in 1996 requiring computerized sales receipts in all large retailers would create an instant market, the company purchased a license from Japan to manufacture cash registers, expanding its production assortment by relying on the same formula.

On the East European side, the centrality of this kind of relatively conventional trade is a sign of the ability of local firms to find

ways of marketing and distributing their products abroad and demonstrating their competitive potential on home markets. In that sense, it marks an important form of adjustment and change at the enterprise level. As such, it indicates not so much the establishment of or entrance into new production networks abroad as an ability to maintain many of the preexisting production networks at home and recast them in ways that products are delivered on time and are of a quality and price acceptable on a competitive market. Equally important, exports of either intermediate goods or final products are a means of establishing a reputation, acquiring references on a new market, and stabilizing finances.

Nevertheless, this trade consists simply of orders and sales; little technology or know-how is transferred either way, and one cannot really view it as the establishment of a production network involving multilateral forms of cooperation or partnership. While this type of arms-length relationship is quite traditional in older industries, the absence of networking—with domestic as well as foreign firms—appears to characterize much computer hardware production in Eastern Europe as well; as one observer notes, “Quite simply, computer firms import all their components from the Far East . . . and that is the end of the matter.”⁵⁷ Although, as noted above, the situation is somewhat different when hardware producers seek to place their products on foreign markets (including markets in other East European countries), for a (Western or Eastern) producer of a sophisticated final product able to market successfully to domestic buyers, the need to surrender some enterprise autonomy to take advantage of a cooperative arrangement appears to be quite limited to date.

In addition, the volume of this kind of conventional trade depends heavily on price competitiveness as well as marketing skills, and so the ability of the East European firms to export depends heavily on low labor costs, favorable exchange rates, and their willingness to accept low margins. Furthermore, while enterprises are nowadays selling a larger proportion of their output on Western markets, in many cases this proportionate increase was simply a mask for the dramatic reductions they have had in the output they previously delivered to CMEA and domestic buyers.⁵⁸ Indeed, there are some indications that some SOEs may even be exporting at a loss simply to keep their operations going. Not surprisingly, as domestic

demand revived after 1994, this kind of export activity stagnated, a factor in the trade deficits that began to increase at about the same time. Last but hardly least, the products which seem to be most competitive in this type of trade have turned out to be those with relatively low-value-added content. As one observer notes in the case of the Czech Republic, the enterprises which had the most initial success in shifting from CMEA to Western markets were "typically . . . enterprises producing intermediate products, raw materials, and standard goods not dependent on R&D, high skills or complicated sales networks."⁵⁹

Finally, it is worth examining the balance of trade between the EU and CEE. Here, despite an initial export boom, the Višegrad countries on which this analysis focuses are all running trade deficits with EU partners, and financing those deficits is becoming increasingly problematic. Thus the rapid expansion of East-West trade has been asymmetrical in two senses. On the one hand, if nearly 70 percent of Eastern Europe's foreign trade is with the EU, the proportion of the EU's foreign trade with Eastern Europe is much smaller, even in the individual cases of Germany and Austria.⁶⁰ On the other, while CEE exports to the EU have tripled over 1992–95, CEE imports from the EU have quadrupled. In addition, exports remain concentrated in relatively traditional sectors: metals, fuel and minerals, and wood products in Poland; raw materials and less processed goods in the Czech Republic; agriculture, apparel and clothing, food and beverages, and basic metals in Hungary.⁶¹ Only to the degree that foreign-owned firms have begun to operate in the region have exports started to shift into more sophisticated products, with the automobile industry being an important example in all three countries. As for imports, it may be tempting to attribute trade imbalances to imports of capital goods needed for modernization, but in fact, "The trade deficit in consumer goods exceeds the deficit in intermediate goods in Poland from 1989, in Czechoslovakia from 1991, and in Hungary from 1993."⁶²

CONCLUSION

That trade and economic integration between Eastern and Western Europe differs substantially from Asia-Pacific trade should come as no surprise. The primary factor explaining the differences is simply the economic (level of development) and political (legacy of socialism and current electoral accountability) starting points that define the two areas.

At the margin, country-specific development strategies do seem to be related to the form economic integration has taken at this early stage, although there is enough endogeneity in this relationship to make one hesitate in attributing causality to them. But it is consistent with the picture we have outlined of the evolution of Polish economic policy to find that country's exports bifurcated between labor-intensive and traditional goods produced by the multitude of small firms that have grown up in the past decade on the one hand, and resource-intensive products made in the far less dynamic sectors as yet populated primarily by SOEs. Likewise, the sheltering policy the Czech government took toward its voucher-privatized enterprises helps us to understand its relatively stable pattern of specialization and the growth of exports coming out of the engineering industries there. Finally, the importance of foreign-owned companies in Hungary's trade and the dramatic upgrading in the quality of its manufactured exports is also a reflection of its emphasis on attracting foreign capital.

To the degree rapidly increasing levels of intra-industry trade are by themselves indicative of the formation of CPNs, this kind of cooperation in manufacturing has indeed begun to appear between Western and Eastern producers, at least in Poland, Hungary, and the Czech Republic. Generally, however, it takes the form of vertically differentiated specialization, with CEE producers supplying the lower quality goods in the chain and upgrading heavily dependent on some sort of Western involvement, be it via the JV format or as acquisitions or greenfield establishments.

Meanwhile, international production networks (IPNs) consisting of large MNCs managing geographically scattered, wholly owned subsidiaries have emerged to the greatest extent in Hungary, largely because of the extraordinarily high degree of cooperation

such companies have received from the government. As the other CEE states begin to "catch up," however, one can expect this pattern to reproduce itself there as well; the recent acceptance of Poland and the Czech Republic into the first tier of new EU entrants is likely to give some momentum here. Nevertheless, to the degree IPNs are defined as alliances between domestically owned local firms and companies based in Western Europe, in which both enterprises are independent and each sacrifices some autonomy in order to pursue a joint objective from which both benefit, IPNs are few and far between—even in industries like electronics and computers, where one would most expect to find them, and even in Hungary, where one would expect to see more such linkages created by now.

Part of the reason is undoubtedly timing: it may simply be too early for complex relationships to be established, particularly at a time when financing channels in Eastern Europe itself are so undeveloped. But the reasons may also reflect deeper barriers. These would include the lack of experience of local producers, the lack of knowledge on the part of Western managements as to local capabilities, as well as the tendency of Western firms to base their strategies in Eastern Europe on the exigencies of operation in their home countries. Ironically, precisely because of the CEE states' geographic proximity, it is relatively easy to leapfrog local companies and networks in host countries in favor of known suppliers across the border. Finally, the kind of "triangular trade" that was so important for Asia is to date missing in the CEE area. Conceivably, the former Soviet area could play the role of a large "third" market for which Eastern Europe could serve as a platform. In such a case, CEE producers might well offer a unique capability of which Western firms would need to take advantage, and vice versa. However, such a development would assume an economic recovery and an institutional infrastructure that could support further development in the Commonwealth of Independent States (CIS), and it is quite unclear how rapidly or fully either are likely to occur. And it is not at all clear how willing CEE governments would be to facilitate it, given their current foci and objectives. For these reasons, the local skepticism described at the outset of this paper is still far from ungrounded.

NOTES

1. Tables referred to in the text can be found in an earlier version of this study at <http://brie.berkeley.edu/BRIE>.
2. See Piotr Wandycz, *The Price of Freedom* (New York: Routledge, 1992); Ivan Berend, "The Historical Evolution of Eastern Europe as a Region," in *Power, Purpose and Collective Choice*, ed. E. Comisso and L. Tyson, pp. 153–71 (Ithaca: Cornell University Press, 1986); Joseph Rothschild, *Return to Diversity* (New York: Oxford University Press, 1988); Jeno Szucs, "Three Historical Regions of Europe," in *Civil Society and the State*, ed. John Keane, pp. 291–333 (London: Verso, 1988).
3. For example, see András Inotai, "From Association Agreements to Full Membership? The Dynamics of Relations between the Central and Eastern European Countries and the European Union," *Institute for World Economy Working Papers*, no. 52 (Budapest, June 1995).
4. Slovenia, bordering Italy, and Estonia, with ties to Finland, may be exceptions here; we omit them from this analysis primarily for reasons of time and space. It should be noted that as part of the Yugoslav economy, Slovene enterprises were always far less insulated from West European economic currents than enterprises within CMEA member-states.
5. For a lament of this state of affairs, see Alice Amsden, Jacek Kochanowicz, and Lance Taylor, *The Market Meets Its Match: Restructuring the Economies of Eastern Europe* (Cambridge: Harvard University Press, 1994).
6. See Jeffrey Sachs and Andrew Warner, "Achieving Rapid Growth in the Transition Economies of Central Europe," HID Development Discussion Paper No. 544 (July 1996), mimeo; "Tigers or Tortoises?" *The Economist*, 26 October 1996, p. 98.
7. See Norman Davies, *God's Playground: A History of Poland*, vol. 1 (New York: Columbia University Press, 1984); Gale Stokes, "The Social Origins of East European Politics," in *The Origins of Backwardness in Eastern Europe*, ed. Daniel Chirot, pp. 210–53 (Berkeley: University of California Press, 1989); David F. Good, ed., *Economic Transformation in East and Central Europe: Legacies from the Past and Policies for the Future* (London: Routledge, 1994); Ivan Berend and Gyorgy Ranki, *East Central Europe in the Nineteenth and Twentieth Centuries* (Budapest: Akademiai Kiado, 1977).
8. See Maurice Ernst, Michael Alexeev, and Paul Marer, *Transforming the Core* (Boulder: Westview Press, 1996).
9. See, for example, Slavo Radošević, "Science and Technology Capabilities in Economies in Transition: Effects and Prospects," *Economics of Transition* 3, 4 (December 1995): 424–59.
10. In Poland, however, agriculture was never collectivized, and most land was farmed by small peasants.

11. See Andrea Szalavetz, "Measuring the Restructuring Performance of Firms in the Transition Economies," *Institute for World Economy Working Papers*, no. 69 (Budapest, September 1996).
12. The sources I have drawn on in compiling this account include Ernst, Alekseev, and Marer, pp. 31–79; Benjamin Slay, *The Polish Economy: Crisis, Reform and Transformation* (Princeton: Princeton University Press, 1994); Simon Johnson and Gary Loveman, *Starting Over in Eastern Europe* (Boston: Harvard Business School Press, 1995); David Lipton and Jeffrey Sachs, "Creating a Market Economy in Eastern Europe: The Case of Poland," *Brookings Papers on Economic Activity* 1 (1996): 75–147; Stanislaw Gomulka and Piotr Jasinski, "Privatization in Poland, 1989–1993: Policies, Methods, and Results," in *Privatization in Central and Eastern Europe*, ed. Saul Estrin, pp. 218–52 (London: Longmans, 1994); Simon Johnson and Marzena Kowalska, "Poland: The Political Economy of Shock Therapy," in *Voting for Reform*, ed. S. Haggard and S. Webb, pp. 185–242 (New York: Oxford University Press, 1994); Kazimierz Poznanski, ed., *Stabilization and Privatization in Poland* (Boston: Kluwer, 1993); S. Estrin, J. Brada, A. Gelb, and I. Singh, eds., *Restructuring and Privatization in Central Eastern Europe: Case Studies of Firms in Transition* (Armonk, N.Y.: M. E. Sharpe, 1995), pp. 267–445; Andrew Berg, "Does Macroeconomic Reform Cause Structural Adjustment? Lessons from Poland," *Journal of Comparative Economics* 18 (June 1994): 376–410; George Blazycza, "The Impact of Elections on Economic Policy in Poland," *Europe-Asia Studies* (January 1996); OECD, *Poland, 1994*; Economist Intelligence Unit, *Poland: Country Reports, 1991–6* (London: EIU, various years); and Ronan Lyons with Peggy Simpson, "A Survey of Poland," *Business Central Europe* 5 (February 1997): 37–48.
13. Ernst, Alekseev, and Marer, p. 82.
14. OECD, *Poland, 1994*, p. 53.
15. See Ivan Major, *Privatization in Eastern Europe* (Hants: Edward Elgar, 1993), p. 118.
16. Ernst, Alekseev, and Marer report, "Out of 25 firms in a sample, 13 were in arrears on tax payments" (p. 102). Note that there may have been some economic justification for this behavior as well. As it turned out, the "dividend tax" on enterprise assets was skewed against the more modern firms, whereas the sectors that had been underfunded under socialism had a relatively lower tax burden, "one explanation for their success during the transition period." Marek Belka cites a study which showed the tax burden was correlated with the age of machinery, literally disadvantaging the more technologically sophisticated enterprises (M. Belka, "Food Processing/Chocolate and Sweets: Drops," in Estrin et al., eds., pp. 344–57).
17. Note that in this respect, Poland is similar to Hungary and the Czech Republic. See below. The excess wages tax (popiwiek) on enterprises was eliminated by 1995.

18. The number of enterprises per capita is higher in Poland than in many West European countries. One suspects that “phantom” enterprises set up largely for purposes of tax evasion are part of the explanation.
19. The sources I have drawn on for this analysis include Jan Svejnar, ed., *The Czech Republic and Economic Transition in Eastern Europe* (San Diego: Academic Press, 1995): Ernst, Alekseev, and Marer, pp. 127–53; OECD, *OECD Economic Surveys: The Czech Republic 1996* (Paris: OECD, 1996); Estrin et al., eds., pp. 3–155; Mitchell Orenstein, “Out of the Red: Building Capitalism and Democracy in Post-Communist Europe,” Ph.D. dissertation, Yale University, 1996; Marie Bohata, in cooperation with Michael Fischer, “Performance of the Manufacturing Industry in Transformation,” *Eastern European Economics* 33 (January–February 1995): 74–96; Joe Cook, “Survey: Czech Republic,” *Business Central Europe* 4, 33 (July/August 1996): 37–50; Jan Svejnar and Miroslav Singer, “Using Vouchers to Privatize an Economy: The Czech and Slovak Case,” *CERGE Working Paper Series*, no. 36 (Prague: CERGE, April 1993); Lina Takla, “The Relationship between Privatization and the Reform of the Banking Sector: The Case of the Czech Republic and Slovakia,” in Estrin, ed., pp. 154–76; Gerald A. McDermott, “Renegotiating the Ties That Bind: The Limits of Privatization in the Czech Republic” (Berlin: Social Science Research Center, April 1994), mimeo; Yudit Kiss, “Sink or Swim? Central European Defence Industry Enterprises in the Aftermath of the Cold War,” *Europe-Asia Studies* 47 (July 1995): 787–812; Ed Clark and Anna Soulsby, “The Re-Formation of the Managerial Elite in the Czech Republic,” *Europe-Asia Studies* 48 (March 1996): 285–305. The personal communications of Andrew Schwartz have also been extremely helpful.
20. For a perceptive analysis of why attempts to reform centrally planned economies lead to monetary overhangs, see Ronald I. MacKinnon, *The Order of Economic Liberalization* (Baltimore: Johns Hopkins Press, 1993), pp. 120–62.
21. Note, however, that the Austrian economy virtually collapsed at the end of World War I as a result of the dissolution of the empire. See Barbara Jelavich, *Modern Austria* (New York: Cambridge University Press, 1987).
22. See Lubomir Lizal, Miroslav Singer, and Jan Svejnar, “Manager Interests, Breakups and Performance of State Enterprises in Transition,” in Svejnar, ed., pp. 211–33.
23. See Josef Kotrba, “Privatization Process in the Czech Republic: Players and Winners,” in Svejnar, ed.
24. Clark and Soulsby recount a wonderful tale of how a general director of an SOE discovered that three of the general managers had to be removed due to the lustration law. He arranged for them to be demoted to department heads (low enough not to be covered by the law) and promoted members of their junior staff—all females—to their former positions. “The understanding of all parties was that this scheme would operate in name only, and that, when the enterprise was duly privatized, the demotees

would be re-proposed for their former senior jobs, needing only the formal acquiescence of the new board of directors. And this is exactly what happened" (p. 296).

25. OECD, *Czech Republic 1996*, p. 48.
26. By converting themselves to holding companies, however, IPFs can get around these limits. In fact, 1995–96 did see a wave of conversions and acquisitions by former IPFs.
27. The Czech tax authorities "have the power to collect unpaid taxes through direct appropriation of enterprise assets, through an internal purely administrative (as opposed to judicial) decision. . . . [Hence] tax compliance . . . is relatively high" (OECD, *Czech Republic 1996*, p. 116).
28. The sources I have drawn on for this account include David L. Bartlett, *The Political Economy of Dual Transformations: Market Reform and Democratization in Hungary* (Ann Arbor: University of Michigan Press, 1997); David Stark and Laszlo Bruszt, *Postsocialist Pathways: Transforming Politics and Property in East Central Europe* (New York: Cambridge University Press, forthcoming); Eva Ehrlich, Gabor Revesz, and Peter Tamasi, *Kelet-Kozep-Europa: Honnon-hova?* (Budapest: Akademiai Kiado, 1994), pp. 31–186; OECD, *OECD Economic Surveys: Hungary 1995* (Paris: OECD, 1995); Ernst, Alekseev, and Marer, pp. 153–211; Estrin et al., eds., pp. 155–267; Bela Papp, "A Survey of Hungary," *Business Central Europe* 3 (December 1995/January 1996): 35–46; Economist Intelligence Unit, *Country Reports: Hungary* (London: EIU, 1991–96); Miklos Szanyi, "Adaptive Steps by Hungary's Industry during the Transition Crisis," *Eastern European Economics* 34 (September–October, 1996): 59–77; Jan Adam, "The Transition to a Market Economy in Hungary," *Europe-Asia Studies* 47 (September 1995): 989–1006. I have also relied heavily on the working papers series of the Institute for World Economy in Budapest (see above and below for specific citations) and many very helpful conversations with Ivan Major.
29. See Ivan Szelenyi, *Socialist Entrepreneurs* (Madison: University of Wisconsin Press, 1988); Istvan Gabor, "Modernity or a New Type of Duality? The Second Economy Today," in *Transition to Capitalism? The Legacy of Communism in Eastern Europe*, ed. J. M. Kovacs (New Brunswick: Transaction Books, 1994).
30. Even then, the basic policy was not altered; rather, the government simply made a line of credit available on favorable terms to domestic entrepreneurs.
31. Estimate of Ernst, Alekseev, and Marer.
32. That Hungary has attracted no fewer than four greenfield assembly plants in the automobile industry is no small irony. For years, Hungarians had been congratulating themselves on having resisted the sirens of autarchy in CMEA by foregoing the opportunity to build a domestic automobile industry on the grounds that it had no comparative advantages in such a sector!

33. This has also been the case with Skoda-Volkswagen in the Czech Republic.
34. Gyorgy Csaki, Magdolna Sass, and Andrea Szalavetz, "Reinforcing the Modernization Role of Foreign Direct Investment in Hungary," *Institute for World Economy Working Papers*, no. 62 (Budapest, March 1996), p. 9.
35. Papp, p. 42.
36. Andrea Elteto, "The Role of the Trade Balance in the European Union and the Central and Eastern European Countries," *Institute for World Economy Working Papers*, no. 73 (Budapest, December 1996), p. 21. See also Ivan Gizella, "A Privatizacios Kutatointest szerint a kulfoldi tarsasagok tul sokat importalnak," *Magyar Hirlap*, 10 May 1997.
37. OECD, *Hungary*, 1995, p. 16.
38. See Eva Ehrlich, "Recent Conditions and Prospects in Central and Eastern Europe," *Institute for World Economy Working Papers*, no. 73 (Budapest, November 1996).
39. Csaki, Sass, and Szalavetz, p. 7.
40. Klaus E. Meyer, "Direct Foreign Investment in Eastern Europe: The Role of Labor Costs," *Comparative Economic Studies* 37 (Winter 1995): 83; see also Hans Peter Lauker and A. J. Venables, "Foreign Direct Investment in Economic Transition: The Changing Pattern of Investments," *Economics of Transition* 4 (October 1996): 331–47.
41. See Helen Milner, *Resisting Protectionism: Global Industries and the Politics of International Trade* (Cambridge: Cambridge University Press, 1986).
42. See *ibid.*, pp. 427–59. Note that "foreign involvement" in this context also includes joint ventures.
43. Nevertheless, much of the greenfield investment has been extremely capital-intensive, and so the number of jobs created has been somewhat disappointing. See Bertalan Diczhasi, "Zoldmezon as iparba," *Figyelo*, 9 May 1997.
44. Csaki, Sass, and Szalavetz, pp. 9–10.
45. See Françoise Lemoine, "Integrating Central and Eastern Europe in the European Trade and Production Network"; paper presented at BRIE policy conference, "The Creation of a Unified European Economy," Vienna, 5–6 June 1997, p. 10 (mimeo).
46. Wendy Carlin and Michael Landesmann, "From Theory into Practice? Corporate Restructuring and Economic Dynamism in Transition Economies," unpublished ms., 1997, p. 19. See also Paolo Guerrieri, "Trade Patterns, FDI, and Industrial Restructuring of Central and Eastern Europe"; paper presented at BRIE policy conference, "The Creation of a Unified European Economy," Vienna, 5–6 June 1997 (mimeo).
47. See especially Peter Farkas, "Component Supply, Contract Work and Technical Development: A Study of Hungarian Companies," *Institute for World Economy Working Papers*, no. 71 (Budapest, October 1996), and David Bart-

lett and Anna Seleny, "Foreign Direct Investment in Eastern Europe: A Transaction Cost Analysis of Multinational Strategies in the Hungarian Automobile Industry," unpublished ms., 1996. Carlin and Landesmann also observe that "there appears to have been only very limited spillover from the foreign-involved firms to the rest of the economy" (p. 22).

48. See "Together Forever?" *Business Central Europe* 3, 19 (March 1995): 7–10.
49. Author's interviews, 1992.
50. Elteto. Elteto notes further, "In both Poland and Hungary, the trade surplus in clothing exactly mirrored the deficit in yarns" (p. 12).
51. Lemoine, p. 7.
52. Kiss, p. 800.
53. See Marc Ellingstad, "The Maquiladora Syndrome: Central European Prospects," *Europe-Asia Studies* 49 (January 1997): 7–21; Farkas.
54. Jaroslav Jiracek, "Engineering/Forklift Trucks: Desta," in Estrin et al., eds., p.13.
55. David Dyker, "The Computer and Software Industries in the East European Economies—A Bridgehead to the Global Economy?" *Europe-Asia Studies* 48, 6 (September 1996), p. 923.
56. Wendy Carlin, John van Reenen, and Toby Wolfe, "Enterprise Restructuring in Early Transition: The Case Study Evidence from Central and Eastern Europe," *Economics of Transition* 3 (December 1995): 437.
57. Dyker, p. 920.
58. See Szanyi, pp. 68–70.
59. Bohata with Fischer, p. 80.
60. See "Eastern Promise," *The Economist*, 17 April 1997, p. 77.
61. On Poland, see Economist Intelligence Unit, *Poland: Country Profile, 1996–7*, p. 39; on the Czech Republic, see Economist Intelligence Unit, *Country Profile: Czech Republic, 1996–7*, p. 24; on Hungary, see OECD, *Hungary 1995*, p. 76.
62. Elteto, p. 18; see also table 8, p. 36.

THE INTERNATIONALIZATION OF THE BALTIC ECONOMIES¹

Niels Mygind

The three Baltic countries are often considered to be relatively similar, but there are in fact significant economic and cultural differences among them. Estonia, Latvia, and Lithuania also differ in terms of the speed and extent of their integration into the world economy. Are these differences a result of political choices concerning clearly defined, explicit development strategies? Or have they arisen because of “implicit development strategies” influenced by a multitude of different factors? Both explanations are correct: political choices direct the transition, but these choices and their outcomes have been influenced by many different factors.

In this paper, I will apply an analytical model of societal change developed in Mygind (1994) to compare how different transition strategies have developed in each of the Baltic countries, setting different conditions for the process of economic internationalization. Differences in *background conditions* in the outside world and the four subsystems of society—the institutional system, the production system, the value system, and the social system—have had a strong impact on political developments and hence the choice of transition strategies. The chosen *transition strategies*, in interaction with the background conditions, result in the development of new market institutions specific to each country. These institutions set the framework for the development of each country’s production system—both on a general level and in terms of the development of markets and factors of production that are critical to international trade and foreign direct investment (FDI).

BACKGROUND CONDITIONS

The transition strategies of the three Baltic countries have followed similar overall trends. Let us quickly examine some of the similarities in the background conditions of the Baltic countries as of 1989. The *production system* in all three countries was strongly influenced by the Soviet model of industrialization, characterized by a small service and trade sector; manufacturing based mainly on large, energy-intensive enterprises; and significant military-related production. The *institutional system* of each country was integrated in the Soviet command economy. The *social system* was characterized by the dominance of both the Communist nomenklatura and the Russian population. Because of the Soviet occupation, many Balts emigrated to the West or were deported to Siberia, whereas workers from other parts of the USSR moved to the Baltics to work in the new, large Soviet enterprises. There was also a close connection between the social system and the *value system* in the three Baltic countries, which shared centuries of similar historical conditions.

However, upon closer examination, we find that there were important differences in these countries' background conditions that account for many of the differences in their respective transition strategies. In terms of their respective production systems, both Estonia and Latvia had developed a light industry sector in the 1930s; Tallinn and Riga were important centers of trade at the turn of the century. However, Lithuania was dominated by agriculture, and the greatest part of its industrialization took place under Soviet leadership. Thus there were significant differences in the social system in Estonia and Latvia, on the one hand, and Lithuania on the other. Although many workers had emigrated from the rest of the USSR to Estonia and Latvia to work in their large Soviet-type enterprises, in the less industrialized Lithuania the workers were mainly recruited from the countryside. Therefore, Lithuania had only a small minority of Russians, in contrast to Estonia and Latvia, where the Russian-speaking population dominated the large cities and the manufacturing sector. When the Baltics got their independence, these Russian-speaking minorities lost their political influence, and the workers as a group had a weak position in the social system in Estonia and Latvia.

We should also emphasize important differences in these countries' value systems with respect to tradition, language, and religion, and hence the ways in which each of these countries relates to the outside world. Estonia is particularly notable for its geographic and cultural proximity to Finland. The Estonian language is closely related to Finnish, whereas Latvian and Lithuanian belong to a specific Baltic language family. In fact, in the northern parts of Estonia, the population was able to receive Finnish radio and television. In terms of religion and culture, the northern countries are Protestant and have been strongly influenced by German culture, while Lithuania is strongly Catholic and was influenced by its close historical links with Poland. (Note the connection to the early industrialization in the production systems in the two northern countries.) These distinctions are also connected to differences in these countries' institutional systems. During perestroika, many economic experiments introducing some market elements were implemented in the Baltic countries, but they were most pronounced in Estonia, which contained the highest number of semi-private companies, including "new cooperatives" and "individual enterprises" (Aage 1991). Compared to the rest of the USSR, more Estonians had a positive perception of the new private cooperatives—in part because they had had more experience with market reforms, but perhaps also because of a higher degree of individualism in Estonian culture and a strong orientation toward the West.

The three Baltic countries experienced similar developments in their fight for independence up until 1991, except for the fact that the Lithuanians followed a more radical line of confrontation with Moscow. After the failed coup in August 1991 and the beginning of Baltic independence, however, there was greater room for differences in the political and economic development strategies in the three countries. Differences in background conditions in Estonia, Latvia, and Lithuania played an important role in shaping the political processes in each country and thus had serious implications for the more explicit choice of transition strategy. The national problem in particular marked political developments in Estonia and Latvia and shaped the political "window of opportunity." The Russian-speaking population, which included the majority of the workers, had very little political influence in Estonia and Latvia, and hence the social reaction to economic problems was postponed in

those two countries. The Estonian government used the window of opportunity to implement both fast and comprehensive reforms in connection to liberalization. The Latvian government was to a greater extent paralyzed by political conflicts. Therefore, the reforms were slower and less comprehensive in Latvia. In contrast to the northern countries, in Lithuania, the workers were not dominated by a large Russian-speaking group that had lost political dominance. The Lithuanian workers were relatively strong, and there was an early reaction to the economic recession against the reformers. Although the new Labor government, elected in the winter of 1992–93, did not change essential elements of the economic reform policy, the relatively strong position of workers was an important reason for insider privatization in Lithuania. At the same time, Lithuanian politicians were concerned about the danger of foreign, especially Russian, capital inflows.

TRANSITION STRATEGIES

The results of these political developments are reflected in the transition strategies chosen by each country. The transition in Estonia had already begun during perestroika with the establishment of many semi-private enterprises and joint ventures with foreign companies. By 1990, Estonia was already ahead in terms of attracting foreign investments and had nearly as many joint ventures as Russia (World Bank 1992). Estonia implemented fast, tough stabilization and liberalization policies. Insider privileges in the privatization process were eliminated at an early stage. The privatization process gained speed after 1993 with an emphasis on direct sales to core investors, including good opportunities for foreign investors. Latvia also pursued a tough stabilization policy but a somewhat slower and less consequent liberalization. Privatization followed the same pattern as in Estonia but did not gain momentum before 1995–96, slowed by conflicts and the lack of political governance for many years. Lithuania was slowest in the implementation of a tough stabilization policy, and liberalization was not as comprehensive as in Estonia. Since workers have had a stronger political role in Lithuania, privatization has been dominated by insiders, and foreigners

have been squeezed out of the process. There have also been more significant restrictions on FDI in Lithuania, especially with regard to land ownership.

The general results of the development and restructuring of production and trade were a steep fall in production in all three countries, most severely in Latvia and Lithuania, followed by a hesitant upturn after 1994. The fall was somewhat smaller and the turnaround faster in Estonia. In Latvia and Lithuania, the upsurge was further postponed by a serious banking crisis in 1995. Inflation was stabilized, first in Estonia and Latvia, but later also in Lithuania. By 1997, inflation was expected to be only around 10 percent in all three countries.

The analysis of the transition process shows a strong relation between the background conditions in the four subsystems and the different paths of transition (in terms of stabilization, liberalization, privatization, and internationalization). The production system in all three countries experienced a drastic slump, but the fall was somewhat smaller and the turnaround faster in Estonia. GDP per capita and wages measured in U.S. dollars were at the end of 1996 highest in Estonia, and the combination of growth in GDP and real appreciation of the currency has resulted in steep growth in international purchasing power. Although the market is relatively small, it is rather stable and fast-growing. After some delay in Latvia and Lithuania because of banking crises, these markets are also developing in a promising direction. In all three countries, there has been a drastic change in the distribution of production in different sectors. This change is connected to the general restructuring of production away from products determined by the commands from Moscow to products determined by the demand of customers and the cost of inputs. Agriculture has fallen to less than half of the relative value. This reflects both a fall in production and a relative fall in agricultural price levels. Manufacturing has also fallen, in both absolute and relative terms. A closer look at the different branches in manufacturing shows that foodstuffs are the most important branch in Estonia and Latvia, and they are also the dominant branch in Lithuania. Textiles, and therefore also the aggregated branch of textiles, clothing and shoes, especially have lost in relative importance. Wood and wood products have increased in importance

in Latvia. The broad group of chemicals, fuels, and metals has increased in importance in Estonia and Lithuania (in Lithuania mainly because of a revival of oil refining production—24.2 percent of manufacturing production in 1994). In Estonia and Latvia, the machinery and equipment branch has lost much of its relative importance. In Latvia, the fall was mainly caused by branch radio and TV equipment falling from 10 to 1.6 percent.

Overall, the social system in all three countries has been rather stable, with political developments in Estonia the most stable despite changes in governments. Political developments have strongly affected the development of the institutional system in each of these countries. All three Baltic countries have had quite liberal legislation concerning foreign economic relations, but Estonia comes closest to the small, open economy featured in many economics textbooks and provides a strong contrast to Lithuania. It is difficult to document differences in the value system which strongly influence FDI and international trade, except for the differences connected to Russian minorities, which have had an indirect effect through the social system. The stronger German/Nordic influence in Estonia and Latvia might have caused a more individual attitude in contrast to the more traditional and Catholic tradition in Lithuania, including a higher degree of collectivism that might make Lithuanians more hesitant in regard to foreign investors.

CONDITIONS OF INTERNATIONALIZATION

When we look more closely at the conditions for internationalization, the following tendencies should be emphasized (see Figure 1). Estonia has experienced stable political development. The potential threat of open conflict with the large Russian-speaking minority does not seem to be a serious problem from the point of view of most foreign investors. There has been broad support in the population for market reforms. In Estonia, the turn away from Russia toward Western countries has been one of the main objectives of economic policy. This policy has been strongly influenced by the proximity to Finland and the “national question.” The early introduction of the Estonian kroon was one of the first steps, and the

Figure 1

Overview of the Background Conditions for Trade and FDI in Estonia, Latvia, and Lithuania

	Estonia	Latvia	Lithuania
<i>Social System</i>	High stability Russians and workers Low political influence Broad support of market Quite low corruption? Low mafia activity?	Often political deadlock Russians and workers Low political influence Weak support of market Quite high corruption? Some mafia activity?	Relative stability Workers quite strong political position Weak support of market Quite high corruption? Some mafia activity?
<i>Institutional System</i>	OK from 1992–93	OK from 1993	OK from 1993–94
Stabilization	Market functioning Hard budget constraint Full trade liberalization Liberal regime for FDI	Market functioning Soft budget constraint Some trade barriers Quite liberal FDI rule	Market functioning Soft budget constraint Some trade barriers Some FDI restrictions
Privatization	Quite fast 1993–95 Foreigners very active in large privatization; can own land from 1993	Quite slow up to 1995 Foreigners can join large privatization; can own land from 1994	Fast 1991–95 Foreigners crowded out; can own land from 1996

<i>Production System</i>	Very small, fast, growing international purchasing power	Small, but growing international purchasing power	Small, but fast growing international purchasing power
Markets	Very easy access Opening for FDI in utilities and infrastructure	Easy access Opening for FDI in utilities and infrastructure	Quite easy access Opening for FDI in utilities and infrastructure
Factors:			
Raw materials	Peat, wood, (food)	Wood, food	Wood, food
Technology	Some restructuring	Low restructuring	Low restructuring
Infrastructure	Not important problem	Not important problem	Not important problem
Human resources	High educational level	High educational level	High educational level
Labor cost	Low, highest of Baltics	Low, middle of Baltics	Lowest in the Baltics
<i>Value System</i>	High individualism	High individualism	More collective
<i>Outside World</i>			
Geography Proximity	Finland, Baltic Rim, St. Petersburg area Gateway to Russia	Baltic Rim, Russia Gateway to Russia	Baltic Rim, Belarus, Russia, Poland Gateway to Russia
Cultural proximity	Finland, Nordic ties	Nordic ties	Nordic Ties, Poland
International relations	EU agreements, 0 years	EU agreements, four years	EU agreements, six years

Figure 1

liberalization of foreign economic relations continued this quite explicit development strategy with broad support in parliament. The legislative framework for the market economy has been built rather quickly, and the system has been implemented in a strict way. The strict bankruptcy procedures and the tough regulation of the banking system are good examples. This is combined with fully liberated international trade flows, and no barriers for FDI except for some uncertainty concerning the restitution process. Estonia's liberal trade regime meant that the EU association agreement was implemented without an adjustment period. Restructuring of the enterprises is being implemented, and fixed gross investments are relatively high. Estonia is a small market, but the international purchasing power is growing very fast. On the factor side, the only important raw material is peat. Products from forestry and agriculture are, however, also important. The educational level is high, and although Estonia has the highest wage level of the Baltic countries, it may be assumed that restructuring and increasing productivity mean that the labor costs per unit are still competitive. Estonia's technological base needs much upgrading, but there is probably some potential in wood processing and textiles, as well as machinery and equipment.

Latvia's political situation is not as stable as Estonia's, but the risk of a drastic change in the political climate would probably not constitute an important barrier for foreign investments. Personal networks are probably more influential than in Estonia, and the problems related to corruption in the relations between the bureaucracy and enterprises might be a more serious threat for foreigners. The legal system is quite developed, but the implementation is not as strict as in Estonia. The bankruptcy law has not yet been strictly implemented, and the strengthened regulation for banks resulted in a serious banking crisis in 1995. Regulation of international trade is quite liberal except for some high tariffs for imports of foodstuffs. There are no important legal barriers for FDI. Restructuring in Latvia seems to face somewhat more resistance than in Estonia. Privatization is much slower and the level of gross investments is lower. The technological base of the fixed capital is probably not attractive to many foreign investors. Products from forestry and agriculture are the most important primary resources. The price of labor is somewhat lower than in Estonia, probably reflecting a lower level of re-

structuring and productivity. Latvia's potential lies mainly in the clusters connected to wood and food products. However, there might also be a potential in developing Riga as an important financial center.

Lithuania has a rather stable political system, in spite of governments changing between the Labor and Conservative Parties. There are no threats of serious conflicts because of national minorities. Unofficial networks are probably of some importance, as in Latvia. Also, the legal system and the lack of full implementation show some similarity with the developments in Latvia. The level of gross fixed investment is the same as in Latvia, and this is probably also the case with enterprise restructuring. A strong cluster in food products might be a possibility in Lithuania, and oil-refining and related industries are substantial parts of Lithuania's industrial base. The wage level measured in U.S. dollars is the lowest in the Baltic countries.

The influence of the outside world is closely connected to the development of infrastructure, determining the cost of transportation of goods and people. The data confirm that the development of infrastructure and geographical proximity to large markets are indeed important determinants for economic internationalization. The most significant common feature is the three countries' location as part of the Baltic Rim, together with Russia, Finland, Sweden, Denmark, Germany, and Poland. The differences worth noting are Estonia's closeness to Finland—in the cultural and linguistic sense as well as the geographic sense—and Lithuania's closer relations to Poland, Belarus, and Ukraine. These differences have resulted in the following international trade pattern.

Estonia in particular made a very fast and drastic change in its international trade pattern, orienting itself toward the West, with Finland as the main trading partner starting already in 1992. By 1996, Estonia's exports per capita were 2.5 times the level of Latvia and 1.6 times the level of Lithuania. As for the two southern countries, Russia was still by far the most important trading partner. Trade with Sweden and especially Finland is higher as we move north. Trade with the neighboring Slavic countries is more important for Lithuania. Germany has a larger role as we move south. The EU countries, especially Finland, Sweden, and Germany, export mainly machinery and equipment to the Baltic countries. The Baltic countries export mainly timber,

wood products, and textiles to the EU and mainly foodstuffs and some equipment to the Commonwealth of Independent States (CIS). Wood exports are more important in Estonia, whereas food is more important in Lithuania. Primary resources from forestry and agriculture play an important role, but so does cheap labor. This is especially the case with the large amounts of textile and clothing exports from all three countries. Outward processing is important in this sector, with final markets in the West, and it is important for machinery and equipment for final export to the CIS.

There is a strong connection between the pattern of trade and the pattern of most of the FDI into the Baltics. Finnish FDI in Estonia in particular has complemented the development of trade. Finnish FDI is mainly market-seeking. Swedish investments are more concentrated on manufacturing and tend to be more factor-seeking. In general, most FDI in the Baltic countries has multiplied and increased the trade and production linkages between the countries in the Baltic Rim region. The high proportion of outward processing indicates that Finnish and Swedish investors in particular are establishing new cross-national production networks. As with trade, the volume of FDI falls as we go south, and the weight of the regional FDI from the Nordic countries decreases as well. At the same time, the weight of the United States, the United Kingdom, and Germany increases. The United States ranks second or third among the foreign investors in the three countries. The U.S. share of trade is much lower, and U.S. investments seem to be an alternative to exports. They are often market-seeking investments in sectors such as retail food, tobacco, or telecommunications.

Estonia belongs to the countries in Eastern Europe with the highest FDI per capita. A substantial part of FDI in Estonia is directly connected to takeover payments in the privatization process. Another increasing portion is used for investments in the enterprises taken over by foreign investors. About 35–40 percent of the privatized assets in the enterprises have been taken over by foreigners, and 9 percent of the enterprises are owned by foreigners. About half of total FDI has been invested in manufacturing.

Up to 1996 Latvia attracted much less FDI than Estonia. The privatization agency is selling enterprises to foreign owners, but this part of the privatization process started later than in Estonia, and the process has been slower. Around 5 percent of the enterprises are

owned by foreigners. FDI is most frequent in finance, trade, and manufacturing of foodstuffs, wood products, clothing, and instruments. The largest amounts have been invested in telecommunications and the financial sector.

Lithuania has the lowest FDI level of the Baltic countries. This can mainly be explained by the low level of FDI in the privatization process. The enterprises were instead sold to insiders or citizens in general. It can be expected that foreign investors will be active buyers of the shares that insiders will sell. Foreigners already play a relatively large role in trading at the Lithuanian stock exchange today. Nearly all foreign investors are from the EU and the United States. Only 6 percent of the capital comes from the CIS. For this amount of money, 31 percent of the enterprises have been taken over by investors from the CIS. This implies that the CIS-owned companies are much smaller on the average than their Western counterparts. It may be assumed that these investments are mainly in service and trade. The important sectors for Western FDI are telecommunications, petrol, food, textiles, and wood processing. In the last stage of privatization, market-seeking investments in monopolistically oriented branches in transport, telecommunications, and energy have increased in all three countries.

It is too early to discern the exact form of cross-national production networks developing around the Baltic Sea. However, the rapid development in international trade, combined with increasing FDI, shows that the Baltic countries constitute fertile ground for reorganizing production that could strongly affect the Baltic economies and have strong effects on the other countries situated on the Baltic Rim.

NOTES

1. Additional tables, figures, and references can be found in an earlier version of this study at <http://brie.berkeley.edu/BRIE>.

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APPENDIX

THE TUNNEL AT THE END OF THE LIGHT: PRIVATIZATION, BUSINESS NETWORKS, AND ECONOMIC TRANSFORMATION IN RUSSIA

**Edited by Stephen S. Cohen, Andrew Schwartz,
and John Zysman¹**

SUMMARY

This book addresses the question of whether international production networks (IPNs) will become a significant element in the Central and East European transition to a market economy, the reintegration of Europe, and the evolution of Europe's regional position in the global economy. Because of the substantive differences between the transitions from socialism in Eastern Europe and the former Soviet Union (FSU), we have dedicated a second volume to Russian reforms, the evolution of Russian capitalism, and the prospects for the country's economic integration with Europe and the global economy. Our second volume is entitled *The Tunnel at the End of the Light*, in reference to the reverse sequencing of Russian reforms, which have produced markets before the institutions that regulate, support, and correct those markets are in place. This appendix summarizes the contributions in *The Tunnel at the End of the Light*, the conclusions of which bear directly on the answers to the questions raised in *Enlarging Europe*. The IPNs that are emerging in Central and Eastern Europe could potentially reach still further east. Such business networks and the economic integration of the FSU would benefit former Soviet citizens and provide a market of nearly 300 million more consumers for the rest of Europe. What transpires in the FSU in the next phase will significantly affect the prospects for Central and Eastern Europe's prosperity. If Russia and its neighbors realize

their economic potential, a rich area of trade and IPNs could develop. If not, as one contribution in *The Tunnel at the End of the Light* points out, Russia could turn inwards, revert to nationalist politics, and rebuild a menacing security apparatus that would hamper the emergence of a peaceful and prosperous united Europe.

Many of the conclusions reached in *The Tunnel at the End of the Light* are distressingly grim, although several authors point to the potential for political reforms that could reverse current trends. The newly reformed Russian economy is languishing under ineffective governance and a faltering state apparatus. The ineffectiveness of the state virtually guarantees that there will be neither stable rules nor credible institutions crucial to market viability in the short term. Not only are the necessary institutions to govern the market lacking, but also the presence of corruption and organized crime means the evolution of the post-Soviet transformation will face continued contestation. Because the planned economy underwent dismantling before markets were in place, business relationships are regulated by neither the state nor the market.

In order to reverse Russia's current trajectory, the first requirement would be to reinvigorate the state with power and legitimacy. As Dietrich Rueschemeyer and Peter B. Evans put it, a viable state is "a set of organizations invested with the authority to make binding decisions for people and organizations juridically located in a particular territory and to implement these decisions using, if necessary, force." Overcoming the social conflict that inevitably occupies the governing arena, the state must act as the "guardian of the universal interests of the society over which it has jurisdiction."² This is not to say the state does not embody contradictory tensions, but the question in Russia is whether those tensions will be resolved according to the rule of law or whether they will continue to be the source of arbitrary application of the law and venality among state officials and members of society.

None of the authors doubts Russia's potential to become an economic giant in the European and global contexts. With access to FSU markets, natural resources, and adequate infrastructure, there is much incentive for foreigners to invest. But given the current uncertainty permeating the political environment, the enduring barriers to direct investment, and the state's reluctance or inability to enforce the law, capital has (probably wisely) stayed away. Given the

powerful networks of criminality and influence in the Russian system, development will be different there than in much of the rest of Central and Eastern Europe. Until it develops market institutions, Russia will not realize the benefits of market competition. What follows is a brief description of the chapters included in *The Tunnel at the End of the Light*.

Stephen S. Cohen and Andrew Schwartz's chapter, "Deeper into the Tunnel," lays the theoretical groundwork for the subsequent chapters in the volume. Their argument is that "fundamentalist capitalism" in its rawest form swept into the former Soviet empire when the defeat of communism left an ideological vacuum. Free market enterprise was simplified to privatization, while democracy was assumed to mean free elections. Cohen and Schwartz point out that more is required to realize the proper functioning of either.

These authors emphasize three points in the transition from socialism to capitalism. First, successful privatization cannot be immediate because the creation of capitalist institutions takes time. Although competition is essential to efficiency in a mature market economy, simply changing from state to private ownership will not make an enterprise profitable. Internal restructuring is normally essential in the transformation of formerly publicly held businesses. Second, embedded socioeconomic institutions such as a legal code, financial institutions, capital markets, and regulatory regimes make private ownership workable. Third, the state is essential in this process. Only the central authority can create—and, more important, regulate—markets. And for a time, the state should also regulate imports, capital flows, and major industrial assets.

In contrast to the advice of "radical capitalists," there are many examples of states achieving high levels of growth, not through the immediate engagement of global markets, but rather through the regulation of markets and state-directed allocation of capital. The authors also point out that competing models of capitalism show variation in patterns of ownership. The "simple ownership model," in which the distinctions between public and private are black and white, obtains in few places.

Finally, special consideration should be given to the fact that these states are confronting a Communist legacy that must have institutional and developmental implications for the evolution of capitalism. Cohen and Schwartz point to the shortage of en-

trepreneurial skill and the excess of criminal experience; the shortage of market-ready companies; the poor work habits among former Soviet bloc populations; the shortage of capital; an uncertain business climate; weak links between labor, suppliers, and manufacturers; and fragmented markets, severed international links, and ethnic hostilities. The remaining chapters in *The Tunnel at the End of the Light* focus on the weakness of state structures and its consequences for thriving criminal activity and the slow emergence of productive business networks.

Why are the Russian economy and polity so profoundly dysfunctional? Other Central and East European states have undergone dramatic transitions with fewer difficulties. M. Steven Fish's article, "The Roots of, and Remedies for, Russia's Racket Economy," points to a conjuncture of five other conditions that contribute to Russia's racket economy. The first is what he calls "the curse of plenty." Russia is so well endowed with metals, oil, and gas that it is possible for a select and powerful few to enjoy considerable wealth from these industries without having to restructure them. Second, the intense concentration of wealth has been exacerbated by Russia's privatization strategy and the "loans for shares" program, in which citizens were awarded vouchers that they promptly sold to oligopolist interests.

Third, Russia is now dominated by what Fish calls "one-dimensional liberalism," in which the market emerges in the midst of lawlessness. The state has almost entirely withdrawn from its role as enforcer and upholder of the law, a role it fulfilled only selectively during the Communist era. In the absence of this vital service normally provided by the state, individuals and firms are forced into the private protection racket, which makes for a "poisonous investment climate." The fourth reason Fish cites is a moral vacuum that pervades Russia's economic and political spheres. Religious and civic activities were for the most part extinguished under Communist rule, and the current government continues to stifle many forms of association, particularly Russian Orthodoxy. Thus there is no commonly held understanding of the greater good, not even in the form of Russian patriotism. Finally, Fish highlights the debility of societal organizations and the consequent lack of social fabric. Old structures have been dismantled before replacements have had a chance to develop. The military is demoralized, the intelligentsia fragmented,

and political parties do not yet command much loyalty. Although some of these problems have emerged in other post-socialist societies, it is unusual to find all five conditions in one place. The conjuncture tends to feed on itself, allowing problems to metastasize and grow ever more insoluble.

The good news is that the fundamental issues are political and that they could therefore be solved through a change in leadership or, if current leaders prove effective, a change in policy. As an example, Fish cites the election of Costive in Bulgaria as a dramatic change in leadership that was good for both the restoration of law and order and democracy. The trick, Fish admits, is to find the right agent for the Russian context. Because of the dire need for the state to resume its function of law enforcer, Fish concludes that the best short-term solution for Russia today might be the Luzhkov model, named for the mayor of Moscow who has vigorously undermined the private security racket in his city. In addition, Fish argues that small business, intellectuals, academics, and journalists are potential catalysts of change in Russian society. These groups manifest autonomy and a cosmopolitan outlook that may allow them to step outside the confines of Russia's failing economy and demoralized society ahead of the rest of the population, forging a path out of the negative cycles of corruption.

Gregory Grossman's chapter, "Subverted Sovereignty: Historic Role of the Soviet Underground," traces the origins of contemporary Russia's vast criminal activity to the shadow economy of previous decades. In keeping with George Breslauer's well-known defense of Sovietology,³ Grossman demonstrates that Soviet rule cannot be properly understood in either of two oversimplified characterizations: the dynamism that existed in the Soviet system cannot be explained exclusively by a pluralist approach that looks only at social forces from below, nor by a top-down, purely statist approach. In tracing the origins and growth of both illegal and legal private economic activity, Grossman uncovers forces of change in the Soviet system that led to its demise.

Grossman does not argue that the shadow economy alone was responsible for the Soviet Union's collapse and even concedes that some illegal activity might have resulted in positive externalities through the provision of additional goods. But he does point out that several symptoms of illegal economic activity undermined state

power. These include the growth of illicit, private income; the corruption of state and party; increasing economic inequalities between sectors and regions; and, finally, the rise of violent organized crime. The lax enforcement of law and illegal dealings between state-owned firms were already firmly entrenched practices by the 1960s, but it was under Brezhnev and later Gorbachev that the shadow economy gained momentum and undermined state capacity. It could be argued that the accumulation of private wealth, the growing familiarity with private exchange, and the trust that developed as a consequence of business transactions may yet help the Russian transition. But thus far, what seems to have penetrated Russian society most deeply are the tendencies for citizens to cheat the state, to cheat each other, and to evade taxes. In Grossman's estimation, the level of trust among FSU citizens remains low, toward both the state and each other.

The shadow economy contributed to the Soviet Union's collapse for several reasons. First, it had become so bloated by the late 1980s that it was dysfunctional and contributed to inflation. Second, the corruption and crime associated with it had upset the domestic political order. Third, Gorbachev's privatization policies introduced new opportunities for both legal and illegal activities, exacerbating the ongoing conflict between the shadow and legal economies and contributing to the decay of the whole system. The chapters in *The Tunnel at the End of the Light* highlight certain elements of Grossman's analysis, revealing in greater detail the process by which corruption and criminality became embedded in the country's economic system.

Peter Huber and Andreas Wörgötter build on Grossman's conclusions about the evolution of the shadow economy. Their chapter, "Political Survival or Entrepreneurial Development?," addresses the preponderance of survivalist, as opposed to entrepreneurial, networks in the Soviet and post-Soviet economy. Survivalist networks are rent-seeking, operate in the short term, and generally diminish the value of assets. Entrepreneurial networks, by contrast, attempt to enhance market performance of their products and services and generate profits. The Russian economy today suffers from an abundance of survivalist networks and a paucity of entrepreneurial networks. This not only extracts value from the economy, but also will undoubtedly make it difficult to integrate with Western Europe,

where firms are typically entrepreneurial as opposed to rent-seeking.

Huber and Wörgötter argue that enterprise culture, history, and the institutions available during their creation affect the structure, nature, and purpose of networks. Because many of the current networks predate Soviet transition, they grew up in the environment analyzed by Grossman. They are the products of personal, informal ties that were used in conspiratorial activities during the Communist era, when prices were not a means of conveying information and hierarchy informed all relationships. Communist-era practices and relations remain operative, leading to economic irrationality in some cases and to price discrimination in others.

There are also structural reasons for the ascendancy of survivalist networks at this time. Where industrial concentration is high but the number of competitive enterprises is low, as in many post-Soviet communities, a dependence of the population on the enterprise develops, effectively eliminating the possibility of political and social change. Particularly where a single enterprise dominates a community, that firm will harass prospective entrants in the region as a means of preserving power and ensuring continued dependence of the population. Entrepreneurial networks have a better chance of emerging where the economy is diversified, industries are smaller, and there is no hegemonic enterprise actively defending its territory.

The proportion of survivalist to entrepreneurial networks augurs poorly for the generation of profit in the Russian economy. One could reason, however, that because survivalist networks are basically extractive and consumptive as opposed to productive, their days must be numbered—the value of assets can be diminished only for so long before survivalist networks implode. Although Huber and Wörgötter acknowledge this, they argue that survivalist networks could hold on for a regrettably long time. And the longer they endure, the more difficult it will be to integrate with Western Europe.

Manuel Castells's chapter, "Paths and Problems of the Integration of Post-Communist Russia into the Global Economy," speaks directly to the question of whether and under what conditions Russia might integrate with the European economy. In both the European and global contexts the Russian economy could have an enormous impact. With nearly 300 million potential consumers in the FSU and Russia's raw materials, educated public, and scientific

and technological capacity, the region could fuel substantial economic growth, both internally and abroad. Castells argues that productive investment continues to be inhibited by arbitrary law enforcement, bureaucratic corruption, and security concerns.

On the one hand, it may appear that some economic indicators have improved in the 1990s. Russian politicians favoring free market reforms are eager to point to the increasing volume of foreign direct investment and the growing importance of Russia's external sector. Although Castells concedes financial flows are increasingly important, he cautions that some of this is fueled by business deals related to global crime. And although it is true that the external sector has grown in terms of Russian GDP, the principal cause has been the comparatively dismal performance of other parts of the Russian economy.

Particularly devastating has been what Castells terms the "de-industrialization" of the Russian economy. The precipitous drop in demand for military equipment, which at one time accounted for a substantial portion of GDP, combined with the collapse of supply-demand linkages in the economy, growing income disparities, and the failure to collect taxes, has undermined Russia's growth potential. Indeed, from 1991 to 1996 GDP fell. Russia's leadership has even allowed the most vital growth industries, including electronics manufacturing, to languish in the post-Communist chaos. Again, the faltering demand for military equipment, the isolation of the industry from the global market, and the lack of information diffusion have killed this sector. Consequently, for the foreseeable future, Russia will be dependent on external sources of technology, will have limited technological know-how, and will be unable to support viable, up-to-date military forces.

Even where Russia has the greatest comparative advantage, management has failed to produce substantial gains for the Russian economy. The oil industry is in crisis, and gas exports do not by themselves generate enough hard currency to pay for basics such as food, machinery, and consumer products, let alone industrial modernization. Both Russia and the European Union (EU) will suffer without an overhaul of the energy sector; Russia will be unable to import, while the EU will be missing out on a potentially huge market.

The one area in which Russia's economy is apparently seeing some successful globalization is in finance and stocks. But even here, where the risks are big but so are the potential payoffs, investments

are generally speculative, investors can get out quickly in a panic, and profits are rarely, if ever, reinvested in the Russian economy. More often than not, investors get in and out again quickly, taking their earnings with them. Russians themselves evince little enthusiasm for their country's potential. In the first five years of transition, capital flight from the country has approached \$60 billion, while it is estimated the Russian public hides another \$30 billion under its mattresses, unwilling to invest personal savings in the economy or even put them in the bank.

As Russia attempts to reinvent itself as a democratic, capitalist society, much more than just its own success or failure lies in the balance. The present volume addresses the prospects for the integration of Central and Eastern Europe with Western Europe. But whether and under what conditions that integration is successful depends in large measure on what becomes of Russia in the next few years. As the chapters in *The Tunnel at the End of the Light* unanimously argue, corruption and the racket economy will continue to thrive unless there is a decisive break in the political leadership. And this will mean growing income stratification, continued weakness of viable free market institutions, and enduring safety concerns for those who do business in Russia. Under these circumstances, integration with Western Europe through IPNs, joint ventures, or foreign direct investment remains unlikely. For Central and Eastern Europe, this would also preclude the possibility of such business arrangements and block access to an enormous market. Even worse, if Russia's degeneration continues unabated, it could mean a turn to economic and political nationalism. In that case, Russia would not only be difficult to do business with, but it might also reemerge as a formidable military antagonist, endangering the potential prosperity of newly liberated states throughout the region.

Despite its unflattering conclusions, *The Tunnel at the End of Light* is not intended to stifle debate about Russia's reform in a cloud of conclusive pessimism. Rather, the essays present tentative findings meant to spur comment from other specialists whose views may contradict those provided here and who may have suggestions about how Russia's current trajectory might be rectified.

NOTES

1. A companion volume to this one and part of the BRIE/Kreisky Forum Project on Uniting the European Economy. Published by International and Area Studies, Berkeley, 1998. This summary was prepared with assistance from Rachel Epstein.
2. Dietrich Rueschemeyer and Peter B. Evans, "The State and Economic Transformation: Toward an Analysis of the Conditions Underlying Effective Intervention," in *Bringing the State Back In*, ed. Peter B. Evans, Dietrich Rueschemeyer, and Theda Skocpol (Cambridge: Cambridge University Press, 1985), pp. 46–47.
3. In his article, Breslauer argues that some strains of scholarship did see potential for change within the system during the cold war ("In Defense of Sovietology," *Post-Soviet Affairs* 8, 3 [1992]: 197–238).

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