

## Overview

Published at the turn of the millennium, *Making Transition Work for Everyone* called attention to an unprecedented increase in poverty in Eastern Europe and the former Soviet Union from the onset of transition until 1998 (World Bank 2000). Inequality had increased steadily in all countries, in some to rival the most unequal countries in the developing world. The achievements in education and health during the years of socialism were under strain—to the detriment of poor families and the long-term economic mobility of their children.

Much of this grim litany could be attributed to the collapse in output and institutions that attended the beginning of transition everywhere—and to the failure of the long-awaited recovery of GDP in the Commonwealth of Independent States (CIS) to arrive until after 1998, the year of the Russian Federation's financial crisis.<sup>1</sup> The ensuing decade has been kinder to the transition countries. Helped externally by a benign global environment and internally by capacity underutilized on account of the recession, rapid economic growth in the CIS—among the fastest growing developing regions during this period—took its GDP per capita to pre-transition levels by 2007. Eastern Europe, where recovery had taken hold in 1993 after a shorter and shallower recession, grew steadily as well. As a result, 50 million people—out of 400 million in the region—moved out of absolute poverty between 1998/99 and 2005/06.<sup>2</sup> Inequal-

ity also fell to levels considerably lower than in East Asia and Latin America. Growth since 1998 generally came from rising aggregate labor productivity, or output per worker, which allowed broad-based real wage increases that reduced poverty, not from gains in employment or a rising share of the working age population (15-64 years) in total population.<sup>3</sup>

Underneath the headlines of the slump and recovery is a more enduring development: the convergence of institutions that shape firm behavior and outcomes toward those in development market economies. This book explores the contours of convergence by addressing the following questions:<sup>4</sup>

- Can productivity growth, the main determinant of poverty reduction, be sustained?
- Are key aspects of the business environment converging toward those in market economies?
- To what extent is sluggish employment growth a legacy of transition? Can poverty be further reduced if employment prospects do not improve?
- How well are the transition countries integrated into world trade? To what extent is international migration in the region driven by broadly economic considerations?
- What policies can help offset slowing growth due to aging populations? Can international labor migration be part of the policy package?

## Innovation

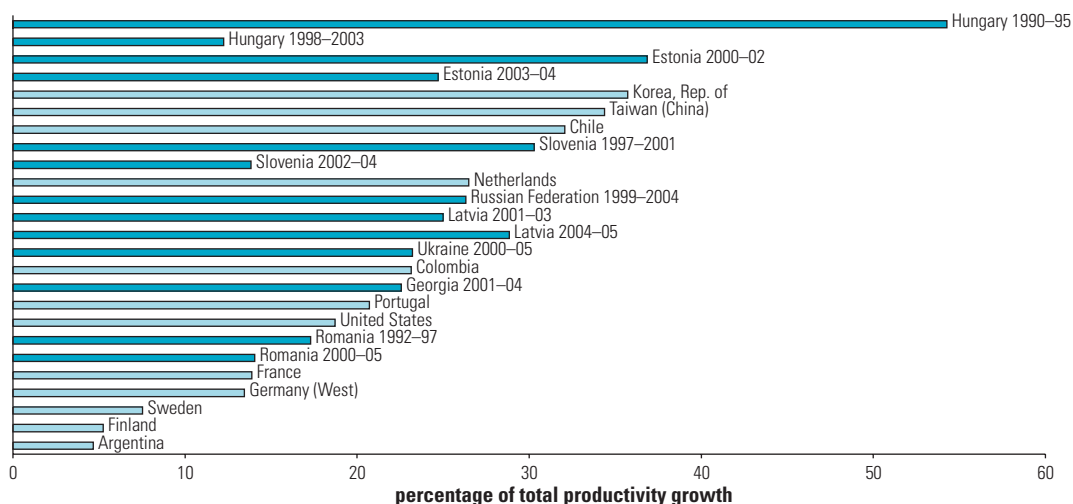
### Accounting for Productivity Growth

The transition from command to market economies at the level of broad sectors saw a pattern of deindustrialization and expansion of services in value added. Oversized industrial sectors contracted towards norms more characteristic of market economies. Services, which had been repressed under central planning, expanded everywhere. Labor's movement into services increased productivity in the EU8 and some Southeastern European countries where productivity in services was higher than in agriculture and industry. In contrast, labor's move into services reduced productivity in the CIS countries where productivity in services was lower than in industry.<sup>5</sup> The low income CIS countries also saw an influx of labor into low-productivity agriculture, which played the role of a social safety net.

Within broad sectors, productivity gains in manufacturing during the transition occurred largely within industries, not from reallocating labor from less to more productive industries. At the level of firms, where the core activity of restructuring took place, many of the gains in labor productivity came from improvements in efficiency within firms (the within firm effect), as in industrial and developing countries. But the beginning of the transition also offered many opportunities to correct the historical misallocation of resources. New firms could enter and occupy market niches that were thin or did not exist in the command economy (the entry effect). Firms that were no longer viable once they faced competition in a market economy had to shut down, raising the average productivity of surviving firms (the exit effect). Entry and exit contributed more to productivity growth in the relatively early years of the transition in Estonia (2000–2002), Hungary (1990–1995), Slovenia (1997–2001) and, to a lesser extent in Romania (1992–1997) than in industrial and developing economies (Figure 1). Productivity improvements were also brought about from the reallocation of labor across continuing firms (the between-firm effect). This too was an opportunity to redress the distorted industrial structure inherited from the central planning period.<sup>6</sup>

**FIGURE 1**

**Firm Entry and Exit Contribute More to Productivity Growth in Transition Economies than in Industrial and Developing Economies**



Source: Bartelsman, Haltiwanger, and Scarpetta 2004 for comparator countries. Brown and Earle 2007 for Hungary, Romania, Russian Federation, Ukraine, and Georgia. Bartelsman and Scarpetta 2007 for Estonia, Latvia, and Slovenia.

Note: Data show the sum of the contributions from new firms and exiting firms to total labor productivity in manufacturing. The bars for the Russian Federation and Ukraine for the early years of transition are not shown because the prolonged decline in output implies that measured labor productivity was negative during those years. See also the note to figure 2.4.

Entry, exit, and the between-firm effects were also relatively more important for productivity growth in late-reforming CIS countries, such as the Russian Federation and Ukraine after the 1998 crisis. It is important to note that productivity growth after the transitional recession in the major CIS countries resulted not only from restoring incumbent firm productivity to pre-transition levels. It also came from addressing the historical misallocation of resources through entry, exit, and reallocation, an agenda that continues to be important for slower reforming countries.

### **Toward Productivity Growth within Firms**

As countries progress in the transition, the number of market niches that new entrants can occupy falls. And as the legacy of transition is gradually extinguished, fewer potential exiting firms remain unviable. In advanced reformers, the relative importance of entry and exit declines to levels seen in developed market economies and growth then relies even more on productivity improvements within firms. The disappearance of opportunities to redress the historical misallocation of resources signals the end of the transition.

But the end of the transition does not mean that entry and exit become unimportant. There is a strong and positive association in developed market economies between the contribution of entry and exit to productivity growth and within-firm productivity growth. Such an association has yet to emerge in the transition countries in general, where net entry has been a mechanism for changing the supply side of the economy and does not as yet signal the overall state of competition in the market. Only after the high rates of entry and exit have settled down can firm turnover be expected to discipline incumbents.

Boosting productivity requires firms either to innovate, developing knowledge new to the world, or to absorb knowledge, integrating and commercializing knowledge new to the firm but not to the world. Indeed, there are important complementarities between innovation and absorptive capacity because the generation of human capital and new ideas and associated knowledge spillover help build absorptive capacity. Conversely the absorption of cutting-edge technology inspires new ideas and innovations. The activities to accomplish innovation and knowledge absorption, all falling under the rubric of deep restructuring, include adopting new products and processes, upgrading old products and processes, licensing technology, improving organizational efficiency, and certifying quality.

What drives productivity growth in firms? A business environment that offers competitive markets, a deep financial sector, good

governance, and superior skills and infrastructure. This finding is unsurprising but empirically substantiated using a new data base that includes corporate financial data for more than 60,000 firms in 14 countries of the region and 3 rounds of enterprise surveys conducted in virtually all the transition countries.<sup>7</sup> Productivity growth is higher in firms when they face stronger pressure from domestic competitors to develop new products and markets. When they are in industries that rely more on external finance in countries with more developed financial sectors. When rules and regulations are more predictable and there is greater confidence in the legal system. When they offer more on-the-job training to their workers. When the availability of mainline telephone services is higher and the incidence of power outages is lower<sup>8</sup>.

These attributes of the business environment affect not only improvements within-firm but also the other components of productivity growth. Competition removes barriers to firm entry, exit, and reallocation. A deep financial sector alleviates liquidity constraints faced by start-ups. Investment in human capital and infrastructure makes it easier for workers to move from declining to expanding activities and sectors.

## **Convergence of the Business Environment**

Are key elements of the business environment in transition economies, which is itself shaped by countries' underlying institutions, converging toward those found in developed market economies?

### *Competition and Market Structure*

Competition has been increasing in the transition economies over 1999—2005. A first measure of competition reported by manufacturers and service sector firms in the Business Environment and Enterprise Performance Survey (BEEPS), which was conducted in 1999, 2002, and 2005 in the transition countries and in developed market economies in 2004-2005, is the number of competitors an enterprise faces in its product or service lines in the domestic market: none (monopoly), 1 to 3 (moderate competition), or 4 or more (strong competition). Of the firms facing moderate competition in 2002, 34 percent in the transition economies faced strong competition in 2005, compared with 22 percent in the developed market economies, viz., West Germany and the cohesion countries of Greece, Ireland, Portugal and Spain. Of the firms that faced strong competition in 2002, 18 percent in transition economies faced less competition in 2005, compared with 15

percent in the developed market economies. In 2005 the environment was the least competitive in the low income CIS countries and the most in the EU8 and the cohesion countries. Indeed, the EU8 countries were fairly close to the cohesion countries in market structure.

Another measure of competition that is important for productivity growth is the extent to which pressure from competitors and customers prompts restructuring. Pressure from foreign competitors on firms to develop a new product or reduce costs is as important for the transition countries as for developed market economies. It has always been important over 1999-2005, but it is stronger in the EU8 and Southeastern Europe than in developed market economies. And it is weaker in the CIS countries. These are more distant from the most important advanced market area: the European Union. Since domestic productivity levels and product quality in these countries are low, domestic producers can occupy niches less exposed to international trade. Pressure from domestic competitors and customers to develop a new product or to reduce costs was not always as important but has been growing everywhere. Pressure from domestic competitors varies less than that from foreign competitors across transition country groups, but it is nevertheless the highest in the EU8 (comparable to West Germany), followed by Southeastern Europe (comparable to the cohesion countries), and lowest in the low income CIS countries.

Competitive pressure from foreign competitors and customers is a spur to deep restructuring in the transition economies. In this they differ from the developed market economies, where the impetus is competitive pressure from domestic competitors. But the transition economies are becoming more like the developed market economies. Foreign competition was always there. But early on firms could fill market niches virtually nonexistent under central planning and avoid domestic competition. But as economies matured, there is more successful homegrown competition, which heats up over time. High quality imports were always a source of competition, but high quality domestic production is new. When it comes to the importance of competition for restructuring, the transition economies are following in the footsteps of developed market economies. The EU8 and Southeastern European countries are in the lead, with the CIS country groups some distance behind.

### *Finance and Its Structure*

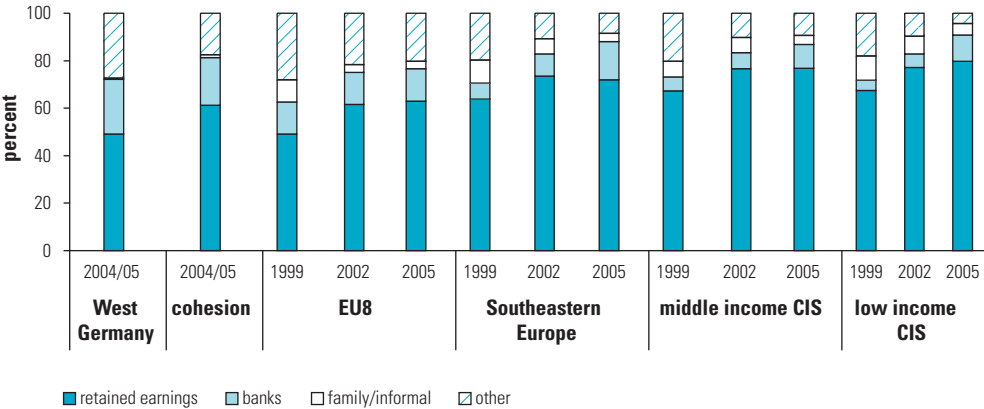
Finance makes deep restructuring possible in both transition economies and developed market economies. The structure of financing for fixed investment shows a growing reliance on retained earnings over 1999–2005 in all transition country groups, towards shares higher than

in the developed market economies (figure 2). The reliance on formal finance is generally less than in developed market economies, although the shares for the EU8 and cohesion countries are similar. But this is not because of a decline in the role of banks, which remained stable in the EU8 and increased for the other transition country groups. And the role of equity finance was small. The greater reliance on retained earnings instead reflects a decline in loans from family, friends, and money lenders—a maturing of the business and financial sectors in the transition countries, not a decline in the institutions of formal finance.

The structure of finance for private firms—de novo and privatized—in the transition economies differs considerably from that for private firms in the developed market economies in by now expected ways. Private firms in the transition economies rely more on retained earnings, more on family and informal sources and less on bank financing and other sources compared to private firms in the developed market economies (figure 3).

But these differences do not arise primarily on account of differences in observed firm characteristics such as size, sector, location, export orientation, and majority ownership (“endowments” in figure 4). Nor do they arise primarily on account of differences between developed market economies and transition economies in the underlying relationship linking those characteristics to the structure of finance (“coefficients” in figure 4). Instead, they are due more to “autonomous” factors having to do with the maturation of the business and financial sectors in the transition economies (figure 4).

**FIGURE 2**  
**The Structure of Finance for Fixed Investment Is Maturing but Has Not Converged to That in Developed Economies**



Source: Mitra, Muravyev, and Schaffer 2008.

Note: Equity finance is small in the transition countries and is absorbed in “other”

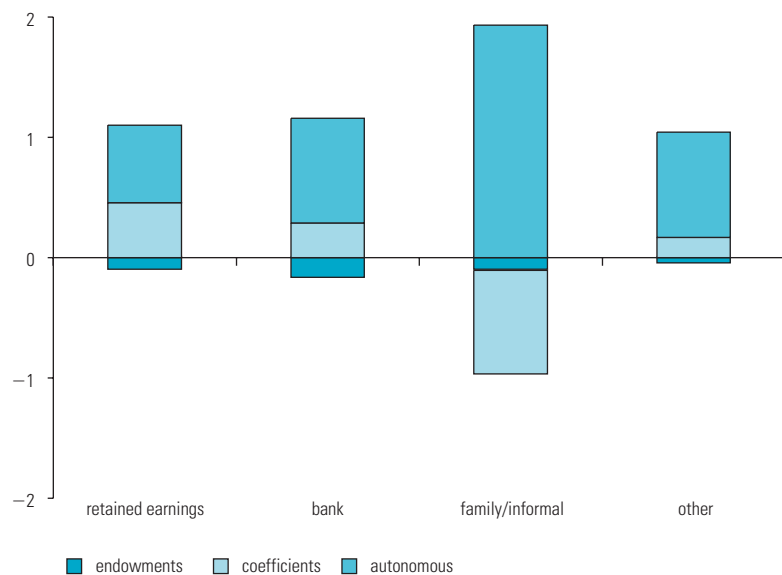
**FIGURE 3**  
**The Structure of Finance for Fixed Investment in Private Firms in Transition Economies Differs from Developed Market Economies, 2005**



Source: Mitra, Muravyev, and Schaffer 2008.

The structure of financing for fixed investment in de novo firms—those always in the private sector—resembles that for privatized firms in the transition economies (figure 5). There are some differences inasmuch as privatized firms rely relatively more on bank financing

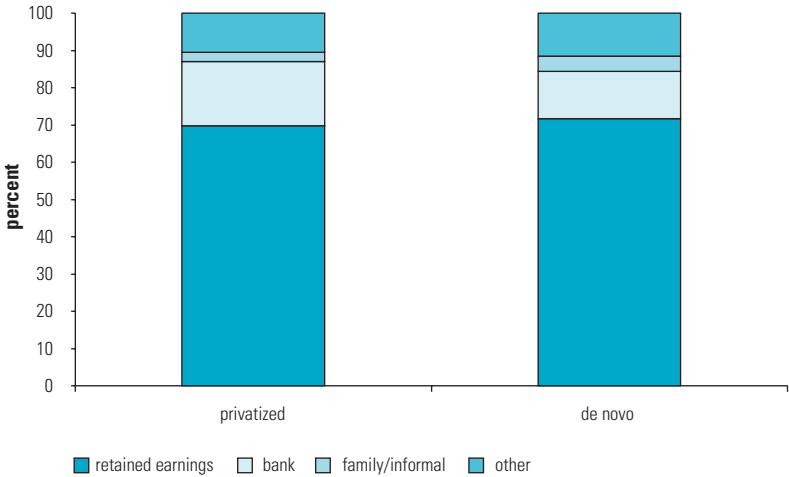
**FIGURE 4**  
**The Difference in Structures of Finance between Private Firms in Transition Economies and Market Economies Is Due to Autonomous Factors**



Source: Mitra, Muravyev, and Schaffer 2008.

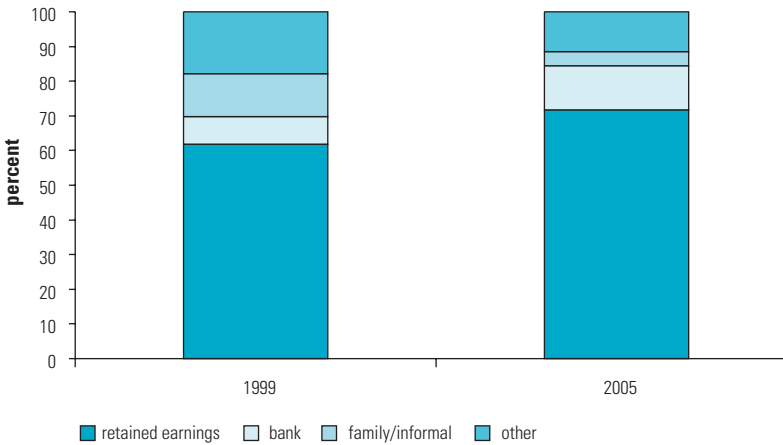
and less on retained earnings than de novo firms. And the structure of finance for de novo firms over 1999-2005 shows a shift towards retained earnings and banks and away from family and informal financing (figure 6). In summary, these comparisons suggest that de novo firms over 1999-2005 have become more like privatized firms and together they have become more like developed market economy firms with regard to how firm characteristics relate to financing, a double convergence.

**FIGURE 5**  
**The Structure of Finance for Fixed Investment Is Similar in Privatized and De Novo Firms, 2005**



Source: Mitra, Muravyev, and Schaffer 2008.

**FIGURE 6**  
**Structure of Finance for De Novo Firms, 1999 and 2005**



Source: Mitra, Muravyev, and Schaffer 2008.

## Lessons

Three lessons can be drawn from the evolution of productivity and the business environment in the transition countries.

- Countries rely increasingly on productivity growth within firms as they progress in the transition. This is important for countries less advanced in the transition as well but they also need to address the legacy of transition by focusing relatively more on entry, exit and reallocation. Improvements within firms call for deep restructuring to bring about innovation and absorption of knowledge.
- Productivity growth within firms requires a supportive business environment that delivers competition, a deep financial sector, good governance, and superior skills and infrastructure. These attributes of the business environment are however also important for firm entry and exit and reallocation of resources between continuing firms.
- Competition and market structure is a key element of the business environment. So is finance. Both are converging towards structures in developed market economies, with the caveat that the structure of lending for fixed investment still reflects a maturing of the business and financial sectors in the transition economies.
- The EU8 are farthest along in the process of convergence, followed by Southeastern European economies, with the CIS countries being some distance behind.

## Inclusion

### Employment Growth

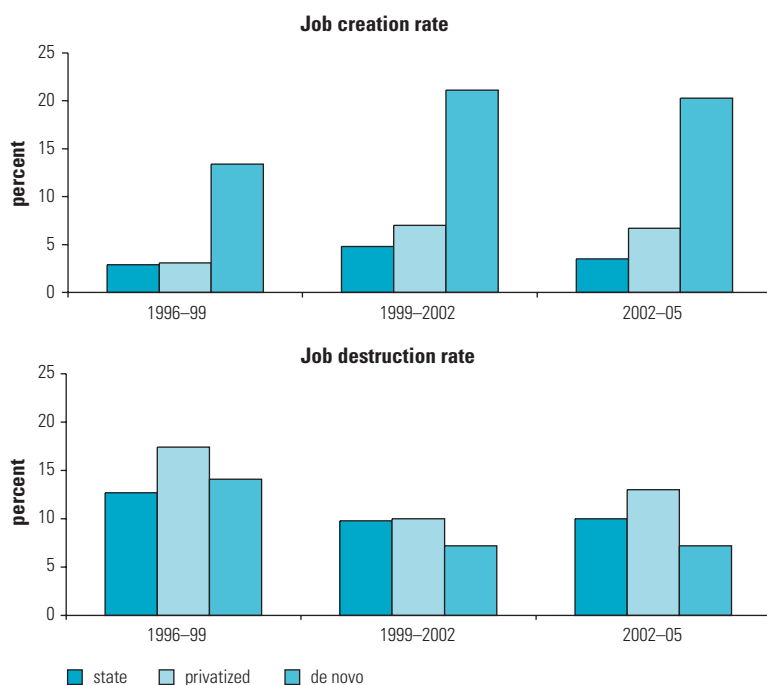
Labor market outcomes in the transition countries have generally been poor. In 2006 employment rates—the ratio of the employed to the working age population—ranged from 50-60 percent in Bulgaria, Hungary, Poland, and the Slovak Republic compared to the Lisbon agenda target of 70 percent for EU countries. Open unemployment stood at between 13 percent and 14 percent in Poland and the Slovak Republic, and more than half the unemployed had been without work for at least a year. Labor force participation rates in Southeastern Europe were 73 percent for men and 56 percent for women. The corresponding numbers in the EU15 were 78 percent for men and 65 percent for women. Low productivity subsistence agriculture employed 40 percent of the population in Moldova and 20 percent in Georgia.

These labor market outcomes reflect different stages of the transition. By sector, job growth has been more robust in services, which have expanded relative to industry since the beginning of the transition. By ownership category, de novo firms have been a strong force for job creation, whereas job destruction has occurred largely through downsizing in state-owned and privatized firms (figure 7). Indeed, rates of aggregate job growth in de novo firms are 15–20 percentage points higher than in state-owned and privatized firms. Why has net job growth been sluggish?

*Employment in the EU8 and Southeastern Europe*

Net job growth was weaker in Southeastern Europe than in the EU8 over 2002-2005. Job growth in de novo firms was over one-and-a-half times as strong as in the EU8, but this was more than completely offset by downsizing, which was over twice as large in state-owned and privatized firms in Southeastern Europe. This is a catching up story. The boom in the new private sector is farther advanced but slowing in the EU8 countries, because there are presumably fewer

**FIGURE 7**  
**De Novo Firms Have Been a Strong Force for Job Creation**



Source: Mitra, Muravyev, and Schaffer 2008.

Note: The job creation rate is the number of jobs created during a year divided by average employment during the year. The job destruction rate is the number of jobs destroyed during a year divided by average employment during the year.

niches left for de novo firms to occupy than in Southeastern Europe due to the EU8's greater progress in the transition. And the downsizing of state-owned and privatized firms is farther advanced in the EU8 but slowing as there is less of the transition legacy to be extinguished.

### *Employment in Southeastern Europe and the CIS*

Net job growth in the CIS during 2002–05 was however higher than in Southeastern Europe.<sup>9</sup> De novo firms in both country groups contributed enormously to employment growth—and in broadly comparable amounts. This was more than completely offset by downsizing in state-owned and privatized firms, which was more than twice as large in Southeastern Europe. The weaker downsizing in the CIS only partially offset job growth in de novo firms, leading to net job growth being higher than in Southeastern Europe.

This suggests that the catching up story does not quite apply to the CIS country groups. Since the Southeastern European countries have progressed more in the transition than the CIS countries, catching up would have involved more vigorous downsizing in state-owned and privatized firms in the CIS countries because there is more of the transition legacy to extinguish. Yet this did not happen, which was likely a result of inadequate competition in the CIS countries. As noted earlier, firms in the CIS countries report that pressure from competitors, whether domestic or foreign, is less of a spur to restructuring than their counterparts in the EU8, Southeastern Europe, and developed market economies.

### *Convergence*

The evolution of employment reflects patterns of convergence similar to those for the business environment. Employment depends on, among other things, firm ownership (state-owned, privatized, de novo) and size. The proportion of de novo firms has been rising and that of state-owned and privatized firms has been falling in all transition country groups over 1999–2005. The size distribution of firms in the transition countries, which was dominated by medium firms (50 to 99 employees) and large firms (200 employees or more), is also converging toward that in West Germany and the cohesion countries, which have many more micro firms (1–9 employees) and small firms (10–49 employees). Employment in small firms is increasing relative to employment in large firms. The process has advanced the most in the EU8, where the size distribution of firms is closest to that in West Germany and the cohesion countries. It has moved the least in the CIS countries which started with fewer smaller firms and, despite

their growth, are some distance from the developed market economies.

### *Skills Shortages in the New Member States of the European Union*

Skills shortages have emerged particularly since 2005, as a constraint to expanding employment in the new member states of the European Union. Employers in the Czech Republic, Hungary, Latvia, Lithuania, Poland and Romania report lack of skilled workers as an important obstacle to business growth. Low employment rates and high unemployment coexist with an increase in job vacancy rates in construction and manufacturing and rising labor demand. This is due in part to the unemployed lacking the necessary job skills—there is an excess supply of unskilled labor, particularly in Bulgaria, the Czech Republic, Hungary and the Slovak Republic. Making education systems more responsive to labor market needs and encouraging lifelong learning will be part of the agenda for reducing unemployment and increasing labor force participation in these countries.

## **Lessons**

Three lessons can be drawn from the evolution of employment in the transition countries.

- Labor market outcomes reflect firm behavior. Weak job growth in the EU8 and Southeastern Europe is the result of vigorous downsizing in state-owned and privatized firms more than offsetting strong job growth in de novo firms. Convergence in labor market outcomes comes from the slowing of both the employment boom in de novo firms and the downsizing in state-owned and privatized firms in country groups farther advanced in the transition.
- Convergence does not apply as yet to the CIS country groups. Downsizing in state-owned and privatized firms is not as strong as addressing the remaining legacy of transition might warrant. Stronger competition, which would facilitate convergence in the CIS countries, would also accelerate downsizing in state-owned and privatized firms. Severance payments, retraining programs, and social safety nets for the displaced workers can facilitate convergence by reducing its social costs.

Labor market outcomes during much of the transition reflect a balance between job growth in de novo firms and downsizing in state-owned and privatized firms. But as countries progress in the transition, these legacy-of-transition factors give way to those that

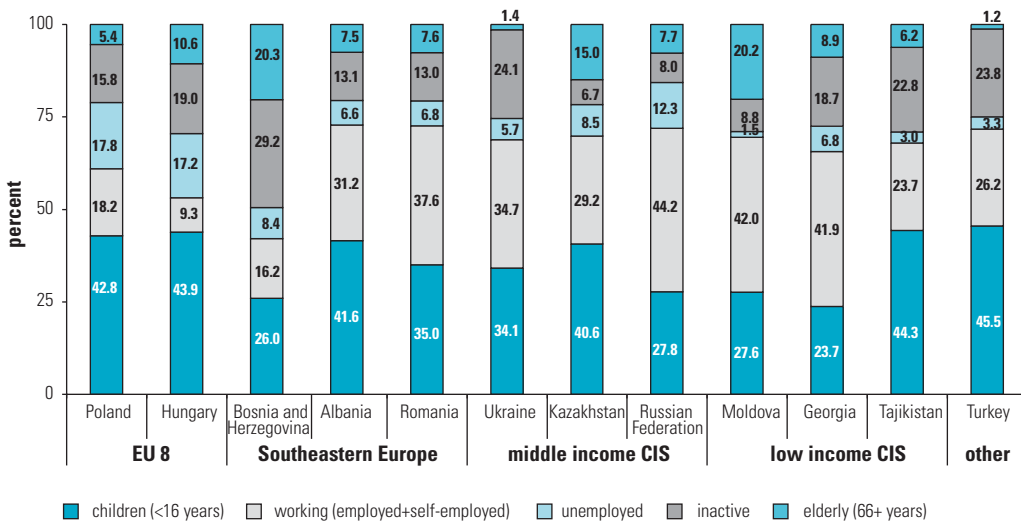
have more to do with competitiveness in a globalizing world, as is clear from recent developments in the new member states of the European Union.

### Poverty Reduction

Economic growth has lifted 50 million people out of absolute poverty. While nearly one in five individuals—or 85 million—lived in poverty around 1998/99, only one in twelve individuals—or 35 million—did so around 2005/06. There are three main channels through which growth affects the poor. First, the working poor gain from rising real wages or increased productivity of their self-employment. Second, the unemployed poor benefit directly from increased employment resulting from growing demand for their labor. And third, growth can trickle down to the economically inactive poor through increased public and private transfers.

Even with broad-based increases in real wages since 1998, working adults, whether employed for wages or self-employed, and children, often the children of working parents, make up the majority of the poor (figure 8). Work, therefore, does not always protect people from poverty. This is because much employment, particularly in the region’s poorest countries, is in low productivity occupations such as subsistence agriculture. Indeed, in 2002 nearly half of the poor in Moldova, for example, were employed in agriculture, a sector where the risk of falling into poverty is the highest compared to industry and services in

**FIGURE 8**  
**The Majority of the Poor Are Working Adults and Children**



Source: World Bank staff estimates using ECA Household Surveys Archive.

all countries. For this reason, productivity growth, especially in agriculture, will remain a dominant concern for policy makers.

The risk of becoming poor is substantially higher for the unemployed than for the employed. But the unemployed poor are a modest proportion—much less than a tenth—of the poor.<sup>10</sup> And this is despite the fact that in low income CIS countries such as Armenia and the Kyrgyz Republic, where social safety nets are less generous, the proportion of the unemployed without a job for at least a year was 40 percent or more. This suggests that the unemployed retain an informal attachment to the labor market and have benefited from the bounce-back in real wages.

The inactive poor, i.e., those not in the labor force, make up an increasingly significant proportion—from between a sixth to a third—of the poor in many countries.<sup>11</sup> Seen against the background of low labor force participation compared to the EU15, this points to the emergence of an underclass dependent on public transfers.

### *Agriculture in the Poorest Countries*

Boosting labor productivity in agriculture is particularly important for productivity growth in the low income CIS countries, where the sector accounts for 20 percent of value added and over 40 percent of employment. It is also important for poverty reduction since the poor are over-represented in agriculture and because the expansion of employment in labor-intensive agriculture in the lower income CIS countries served as a coping strategy for the poor. Land distribution from large formerly collective farms in Armenia and Georgia in the early 1990s, in the Kyrgyz Republic in the mid-1990s, in Azerbaijan in the late 1990s, and in Moldova after 1999, yielded a one-off increase in labor productivity because family farms were more efficient than agricultural enterprises. Imposing hard budget constraints on large corporate farms that are largely unreformed since the Soviet era, is important. This can be done by redirecting public spending away from subsidies and towards development of research and extension, agricultural education and market infrastructure. This would facilitate farm restructuring and enhance the competitiveness of family farms. But continuing gains in labor productivity and poverty reduction will require on-farm technology transfer to improve yields for crops and livestock. It will also require better integration of agricultural households into labor markets to provide off-farm employment or access to urban labor markets. And it will require better credit markets, reduced marketing costs, and improved rural service delivery.

Can poverty be further reduced if employment prospects do not improve? The answer is that continuing reductions in poverty and improvements in living standards are possible even without a significant increase in employment. The experience of transition countries since 1998 shows that productivity growth and rising fiscal revenue make more generous social safety nets possible, thereby helping those unable to benefit directly from growth by securing jobs. Social protection transfers to households increased in real per capita terms during 1998–2005 in line with growth in fiscal revenues. These transfers reduced poverty.

But income, though important, is not all. Satisfaction with life, though well correlated with household expenditures, also depends on factors such as an individual's assessment of health, perception of relative economic standing, work status, and trust in people. Work status is important: the Life in Transition Survey (LiTS), which was conducted in 2006 in 27 transition countries, shows that, other things being equal, the unemployed are significantly more likely to be dissatisfied with life than the employed. Indeed, the difference in satisfaction levels is somewhat higher than the difference in satisfaction levels between people with half and twice the average per capita expenditures.

## Lessons

Two lessons can be drawn from the profile of the poor in the transition countries.

- Productivity growth, which is the only viable path to lasting prosperity, will remain a dominant concern of policy makers in the transition countries. It is of particular importance for poverty reduction in agriculture in the low income CIS countries.
- Poverty reduction, since it has been driven by productivity growth and the use of transfers, is possible even without any improvement in employment prospects. But broader indicators of subjective welfare show the unemployed to be significantly more dissatisfied with life than the employed. A more inclusive growth path would require addressing the constraints to expansion of employment, such as skills shortages in the new member states of the European Union.

## Integration

### International Trade

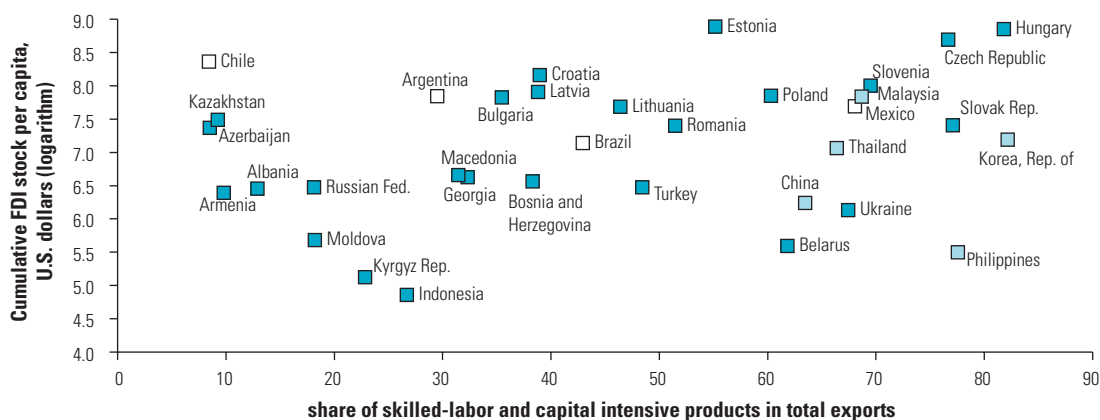
The region's international trade collapsed at the onset of the transition with the fall of the Berlin wall, the dissolution of the Soviet

Union, and the breakup of Yugoslavia. But between 1993 and 2003 it grew faster than in any other region. And by 2003 the transition countries did not systematically trade any more or any less than countries anywhere else. Put another way, this implies that remote, low income countries in the CIS are no better or worse integrated than low income countries of similar size and distances to major markets elsewhere in the world. This reintegration, in barely a decade and a half since the beginning of the transition, is worthy of note.

But the nature of trade varies greatly across transition groups. Countries that joined the European Union in 2004 are much more open to trade—exports and imports made up 60 percent of their GDP in 2006. Enabled by foreign direct investment (FDI), the Czech Republic, Estonia, Hungary, Poland, and the Slovak Republic participate almost as heavily as developing East Asia in producer-driven global commodity chains, such as those for automotives and information technology. Such chains, in which production is fragmented in vertically integrated sectors, involve two-way flows of parts and components for further processing and development across firms in various countries. Those countries also export products intensive in skilled labor and capital (figure 9).

The CIS countries, by contrast, are much less open to trade—exports and imports made up only 20 percent of their GDP in 2006—with Southeastern Europe in between at 40 percent of its GDP. Except for Belarus and Ukraine, exports from the CIS countries are intensive in natural resources and unskilled labor, reflecting exports of fuels, aluminum, and gold. The collapse of manufacturing when uncompetitive Soviet-era industry met world prices explains in part the high

**FIGURE 9**  
**Foreign Direct Investment Helps EU New Member States Take Part in Producer-Driven Global Networks**



Source: UN COMTRADE and IMF International Financial Statistics Database.

Note: FDI stock per capita is for 10 years or more over the period.

share of energy and raw materials in exports from resource-rich countries (Azerbaijan, Kazakhstan, and Russian Federation) and of aluminum (Tajikistan) and gold (Kyrgyz Republic). Their network trade is modest, confined to technologically less demanding buyer-driven production chains, such as those for textiles and furniture, in which global buyers create a supply base to build production and distribution systems without direct ownership. While FDI is almost a sine qua non for participation in producer-driven networks, it is more modest in buyer-driven networks. Cross-country differences in FDI per capita are striking, 40 times higher in Estonia than in the Kyrgyz Republic.

Innovation and integration feed on each other in a virtuous circle. Productivity growth in manufacturing firms is faster when participation in network trade is higher.<sup>12</sup> What is needed for countries to attract foreign direct investment to participate in network trade? Not trade policy per se, since most transition countries have liberal trade regimes, but “behind the border” reforms, the key being a business environment conducive to productivity growth. Two other reforms are important for integration into network trade.

- First, improved trade facilitation and logistics in port efficiency, customs regimes, regulatory policy, and information technology infrastructure. This reform has the potential to significantly increase intraregional trade and trade with the rest of the world.
- Second, liberalized banking, telecommunications, and transport services, typically combining competition with effective regulatory supervision. This improves the efficiency of the services sectors themselves. And manufacturing industries that rely more on inputs from liberalized service sectors enjoy higher productivity than those that do not—and the resulting increase in competitiveness promotes deeper integration with the global economy.

The prospect of European Union accession provided the new member states with an external anchor that supported many of the reforms necessary for the creation of a business environment conducive to productivity growth and international integration. The extent to which countries without similar prospects can look to outside mechanisms to enhance the credibility of a reforming government and lock in the necessary institutions is an open question.

### **International Knowledge Flows**

In addition to trade and foreign direct investment, knowledge flows through citations of patents, international co-invention and multina-

tional sponsorship of local inventions offer another perspective on the links between openness and innovation. Analysis of patent data for 1993 through 2006 from seven countries—Bulgaria, the Czech Republic, Hungary, Poland, the Russian Federation, Slovenia and Ukraine—by the U.S. Patent Office supports three propositions:

- First, indigenous patents from the transition countries tend to cite older technologies, less fundamental prior inventions, and patents that are less frequently cited. This suggests that inventors in the seven countries are insufficiently connected to the technological frontier and that the research and development (R&D) community is relatively isolated from international technological trends.
- Second, international R&D collaboration in various forms has allowed inventors in the region to sidestep these handicaps to some extent. Co-invented patents (those where at least one inventor is located in a transition country and one inventor is located outside, usually in a more advanced country such as Germany, the United States, other major European economies, and the Republic of Korea) have come to account for over a half of total patents granted in recent years. Most tellingly, the citation patterns become less distinctive when patents generated through such collaboration are taken into account.
- Third, foreign firms make a significant contribution to inventive activity in the region. Patents in the transition countries created through multinational sponsorship are more connected to global R&D trends and represent inventions of higher quality.

These findings suggest that countries looking increasingly to innovation-based growth should try to attract foreign R&D investment. Inasmuch as multinationals have a choice among countries when it comes to locating R&D activity, this requires creation of a strong business environment, but also a strong presence in science and information and communications technology (ICT) infrastructure.

## **International Migration**

### *Migration and Remittances: The Facts*

The transition countries and Turkey have seen large movements of people since the fall of the Berlin Wall and the disintegration of the Soviet Union. If movements between industrial countries are excluded, the region accounts for over one-third of total world emigration and immigration. The flows at the beginning of the transition reflected the

return of populations to ethnic or cultural homelands, the creation of new borders and political conflict, and the unwinding of Soviet restrictions on movement. The breakup of the Soviet Union led to the Russian Federation's gaining 3.7 million persons through migration and becoming a net recipient of migration from all other countries of the CIS as well as the Baltic states. At the same time, 15 percent or more of the populations of Albania, Armenia, Georgia, Kazakhstan, and Tajikistan migrated permanently. But later flows—driven mainly by income differences—have been large as well. Looking at migrant stocks, several countries of the region are among the top ten sending and receiving countries worldwide. The Russian Federation is home to the second largest number of migrants after the United States, Ukraine is fourth after Germany, and Kazakhstan and Poland are ninth and tenth.

Patterns of migration in the region are broadly biaxial. Much of the emigration in the western part of the region—more than 40 percent—is directed to the EU15, while much emigration from the CIS countries—80 percent—remains within the CIS. Germany is the most important destination outside Eastern Europe, the CIS, and Turkey for migrants from the region, while Israel was an important destination in the first half of the 1990s. The Russian Federation and Kazakhstan are the main intra-CIS destinations. The United Kingdom is becoming a destination for EU8 migrants, who until recently were barred from legal access to many other EU15 labor markets.

Relative to GDP, remittances are significant in many countries of the region. Migrants' funds represent over 35 percent of GDP in Moldova and Tajikistan and over 15 percent in Armenia, Bosnia, and Serbia and Montenegro. Remittance flows have followed a biaxial pattern reflecting migration flows—three-quarters have originated from the European Union and 10 percent from the resource-rich CIS countries. However, remittances recorded in the balance of payments undercount transfers between migrants and their families because between one-third and two-thirds of migrants use informal channels—or methods outside of the formal financial system such as bank transfers—to transmit remittances at some point. On average, remittances have contributed more than 20 percent of the disposable income of the poorest households and have served as a cushion against the political and economic turbulence brought about by the transition.

### *Determinants of Migration*

With the initial large-scale displacements associated with the beginning of the transition out of the way, economic considerations—such as expected income differences, the expected probability of finding

employment abroad and expected quality of life at home—play an increasingly important role in decisions to migrate. But these are also tempered by the influence of cultural and social factors. The poor nature of data on migration does not allow this to be conclusively established for the transition countries. But broad support for this view is provided by the history of migration from the Southern European countries and Ireland.

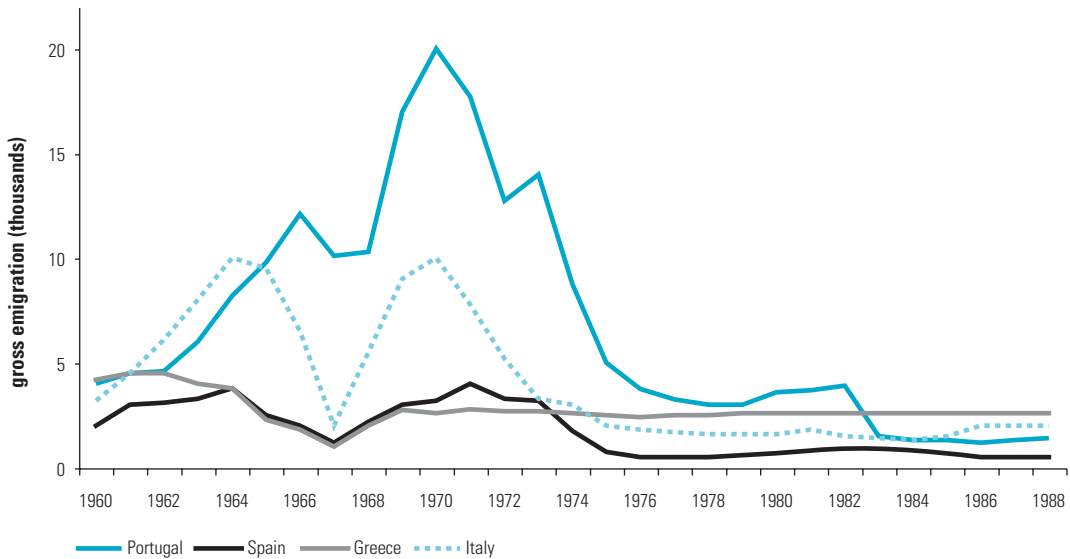
The history of migration from the Southern European countries and Ireland—which realized a shift from being net emigration to net immigration countries during the period of the 1960s through the 1980s—to the wealthier European Community members is useful for understanding and predicting patterns of migration for the transition countries. Their experience suggests the importance of expected income differentials between sending and receiving countries and expected improvements in domestic policy in sending countries in motivating migration. In Southern Europe and Ireland, for example, emigration rates initially accelerated as these countries became more integrated into the regional economy, as has occurred for many of the transition countries. However, this increase was also associated with a shift from long-term to shorter-term migration, suggesting greater interest in return migration, which, in fact, then materialized.

It is interesting to note that migration in Southern Europe evolved in a “hump” pattern, in which emigration rates accelerated as growth took off and more households could finance migration and then fell as further growth made working at home more attractive (figure 10). For example, the surge in Italian emigration to the United States at the beginning of the twentieth century was due not to an increase in poverty but to an increase in income and employment growth at the beginning of the Italian industrialization.

The surge of Spanish emigration to other European countries in the period between 1960 and 1974 was the result of a growth rate higher than in the other European countries (figure 10). The peak of Portuguese emigration in the 1970s also took place during a growth phase, and Greece’s emigration rates rose during the economic boom of the 1960s.

The prospect of EU membership may also have influenced the desire to migrate. The slowing migration from Southern Europe in the second half of the 1970s was the result of lower incentives to migrate owing in part to the large investments made by the EU in these countries before their accession. Such investments led to expectations of a higher quality of life in potentially sending countries. Membership of the EU also played a role in Italy’s turnaround from a net emigration to a net immigration country.

FIGURE 10

**Migration in Southern Europe Evolved in a “Hump” Pattern**

Source: World Bank (2006b).

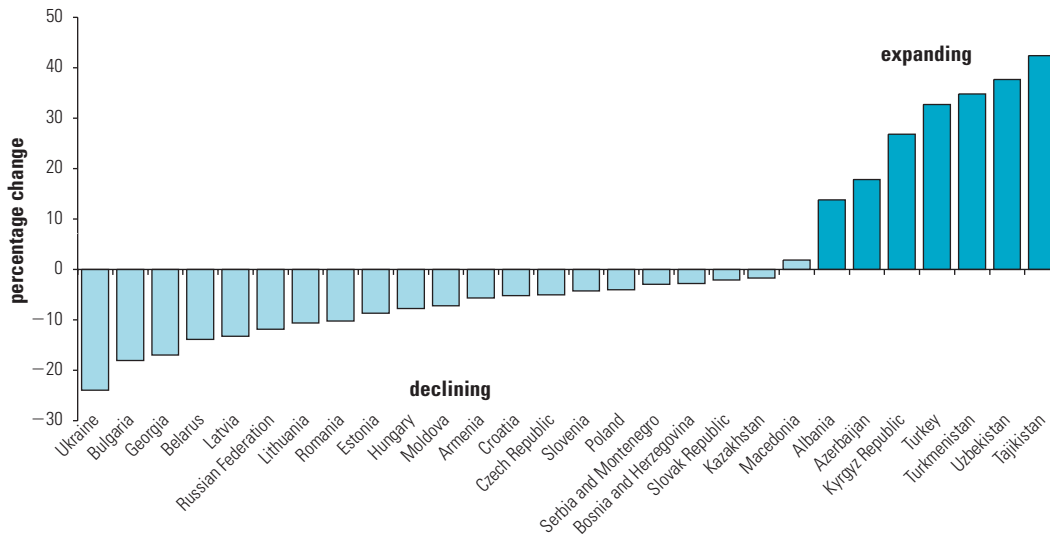
The history of Southern Europe and Ireland suggests that improved policies and institutions, together with expectations of future growth in sending countries, create incentives for migration and return migration or circular migration—the process in which migrants return home for short periods before migrating again.

### The Demographic Transition

As if twin political and economic transitions have not been challenging enough, many countries in Eastern Europe and the former Soviet Union now face a third transition. Demographic projections suggest that by 2025 the average Slovene will be 47 years old, giving the country one of the oldest populations in the world. One in five Bulgarians will be over 65. Ukraine’s population will shrink by a fifth, and the Russian Federation’s by more than a tenth (figure 11). Aging will lead to the share of the working age population (15–64 years) in total population declining rapidly after 2015—less than a decade from now—in the EU8, Southeastern Europe, and middle income CIS countries (figure 11). This is similar to the change projected for the EU15, deeper than in the United States, shallower than in Japan<sup>13</sup>. What challenges is this demographic transition likely to pose?

**FIGURE 11**  
**Populations in Many Transition Countries Are Shrinking**

Percentage Change in Population, 2000–25



Source: UN Population Prospects.

A decline in the share of the working age population could, other things being equal, slow growth.<sup>14</sup> This can be offset in broadly two ways, by accelerating innovation and promoting inclusion.

- First, make the employed more productive. There is no unambiguous evidence that aging cuts individual productivity, which depends on job skill requirements and individual capacities. What is important is reforming education systems to provide those in the labor force with the skills required by employers and offering life-long training and learning to make more effective use of an aging labor force. While the employed are more skilled than the unemployed, only 5 percent of adults in the new member states of the European Union, for example, participate in lifelong learning. And of critical importance in aging societies is encouraging broad-based productivity growth by creating a business environment that is conducive to the deep restructuring associated with innovation and knowledge absorption.
- Second, increase the share of the labor force in the working age population. This requires boosting labor force participation, which is particularly low in the EU8 and Southeastern European countries compared to the EU15 countries, across the entire age spectrum and for both men and women. Measures that can bring this about are pension reforms that raise and equalize the retirement age for

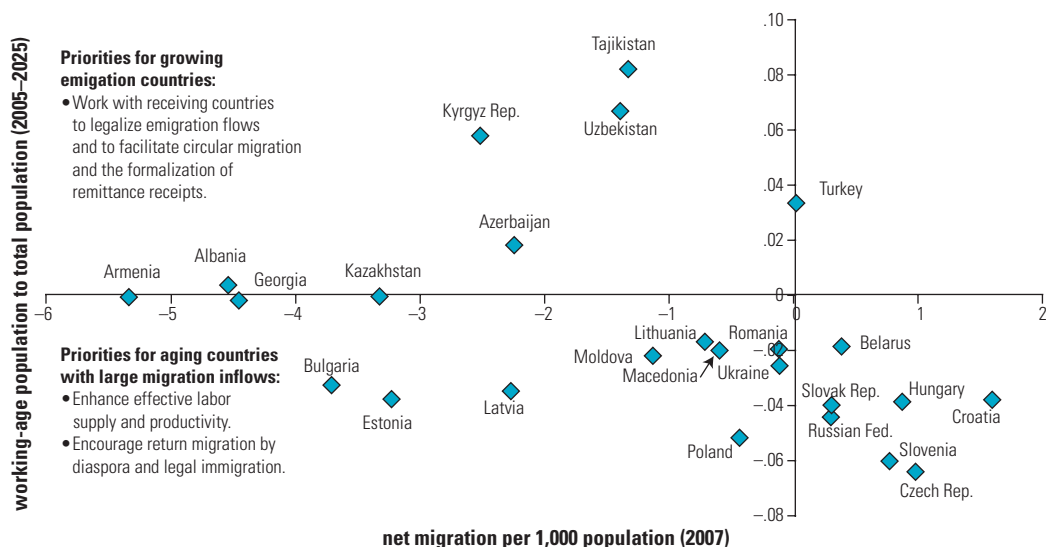
men and women and the reduction of tax wedges on labor—social security contributions plus personal income tax as a proportion of gross labor costs—where fiscal considerations allow this to be done. Upgrading the skills of those of the working age population who have withdrawn from the labor force is no less important than those in it. Excluding a large part of the working age population from employment is an expensive luxury in rapidly aging societies.

Public savings should be increased to offset any decline in household saving because of aging. How? Through pension reform that raises retirement ages for men and women and indexes pensions to price inflation rather than to wage growth. This would also raise labor force participation among older adults. By containing increases in spending on long-term care that aging would otherwise bring about through the introduction of a category of care that is part medical and part social, located between home care and primary care. And—the longest term strategy of all—by keeping elderly populations healthier. While the pace of reform has been impressive in many transition economies, aging is occurring in a weaker institutional framework than in Western Europe and Japan as they undergo a similar demographic transition. It is likely therefore to be more successful in countries where convergence toward developed market economy institutions is the most advanced.

## **Migration**

Migration is not a substitute for policies to offset the consequences of aging. But it can be part of the solution. Countries can be classified by whether the share of the working age population is projected to rise or fall till 2025 and whether they were net senders or recipients of migrants in 2007 (figure 12). Belarus, Croatia, the Czech Republic, Hungary, the Russian Federation, the Slovak Republic, and Slovenia (in the southeast quadrant) are examples of aging societies that are net receivers of migrants. By contrast, Albania, Azerbaijan, and all countries in Central Asia except Kazakhstan are projected to see a rising share of the working age population in total populations and are net senders of migrants (in the northwest quadrant). As noted, migration is increasingly driven by broadly economic considerations, such as expected income differences between the sending and recipient countries, the expected probability of finding employment abroad, and the expected quality of life at home—all tempered by social and cultural factors. As incomes per capita rise rapidly in the wealthier transition countries, it is likely that net senders among them, such as Poland and

**FIGURE 12**  
**Some Net Senders of Migrants Will Become Net Receivers**



Source: UN Population Prospects Database and national statistical authorities.

the Baltic states (in the southwest quadrant), that currently export labor to the EU15, where growth is typically slower, will become net receiving countries. This will be accelerated by labor market shortages that have emerged in some EU8 countries. Such receiving countries will wish to combine immigration from poorer sending countries with reverse migration of their own citizens from the EU15 countries. The poorer aging countries, such as Macedonia and Moldova (in the southwest quadrant), will continue to be net sending countries, though possibly at a slower rate for the foreseeable future. These developments will also affect EU15 countries that rely on migrants from Poland and the Baltic states to fill labor market shortages. Since the new member states of the EU are aging faster than the EU15, the latter will need to look farther afield to countries where populations are young and growing, such as Turkey, Central Asia, and beyond.

Countries should consider temporary circular migration with five features. It should be coordinated between sending and receiving countries. It should channel migrant labor to sectors or subsectors with little native labor. It should offer employers in receiving countries the means to hire legally the workers they need. It should ensure that employment under the new regime is temporary by designing incentives to encourage migrants to return. And it should respect the rights of migrants while abroad. Migration involves complex political, economic, and social factors, and it is for this reason that policy exper-

iments might be needed to improve the frameworks that currently regulate it.

\* \* \*

In summary, this book shows that the legacy of transition is giving way to convergence in institutions that shape firm behavior and outcomes toward those in developed market economies.

- Productivity growth is less dependent on redressing the historic misallocation of resources in the command economy and, as in industrial and developing economies, more reliant on continuing improvements within firms. This can be sustained if key aspects of the business environment converge toward those in developed market economies. This is happening in the EU8 and some of the Southeastern European countries; the CIS countries are followers, but are some way behind.
- Employment growth has reflected the interplay between (a) job growth in new private firms that were able to occupy market niches nonexistent under central planning and (b) downsizing in state-owned and privatized firms. Both factors reflect the legacy of transition and are converging toward patterns characteristic of market economies but less reliably so in the CIS. However, the evolution of employment may now be driven less by such factors and more by the availability within the labor force of skills demanded by employers, at least in the countries most advanced in the transition: the new member states of the European Union.
- Growth can reduce poverty among (a) the working poor, by raising their wages or increasing the productivity of their self-employment; (b) the unemployed poor, by raising the demand for their labor; and (c) the inactive poor, by making possible more generous public transfers. Continued productivity growth within a reforming business environment and rising public transfers fed by rising fiscal revenue—the pattern set since 1998—can reduce income poverty even if employment prospects and labor force participation do not improve. But those excluded from employment report being more dissatisfied with their lives, so building inclusive societies by addressing the constraints to job creation, such as unavailability of the requisite skills among the unemployed in the new member states of the European Union, should be a priority.
- Domestic and external factors worked in harmony as the EU8 and parts of Southeastern Europe used the anchor of prospective EU accession to lock in the reforms of policies and institutions neces-

sary for rapid productivity growth and deeper integration into the world economy. However, the extent to which countries without such prospects can use outside mechanisms to enhance the credibility of a reforming government and lock in the necessary institutions remains to be seen.

- Finally, the challenge posed to economic growth by aging populations in a large swath of transition countries is serious and systemic. Offsetting it will require renewed emphasis on both innovation and inclusion, supplemented by international labor migration—itself a facet of integration. It will be more successful in countries where convergence in institutions is the most advanced. It cannot be taken for granted.

## Endnotes

1. Eastern Europe includes Albania, Bosnia, Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Macedonia, Montenegro, Poland, Romania, Serbia, the Slovak Republic, and Slovenia.

The Commonwealth of Independent States (CIS) includes Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, the Kyrgyz Republic, Moldova, the Russian Federation, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan.

2. The absolute poverty line is \$2.15 a day in 2000 purchasing power parities.
3. This statement is based on the proposition that growth in GDP per capita can be decomposed into (1) growth in GDP per employed person, or aggregate labor productivity, (2) growth in employment as a share of the working age population, or the employment rate, and (3) growth of the working age population in the total population. The relationship used is

$$\frac{GDP}{POP} = \left( \frac{GDP}{EMP} \right) \times \left( \frac{EMP}{WorkingAgePOP} \right) \times \left( \frac{WorkingAgePOP}{POP} \right),$$

where POP is the total population, EMP is the employed population, and Working Age POP is the working age population

4. The book distils the themes analyzed in recent flagship studies published by the Europe and Central Asia Region of the World Bank: World Bank (2005a), World Bank (2005b), World Bank (2005c), World Bank (2006b), World Bank (2007a), and World Bank (2008a).
5. Countries are classified into four groups: the EU8 (Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovak Republic, and Slovenia), Southeastern Europe (Albania, Bosnia, Bulgaria, Croatia, Macedonia, Romania, and Serbia and Montenegro), the middle income CIS (Belarus, Kazakhstan, the Russian Federation, and Ukraine), and the low-income CIS (Armenia, Azerbaijan, Georgia, Kyrgyzstan, Moldova, Tajikistan, and Uzbekistan) See box 1.1.
6. A contribution to productivity growth in this accounting also comes from reallocation that increases the share of employment in firms where

productivity is growing faster and reduces it in firms where productivity growth is slower (the cross effect). See Chapter 2.

7. World Bank (2008a).
8. World Bank (2008a).
9. The middle income and low income CIS country groups are combined for brevity. This does not affect the argument presented in the text in substance.
10. Labor market profiles of the poor are defined by employment status of the household head. See table 5.1.
11. Labor market profiles of the poor are defined by employment status of the household head. See table 5.1
12. World Bank (2008a).
13. The EU15 comprises Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Sweden, Spain, and the United Kingdom.
14. This is because growth in the share of the working age population in the total population contributes to growth in GDP per capita, provided aggregate labor productivity and the employment rate do not change. See note 3.