

Main Labor Market Developments during the Transition

Economic transition is associated with profound changes in the labor market. Labor resources are allocated by forces of demand and supply rather than by the decisions of the central planners. This fundamental institutional change, along with other transition shocks, spurs widespread employment and wage adjustments. Unemployment emerges and the wage structure changes. The nature of jobs changes, too. This chapter documents and discusses these changes. It shows that Eastern Europe and the Former Soviet Union (the Region) is an economically diverse region, and therefore its subgroup labor markets are also diverse.¹ The chapter looks at the labor market adjustment during the transition—the dynamics of employment and unemployment and the changes in the wage level and structure. Then it shows the changing nature of jobs in the wake of the transition. Next the chapter compares initial expectations with actual labor market outcomes. It concludes by summarizing key stylized facts on labor market transition in the Region.

An Economically Diverse Region with Differing Labor Markets

By its very nature, the transition—from a centrally planned to a market economy—that started in the Region in the early 1990s implied

changes in the basic institutions of the economy. It decentralized economic decision-making processes, liberalized price and wage setting, and exposed enterprises to competition. Profitability and competitiveness increasingly became the major criteria of firm survival and growth. These major changes in the rules of the game, along with disintegration of traditional economic links, resulted in a substantial fall in output. This in turn led to a fall in labor demand, which forced firms to reduce employment or wages or, in practice, some combination of the two. Unprofitable firms went out of business or were transformed through restructuring and changes in governance and ownership. At the same time, new private firms began to enter the market. This process occurred in virtually all transition economies, although at varying speeds in different countries. Some countries, mainly in Central and Eastern Europe (CEE), implemented key market-oriented reforms early in the transition and were determined to continue economic restructuring, while others, mainly in Southeastern Europe (SEE) and the Commonwealth of Independent States (CIS), adopted a more gradual and less decisive approach.

Economies of the Region vary vastly in their levels of economic development, which influences the functioning of the labor market (see box 2.1). At one end of the spectrum are countries that are now members of the European Union; at the other end are the low-income countries of Central Asia. The first group is characterized by developed market institutions, more-advanced economic structures, and, correspondingly, relatively high levels of labor productivity. By contrast, the transition economies of Central Asia are much closer to those in low-income developing countries in their economic infrastructures. Their market-based institutions are relatively less developed or not effective on the ground, economic structures are dominated by agriculture, and their labor productivity tends to be low. Other economies of the Region, such as those of Southeast Europe, Russia, and Ukraine, fall somewhere between these two polar cases.

The differences in the levels of economic development across the Region are associated with significant differences in the key features of labor markets. The largely urban, services-oriented, and formal labor markets of EU transition economies perform differently from the mainly rural, agricultural, and informal labor markets of Central Asia. For example, the predominantly rural and informal labor markets in Tajikistan or Uzbekistan are very much different from the mostly urban and formal labor markets of the Czech Republic or Hungary. Similarly, the labor markets in Belarus or Ukraine, where market-oriented reforms are less advanced, differ from the labor markets

in the Baltic States, which have a well-functioning market economy and are members of the European Union.

Labor market adjustments to the transition shock have been different in the transition economies of Europe and those of Central Asia. In Central and Eastern Europe, the high pace of enterprise restructuring and other structural reforms has led to an initial strong fall in employment and far-reaching reallocation of labor away from declining industries toward expanding ones, mainly in the services sector. In contrast, in Central Asia, the pace of enterprise restructuring has been slower. The drop in output associated with the transition was accommodated mainly by a fall in real wages. Many workers who were released from the oversized manufacturing sector moved back to subsistence agriculture. And the lack of job opportunities in the formal sector has led to the fast growth of the informal labor market and self-employment as a coping strategy.²

In European transition economies, the main problem is unemployment, which to a large extent results from the fast pace of enterprise restructuring. In CIS economies, the main problem is underemployment (hidden unemployment) and low productivity (for example, in subsistence agriculture). The low open unemployment in Central Asia reflects both the predominantly agricultural and informal nature of their economies—agriculture and informal sectors act as employers of last resort—and the slow pace of enterprise restructuring (for example, overstaffing is still prevalent in many enterprises).

The key differences between labor markets in the middle-income European transition economies and those in the low-income CIS economies are summarized in table 2.1. These differences must be borne in mind while reviewing labor market development in the rest of this report.

Unemployment and Underemployment: Major Economic and Social Problems

The transition shock caused a substantial fall in the number of formal sector jobs in all transition economies of the Region, although it was more marked in CEE and SEE than in the CIS economies. This in turn has led to considerable underutilization of labor. Underutilization of labor manifests itself in different forms, depending on policies toward the “old” enterprise sector and the prevailing mode of enterprise adjustment. Aggressive enterprise restructuring, encouraged by imposition of the market discipline that prevailed in

BOX 2.1

Do Geopolitical Groupings Help in Assessing the Economic Performance of the Transition Countries?

Eastern Europe and the Former Soviet Union is a large and economically diversified region. It encompasses subgroups of countries that differ in their level of economic development, institutions, industrial structure, and progress in market-oriented reforms. These differences, in turn, influence the characteristics and evolution of their labor markets.

The profound heterogeneity in the economic and structural characteristics of the countries of the Region makes it very difficult to analyze them as a group. One way to group the transition countries is to apply a traditional geopolitical grouping: Central and East European countries, which comprise two groups: CEE EU (EU members) and CEE EUA (EU-accession countries); Southeastern European countries (SEE); and CIS, which comprises middle income CIS countries (Belarus, Kazakhstan, Russia, and Ukraine) and low income CIS countries (Armenia, Azerbaijan, Georgia, the Kyrgyz Republic, Moldova, Tajikistan, and Uzbekistan).³

This geopolitical grouping also has a close bearing in the levels of economic development, institutional arrangements, and economic structure. For example, a close correspondence exists between the geopolitical location and differences in the level of economic development, as measured by GDP per capita (table A). All CEE EU-member countries belong to the group of the richest countries of the Region. And all low income CIS countries belong to the group of the poorest countries of the Region. Thus, the geopolitical location is a good indicator of the level of economic development.

Table A. Geopolitical Location and Level of Economic Development Closely Related

| Geopolitical groups | Income groups: GDP per capita a), 2002 | | | Mean value \$ |
|---------------------|--|--------|----------------|---------------|
| | top tercile | middle | bottom tercile | |
| CEE EU | 8 | | | 12,984 |
| CEE EUA | 1 | 2 | | 8,032 |
| SEE | | 3 | 1 | 5,685 |
| Middle income CIS | | 3 | 1 | 6,122 |
| Low income CIS | | | 7 | 2,428 |

Source: World Development Indicators World Bank database; Bank staff calculations.

Note: Numbers stand for the number of countries within the cell.

a) GDP at PPP (current international \$)

Similarly, there is a strong overlap between the geopolitical location and the quality of institutions and governance. For example, government effectiveness varies significantly between geopolitical groups, but variation within groups is relatively small (table B).

Table B. Geopolitical Groups and Government Effectiveness

| Geopolitical groups | Government Effectiveness Index, 2002 | | | mean value |
|---------------------|--------------------------------------|--------|----------------|------------|
| | top tercile | middle | bottom tercile | |
| CEE EU | 8 | | | 0.67 |
| CEE EUA | 1 | 2 | | -0.07 |
| SEE | | 3 | 1 | -0.62 |
| Middle income CIS | | 1 | 3 | -0.74 |
| Low income CIS | | 2 | 5 | -0.85 |

Source: Kaufmann, Kraay, and Zoido-Lobaton 2004; Bank staff calculations.

Note: Numbers stand for the number of countries within the cell.

Finally, geopolitical location allows one to predict fairly well the progress of economic transition. Roughly speaking, the closer a country group is to Brussels, the more advanced it is in implementing market reforms (table C). Economic transition is most advanced in CEE countries and least advanced in middle and low income CIS countries, while SEE countries occupy the middle position.

Table C. Geopolitical Groups and Economic Transition

| Geopolitical groups | EBRD index of the progress of the transition, 2001 | | | mean value |
|---------------------|--|--------|----------------|------------|
| | top tercile | middle | bottom tercile | |
| CEE EU | 8 | | | 3.45 |
| CEE EUA | 1 | 2 | | 3.03 |
| SEE | | 2 | 2 | 2.61 |
| Middle income CIS | | 2 | 2 | 2.36 |
| Low income CIS | | 3 | 4 | 2.53 |

Source: EBRD Transition Report (2004); Bank staff calculations.

Note: Numbers denote the number of countries within the cell.

Naturally, there are cases when the use of the geopolitical taxonomy results in a misclassification of some countries from the economic perspective. For example, Bulgaria and Romania, which are EU-accession countries and thus fall into the CEE group, are closer to the SEE group in economic development. In turn, Croatia, which until 2004 was not officially an EU-accession country, in economic indicators is closer to EU transition economies than to EU-accession countries, let alone SEE countries. Finally, the borderline between middle and low income CIS countries is blurred in some cases.

In sum, the Region's economic diversity is well captured by the traditional geopolitical country grouping. This grouping fairly well reflects differences in the levels of economic development, institutional arrangements, and governance and in the progress of market-oriented reforms.

TABLE 2.1

Differences between Middle-Income European and Low-Income CIS Labor Markets

| Labor market characteristics | Middle-income European transition economies | Low-income CIS transition economies |
|--|---|--|
| Main labor market issue | <i>Unemployment</i> | <i>Underemployment</i> |
| Adjustment to transition shock | <i>Quantity (employment); labor moving to expanding services sector</i> | <i>Price (wages); labor shifting back to subsistence agriculture</i> |
| Investment climate | <i>Generally favorable</i> | <i>Less favorable</i> |
| Market oriented reforms and enterprise restructuring | <i>Advanced</i> | <i>Less advanced</i> |
| Employment protection legislation | <i>Relatively liberal</i> | <i>Strict</i> |
| Enforcement of labor market regulations | <i>Relatively strong</i> | <i>Weak</i> |
| Unemployment insurance system | <i>Developed</i> | <i>Largely ineffective</i> |
| Economic structure | <i>Dominance of services and industry</i> | <i>Dominance of agriculture</i> |
| Informal sector | <i>Marginal, driven by tax evasion and avoidance of regulations</i> | <i>Large, driven by lack of job opportunities in the formal sector</i> |
| Labor force location | <i>Largely urban</i> | <i>Largely rural</i> |
| Labor force skills | <i>High</i> | <i>Mostly low</i> |
| Productivity (wages) | <i>High</i> | <i>Low</i> |
| Earnings inequality | <i>Modest</i> | <i>High</i> |

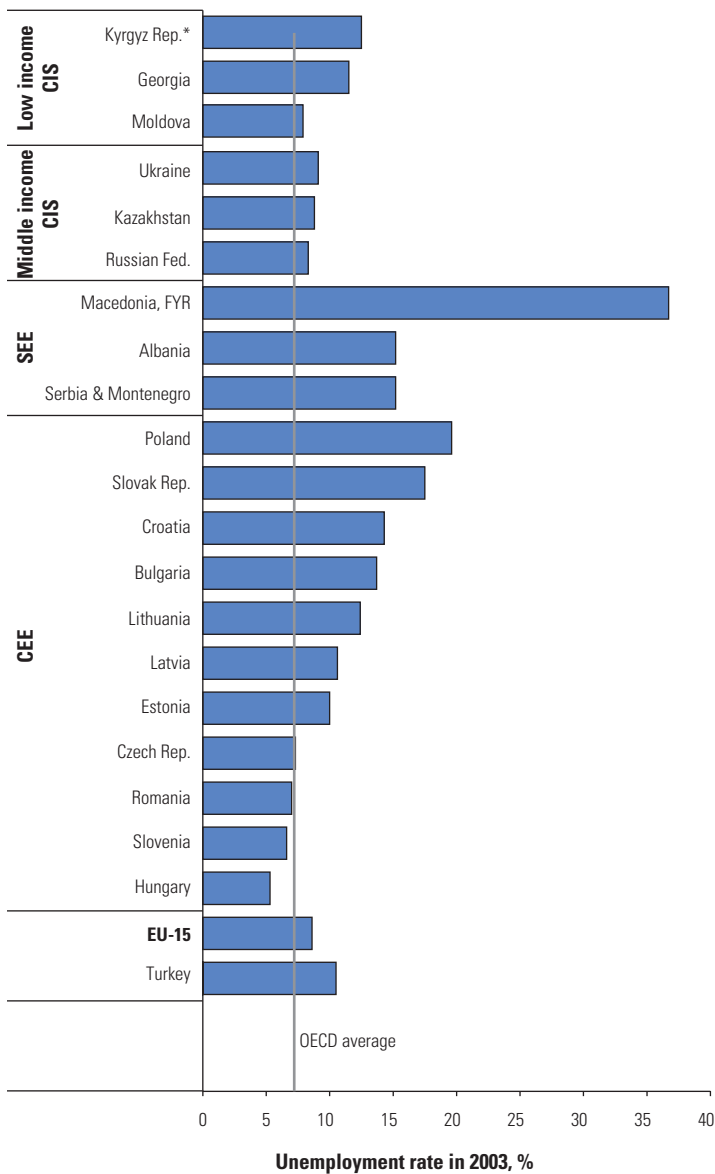
Source: Bank staff analysis.

most CEE countries, led to high open unemployment. In contrast, the policy of protection through soft budget constraint, common in most CIS countries, led largely to underemployment (hidden unemployment) and associated low productivity (World Bank 2000).

Unemployment emerged at an early stage of the transition and rose sharply along with the restructuring process.⁴ Currently it remains high in most transition economies of CEE and SEE, significantly above the level characteristic of mature market economies (figure 2.1). But unemployment is also high in Turkey, which is a nontransition economy at a level of economic development similar to that in many countries in the Region.⁵ Albeit affected by major macro and structural changes over the past two decades and still afflicted by low participation, the country has not gone through the systemic changes of the transition economies (see box 2.2).

Unemployment rates in CEE countries are currently well above 10 percent, except in the Czech Republic, Hungary, Romania, and Slovenia. In SEE countries, unemployment rates are between 10 and 22 percent, except for FYR Macedonia (30 percent). Among the CIS group, Armenia, Georgia, Moldova, Russia, and Ukraine have unemployment rates above 6 percent. The other CIS countries are characterized by low *registered* unemployment rates, generally below 4 percent, and with little fluctuation over time. These latter rates, however, should be interpreted with caution because they refer to admin-

FIGURE 2.1

Unemployment Is High in Most CEE and SEE Countries, 2003

Sources: Labor Force Surveys (ILO, and OECD); * 2002 from Labour Market in the CIS countries, Statistical Abstract. Interstate Statistical Committee of the CIS, Moscow 2004.

istrative data that are highly influenced by the availability and generosity of social-benefit provisions.⁶

Low open unemployment in most CIS countries as a rule masks significant labor market problems. It is associated with artificially sustained, low-productivity employment in unprofitable firms, as well as

BOX 2.2

The Challenge of Job Creation in Turkey

Turkey has suffered from poor labor market conditions since structural reforms were introduced in the 1980s. During 1980–2003, employment growth averaged just 0.8 percent, compared with 2.6 percent growth of the working-age population, and the labor force participation rate fell to 48 percent, the lowest in the OECD. Female labor force participation has been exceptionally weak, standing at less than 20 percent in urban areas. Currently, the working-age population is growing at more than 2 percent per year, and by 2020 more than 21 million new workers will have reached working age. Accommodating the needs of these new and existing workers represents a critical challenge for Turkey over the coming decades.

Turkey's labor market outcomes reflect the interaction of demographic and economic factors. Like most other developing countries, Turkey is experiencing a rapid demographic transition that has generated a surge of new entrants to the labor market. Although these demographic forces have the potential to promote economic growth, absorbing them in the labor market requires sustained firm dynamism and job creation. Inadequate human and physical capital investment have so far prevented rapid expansion and job creation. Meanwhile, the demographic trends have been accompanied by a transformation of a fundamentally rural-agrarian society into an urban-industrial one. Cultural and institutional factors and an evolving occupational structure have led to changing roles, particularly for women, and have affected household preferences and labor force participation decisions.

In the economic sphere in the early 1980s, Turkey abruptly abandoned a long-standing and inward-looking statist policy framework and began a transition toward a more outward-looking,

widespread informal sector and agricultural employment to earn subsistence income. Productive job opportunities are few, and underemployment is common. See box 2.3 on Moldova and World Bank (2003a) on Russia.

In recent years, unemployment has fallen in a few countries, most notably in the Baltic States. But in many other countries, such as Poland and the Slovak Republic, high unemployment rates persist despite resumed economic growth. And in other countries, mainly in those where reforms have been slow and delayed, such as Romania (until recently) and Serbia and Montenegro, unemployment continues to rise.

Long-Term Unemployment

The most worrisome and socially costly feature of unemployment in transition economies, particularly visible in CEE and SEE, is its long

free-market development model. The change quickly turned the economy around from a prolonged crisis in the late 1970s and produced spectacular results in trade performance. But subsequently long-standing policy failures were perpetuated in the new environment, contributing to inflation, macroeconomic instability, and weak investment. At the same time, integration into the global economy, though otherwise beneficial, increased vulnerability to external events, including two regional wars, economic disruptions in trading partners, and financial contagion.

The solution to the problem of generating employment is growth. In the medium term, the outlook is reasonably favorable. The external environment is promising, with growth and import demand picking up in European and the Region's trading partners. Turkey rebounded quickly from the 2001 crisis, and the confidence of international investors has been restored, at least for now. The government is implementing an IMF program, and early negotiations on EU admission seem likely, which should bolster reforms and raise Turkey's attractiveness as a destination for foreign direct investment (FDI). Nevertheless, medium-term growth will do little more than keep the labor market in a holding pattern. Making serious inroads into unemployment and low labor force participation will require a substantial improvement in macroeconomic performance.

In the longer term, Turkey is well situated in location and factor endowments. Some of the stress of absorbing large numbers of new labor market entrants will be alleviated as the working-age population gets older and its rate of growth slows. A recent overhaul of the educational system aimed at increasing human capital investment promises to increase competitiveness vis-à-vis international rivals. However, increasing the quantity and quality of investment is crucial to exploiting future opportunities and realizing Turkey's potential. Policies to improve the business climate and achieve macroeconomic stability must be top priorities.

Source: Keyfitz 2004.

BOX 2.3

Employment in Moldova

Moldova is an example of a country with relatively high employment and low unemployment rates, but where a large proportion of jobs is of low productivity and thus probably unsustainable. As much as 20 percent of privatized firms reported overstaffing in 2001. Moreover, 1 of every 10 workers was on a forced unpaid leave, and the average duration of such leave was three months. Many Moldovan firms close for a part of the year. Because of the low level of activity in poorly performing firms, the actual hours of work are very low. An average worker in Moldova works only 28 hours per week, while his or her Polish counterpart works 42 hours. Similar problems, although to a lesser degree, occur in Russia (World Bank, 2003f).

Source: World Bank 2004a.

duration. Once unemployed, workers find it difficult to find a new job. Consequently, a large fraction of the unemployed in the Region's transition economies are long-term unemployed (that is, jobless for more than a year). In CEE, 40 to 50 percent of the unemployed have been without a job for more than one year, and this proportion is higher than 60 percent in Bulgaria and the Slovak Republic. These figures are high by OECD standards and similar to those observed in Southern European countries with a stagnant unemployment pool. Available data also point to a high persistence of unemployment in SEE. For example, more than 80 percent of the unemployed in FYR Macedonia have been without a job for more than one year.

The crux of the unemployment problem in European transition economies is thus the low chances of finding new employment, rather than high inflow into unemployment. Russia and Turkey provide an interesting contrast of more dynamic unemployment pools. Russian and Turkish workers tend to leave unemployment sooner, and therefore the incidence of long-term unemployment is much lower (about 30 percent).

Labor Force Withdrawal

The increase in unemployment has been one symptom of the fall in labor demand during the transition. Another closely related symptom is the often large fall in labor force participation. Many workers become discouraged by the lack of job opportunities and give up the job search, ceasing to be part of the labor force. In 2002, the economically active population accounted for around 60 percent of the working-age population in Hungary and FYR Macedonia and for more than 70 percent in Belarus, the Czech Republic, Estonia, Lithuania, and the Slovak Republic. In this context, Bosnia and Herzegovina, Moldova, and Turkey are clear outliers, with official participation rates below 55 percent (in the first two cases, down from more than 60 percent in the mid-1990s).

From an economic viewpoint, the effects of labor force withdrawal are similar to those of unemployment: both reduce the amount of available labor and, as such, translate into lower output and diminish growth prospects. For instance, in the early 2000s, the unemployment rate in Poland was much higher than in Hungary. However, so was the labor force participation rate. As a result, both countries had similar employment rates, which is the most relevant measure of the utilization of labor resources.⁷

Some decline in labor force participation was probably to be expected during transition. Participation rates were particularly high during the

central-planning period, when work was not only a right but also a duty for all people of working age. The withdrawal of older workers from the labor market—often taking advantage of early retirement schemes—imposed significant costs on fragile budgets, but was probably inevitable, given the difficulty of reemploying the workers. In contrast, the withdrawal of women and youth is reducing the growth potential of transition economies and contributing to widening income disparities.⁸

Greater International Migration Flows

Cross-border migration has increased in the Region during the transition. Although in some countries migration was linked to conflicts and ethnic reasons in the early years of the transition, migration has increasingly been driven by economic reasons in most recent years. Pressures from a growing working-age population and the lack of employment opportunities have led nationals from the low income CIS countries toward richer countries of the Region, especially Russia, which have themselves become both significant receiving and sending countries. Many nationals of these countries migrate to Western Europe because of increased economic payoffs to migration. In particular, temporary migration (that is, either seasonal or moving back and forth) is sizable (box 2.4).

Falling Employment Rates and Persistent Unemployment

The level of unemployment depends on the probability of becoming unemployed and on the expected duration of the unemployment period. The latter in turn depends on the probability of escaping unemployment by finding a job. Therefore, the level and duration structure of unemployment vary depending on the relationship between the inflow rate and the expected duration of unemployment.

In a *dynamic labor market*, the risk of losing a job may be high, but so are the chances of finding a new one. Therefore, the expected duration of unemployment will be short, which will result in a “moderate” unemployment rate (or a low unemployment rate if inflows into unemployment are low). An opposite example is that of a *stagnant labor market*. In such a market, the risk of losing a job may be low, but so are the prospects of finding a new one. The expected duration of unemployment periods will be long, and the level of unemployment will be elevated, despite low inflows into joblessness. If inflows into joblessness increase (for example, because of economic downturn, restructuring, or demographical pressures), unemployment will reach a high level.

BOX 2.4**International Migration Patterns in the Region****The Changing Nature of Migration**

In the first half of the 1990s, international migration in the Region was a direct consequence of the breakup of the communist system in Eastern Europe and the Soviet Union. Because of the creation of new countries in the former Soviet Union, the former Yugoslavia, and the former Czechoslovakia, millions of people became de facto migrants (that is, foreign born): for example, within the Soviet Union, 43 million individuals were living outside their homeland. Moreover, the end of restrictions to movement led to the resumption of pre-Iron Curtain era migration (for example Jewish emigration to Israel or ethnic German migration to Germany). In addition, civil wars and conflicts in the area led to further ethnic migration.

From the mid-1990s, international migration became increasingly economically driven as individuals weigh the expected costs and benefits of moving to another country to improve their quality of life. Overall, two main directions of flows have emerged: migration from Eastern Europe to Western Europe (especially to Germany and Austria) and migration from low income CIS countries to resource-rich CIS countries (especially to Russia, but also transiting through Azerbaijan and Kazakhstan).

The movements from new EU members to old EU members are expected to be limited and temporary. The experience of Southern European countries joining the EU with much lower income levels than the then members is illustrative. After an initial increase in migration when joining, and as economic and social development occurs, through (for example) foreign direct investments spurred by membership, emigration starts declining to be progressively replaced by temporary or circular (seasonal) migration. All new EU members are currently both significant sending and receiving countries, and a few (the Czech Republic, Hungary, the Slovak Republic, and Slovenia) have already become net immigration countries.

The movements from low income CIS countries and among CIS countries have to be viewed in the context of a history of movements within the Former Soviet Union (FSU), making northern FSU countries attractive destinations for those in southern FSU countries. Young and growing populations in the poorly developed Central Asian countries are likely to move north to FSU countries, which are seeing aging and decreasing working-age populations. Belarus and Russia have already become net immigration countries. Lack of progress of reforms, poor governance, and low quality of public services in some CIS countries are strong incentives for out migration.

A typical example of a flexible, dynamic labor market is that of the United States. There, 66 percent of the unemployed find a job within a year (Boeri and Terrell 2002). The median duration of unemployment fluctuates around 10 weeks, and correspondingly the incidence

Again, as the differentials in governance decrease across countries, migration flows are expected to become multidirectional rather than directed at a few receiving countries, and return migration will become more attractive.

Recent Evolution

Accurate data on migration are notoriously difficult to obtain, but some tentative observations can be made from available data. Consistent with the changing nature of migration just described, countries that had above-average migration flows in the early phase of transition saw these subsequently decrease. Net emigration in absolute terms was largest in Lithuania and Poland. Relative to population size, net emigration was largest in Estonia. Hungary reported, both in absolute and in relative terms, the largest net gain from migration, followed by the Czech Republic. Although the number of Central Asian nationals living permanently in Russia has increased moderately, there is evidence that temporary migration has increased significantly.

International Migration and Labor Markets

The receiving country may be affected in two main ways: flows of new migrants may have an impact on wages and employment of prior residents, and immigration may have fiscal implications. The current literature on immigration in the United States, Europe, and Australia suggests only small effects on labor market outcomes of native populations. The fiscal contribution of migrants is found to depend on the composition of immigration, highly skilled migrants contributing the most to the fiscal balance.

For the sending country, on the one hand, migration may relieve tensions on the labor market (for example, in resource-poor countries that have growing working-age populations, such as Central Asian countries). On the other hand, the emigration of disproportionately young and better-educated individuals may be an issue because growth may be further depressed by poor labor supply.

There is evidence that *circular or return migration* may be welcomed by both sending and receiving countries. Receiving countries may prefer temporary migration that responds to specific labor demand and may be reduced in economic downturns. Sending countries may benefit from greater remittances, as migrants keep stronger ties to their home country with a view to coming back, and from better-skilled returning migrants (although this is not always the case). For example, there is evidence that Albanians who have been abroad earn more than those who never went, while the stayers would have earned even more abroad than those who left.

Sources: World Bank forthcoming; Lucas 2005.

of long-term unemployment is very low: in 2002, the number of unemployed with a period longer than one year accounted for 8.5 percent of total unemployment in the United States, and usually the percentage is even lower (OECD 2003). Labor markets in CEE are in

sharp contrast to the U.S. example. As can be expected, flows from employment to unemployment tended to be higher, as transition economies underwent rapid restructuring, which by its very nature is associated with a high rate of job destruction. However, the main difference lies not in the inflow rate, but in the outflow rate, which was much lower in CEE than in the United States. The chance that a worker finds a job within a year after entering unemployment is substantially higher in the United States than in virtually all transition economies. Roughly speaking, the probability that an unemployed person finds a job in transition economies is half that in the United States. Thus, all else being equal, if the outflow rate from unemployment to jobs in Poland, say, were the same as in the United States, then the Polish unemployment rate would be about one-fourth lower (15 percent instead of 20 percent).⁹

Some examples of the differences in flows into and out of unemployment are shown in table 2.2.

Data in table 2.2 suggest that high unemployment in transition economies was initially the product of relatively high inflows into unemployment and limited outflows to jobs. Most of the economies were thus in the high unemployment/depressed (stagnant) labor market state. As the restructuring process slowed with the progress of the transition, the initially high inflow rates gradually declined, although

TABLE 2.2

Flows into and out of Unemployment

As a proportion of the origin stock

| Country | Year | Employment to Unemployment | Employment to Out of the Labor Force | Unemployment to Employment | Unemployment to Out of the Labor Force | Out of the Labor Force to Employment | Out of the Labor Force to Unemployment |
|---|-----------|----------------------------|--------------------------------------|----------------------------|--|--------------------------------------|--|
| <i>Central and Eastern European Countries</i> | | | | | | | |
| Bulgaria | 1994–1995 | 0.059 | 0.092 | 0.323 | 0.244 | 0.092 | 0.044 |
| Czech Republic | 1994–1995 | 0.013 | 0.028 | 0.496 | 0.129 | 0.042 | 0.012 |
| Czech Republic | 1996–1997 | 0.08 | 0.025 | 0.457 | 0.101 | 0.04 | 0.008 |
| Czech Republic | 1998–1999 | 0.018 | 0.025 | 0.335 | 0.09 | 0.036 | 0.017 |
| Poland | 1992–1993 | 0.04 | 0.076 | 0.361 | 0.158 | 0.095 | 0.045 |
| Poland | 1993–1994 | 0.04 | 0.063 | 0.354 | 0.159 | 0.074 | 0.043 |
| Slovak Republic | 1994–1995 | 0.023 | 0.045 | 0.237 | 0.078 | 0.018 | 0.017 |
| <i>Former Soviet Union</i> | | | | | | | |
| Estonia | 1992 | 0.048 | 0.097 | 0.465 | 0.093 | 0.143 | 0.036 |
| Estonia | 1997 | 0.047 | 0.04 | 0.372 | 0.064 | 0.074 | 0.038 |
| Russian Federation | 1992–1993 | 0.032 | 0.058 | 0.52 | 0.157 | 0.087 | 0.014 |
| Russian Federation | 1995–1996 | 0.056 | 0.062 | 0.395 | 0.145 | 0.076 | 0.034 |
| <i>Memorandum</i> | | | | | | | |
| United States | 1992–1993 | 0.028 | 0.053 | 0.659 | 0.288 | 0.043 | 0.161 |

Source: Boeri and Terrell 2002.

they still remain higher than in the United States. This entailed a movement toward the moderate unemployment/stagnant labor market state because the job-finding chances hardly improved and thus the duration of unemployment remained high. Currently, unemployment is a rather stagnant pool: few workers enter unemployment, but also few are able to exit it. However, recent examples of a substantial fall in unemployment in some CEE countries (for example, Lithuania) suggest that these successful countries might have begun a movement toward a moderate unemployment/dynamic labor market. It is obviously an open question whether the movement will continue toward the low unemployment/dynamic labor market state.

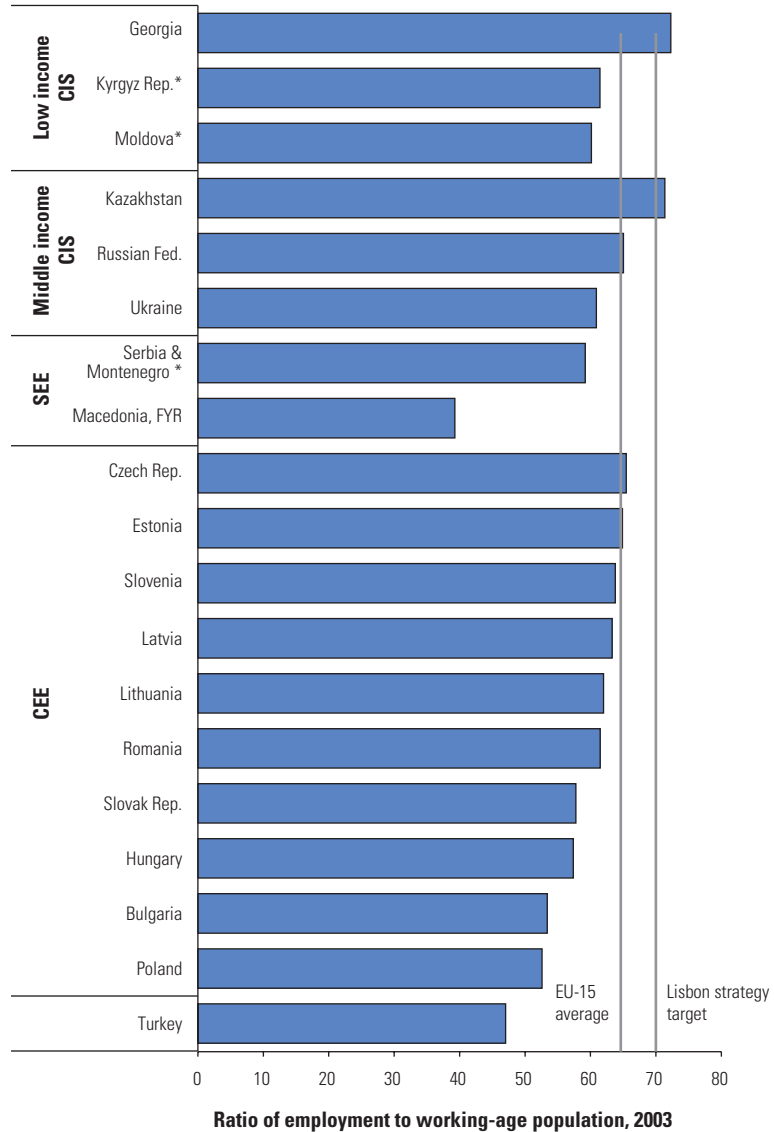
Employment Rates below EU Average

Because of rising unemployment and falling participation, employment rates (employment as a percentage of working-age population) declined sharply in most transition economies. Roughly 15 percent of the population of working age who would have been employed under the old regime has become nonemployed (that is, unemployed or out of the labor force). In virtually all of the Region's countries, the employment rate is presently below the EU average of 65 percent and way below the Lisbon target of 70 percent for 2010 (figure 2.2). For CEE countries, meeting this target would require a major effort of job creation in the years to come.

Employment rates remain relatively high in some low income CIS countries. But rather than a sign of good labor market outcomes, these high employment rates are often a symptom of a slow pace of restructuring and the permanence of many low-productivity jobs. These include informal sector jobs, subsistence farming, and nonviable jobs in the formal sector characterized also by a high prevalence of wage arrears, forced unpaid leave, and short working hours. These jobs can exist only as long as enterprises are not subject to competition and receive direct or indirect subsidies (for example, tax arrears, nonpayment of utility bills) (see box 2.5).¹⁰ The high employment rates in these countries therefore partly reflect low value added and poorly paid work.

In some transition economies of both CEE and the CIS, there are signs of incipient employment growth. Since the early 2000s, the employment rate has increased in the Baltic States, Hungary, and Slovenia in CEE, and in Armenia, Georgia, Russia, and Ukraine in the CIS.¹¹ However, whether this growth is sustainable and represents a turnaround point remains to be seen. In some of these countries, especially in the CIS, major restructuring effort still lies ahead, which may imply an acceleration of job destruction.

FIGURE 2.2
Employment-to-Population Ratio Is Low in Most of the Region's Countries



Source: Labor force surveys (ILO).

Note: * signifies 2002.

Male Employment Rates Affected More

As is common in most industrial economies, male employment rates are higher than female employment rates in all transition economies of the Region. This results from the difference in the labor force participation rates, which are lower for women, rather than from the difference in the

unemployment rates, which tend to be similar for men and women in the Region. This is not surprising because the female labor force participation rates are lower than those of men in virtually all societies, and the transition countries are no exception to this regularity.

If anything, the gap between male and female labor force participation rates is smaller in the Region than in the OECD countries. In nearly two-thirds of the Region's transition economies, women's activity rates increased relative to men's. In effect, there has been a general increase in the share of women in the labor force over the past decade in the Region (Paci 2002). Thus, by international standards, male rather than female labor resources are underutilized in the Region's transition economies. To illustrate this point for the CEE countries, there is a 6-percentage-point gap in the male labor force participation rates between the EU-15 and CEE. This gap is even bigger in the male employment rate: 64 percent in the CEE compared with 73 percent in EU-15. In contrast, no such gap between CEE and EU-15 exists for the female employment rate.

How can these particularly low male employment rates be explained? One possible explanation is that the restructuring process has been biased against manual, less-skilled labor, which has put men at a disadvantage. The industries that have been declining, especially heavy industry, were employing predominantly male labor. In contrast, the expanding service sector relies to a much greater extent on female labor. Moreover, the restructuring is associated with the increase in the relative demand for higher, mainly nonmanual, skills, which benefits women more, because in many transition economies women tend to be better educated than men. In other words, there is indication that during the transition the demand for male labor, which tends to be manual and less skilled, has been hurt more than that for female labor, which tends to be nonmanual and more skilled.

In addition, the female labor force participation rates were very high by international standards in most socialist countries, and therefore the gender gap in labor force participation was relatively small. The transition shock lowered both male and female employment rates, but although it has brought female employment rates to the EU level, it brought the male rates well below the EU level (box 2.6).

Less-Skilled and Young Workers

Unemployment rates in transition economies are particularly high among less-educated workers and are disproportionately low among well-educated workers, especially those with university education. For example, a worker with primary education (eight years) in Poland

BOX 2.5**Growth and Job Creation in Low Income CIS Countries**

The low income CIS countries historically suffered from a certain degree of underdevelopment vis-à-vis other Soviet republics, and this development gap was increasing during the 1980s. The output fall unleashed by the early transitional postindependence reforms exacerbated this gap as the low income CIS countries experienced a deeper recession between 1990 and 1994 relative to other transitional economies. In the subsequent stabilization period, the macroeconomic trends became progressively positive, and growth was reestablished in all the countries considered after the Russian financial crisis in 1997. A period of substantial and sustainable GDP growth followed.

Yet net job creation continued to be negative or slow (especially in the formal sector) during the expansion period, a trend that constrained the transmission of growth benefits to people. According to available evidence, the elasticity of poverty reduction to growth was modest and delayed by two to four years vis-à-vis the initial phase of GDP growth. Thus questions arise as to what factors may be constraining employment growth in the low income CIS countries and what policy mix might be needed to reverse this trend.

A number of coexisting factors have constrained job creation in these countries. They are related to both the structural heritage of the pretransition period and the nature of economic transition in the Region. The countries entered the transition period with significant excess labor in most enterprises. The recession of the early 1990s accentuated this phenomenon as employment declined markedly slower than did GDP. The resulting losses in productivity were fully reflected in real-wage losses. In other words, most people kept their job, but lost part of their income.

Growth recovery also took place only in a few sectors, mostly capital-intensive, and in a few export-oriented firms. Moreover, enterprises remained largely unstructured and could still be characterized by significant labor hoarding. Economic growth was in fact supported by either capital investments or by labor-productivity growth (with a steep increase in real wages). Therefore, the later period of mostly jobless growth is largely explained by the productivity-margin gains that were available in existing enterprises.

How real-wage growth could have coexisted with excess labor in the market is partly explained by the dual labor market behavior of the low income CIS economies. Many workers who lost their jobs in manufacturing moved back to agriculture, which for many became the only possi-

is more than four times more likely to become unemployed than a worker with tertiary education. At the same time, most of the unemployed are workers with secondary education, especially those with narrow vocational skills, because in the centrally planned economies this was the most prevalent form of education. This unemployment

ble form of subsistence, as well as an escape from urban unemployment. Consequently, they did not compete with formal urban sector workers and did not exert downward pressure on wages.

Industry and agriculture followed two rather different paths during the transition. The agricultural sector initially experienced a fall in output—but a fall that was much more limited than what was visible in other sectors. This is explained by land privatization that allowed a large number of small farmers to increase production and productivity and progressively replace state farms in the market. But agriculture remained a rather isolated sector, with few backward and forward linkages to the industrial sector. In the industrial sector, the collapse of the state system was not offset by private initiatives. Moreover, the post-1997 growth in the industrial sector tended to be narrowly based and concentrated in a few—typically capital-intensive—industries, while manufacturing stagnated. As a result, the demand for agricultural production has hardly increased, constraining agricultural production to the subsistence level. Thus, agriculture and industry not only followed different paths, but paths that produced very little employment or benefits for the average household.

Summing up, the following features distinguish economic transition in low income CIS economies from that in middle income CIS and other more-advanced transition economies:

- Lower economic performance than middle income CIS countries before the transition
- A different economic structure, with a smaller urban sector and a larger agricultural sector
- Deeper and faster recession than elsewhere in transition during 1991–1996
- Larger output-employment gap during the recession and faster labor-hoarding growth during the 1990s
- Slower and narrower structural reforms during the recession
- Faster reforms and faster growth rates during the growth period (1997–2003)
- Slow or nil job creation during the growth period (explained by productivity gains in existing enterprises)
- An agricultural sector currently confined largely to subsistence
- A very small industrial manufacturing sector delinked from the agricultural sector

Source: Verme 2004.

pattern indicates a labor market premium to education and high skills, also visible in the structure of wages (see Widening Wage Differentials section later in this chapter).

Youth is another group that suffers from high unemployment. On average, youth unemployment rates are twice as high as overall

BOX 2.6**Relative Position of Women in the Labor Market Has Not Deteriorated during the Transition, and New Employment Opportunities for Women Emerged in the Expanding Services Sector**

Despite an ideology of gender equality and high labor force participation, different forms of gender discrimination were evident under the central-plan period in many of the transition countries. In particular, there was evidence of a gender pay gap, mainly because women were prevalently working in low-paid, white-collar occupations. This wage gap was relatively small by international standards but, in practice, societies continued to reflect the model of a “male breadwinner,” which considered women as secondary workers.

In the context of major economic changes associated with the transition to a market economy, there was a concern that women would be disproportionately affected by worsening labor market outcomes so that preexisting gender gaps in employment and wages would increase. The reduction in state-financed social services, such as kindergartens, forced many women to withdraw from the labor market to take on family responsibilities. At the same time, jobs with a clear female connotation remained or even expanded during the transition, while many male-oriented jobs were destroyed, contributing to the erosion of the male breadwinner model.

After 15 years of transition, female unemployment rates are generally similar to men’s rates and are even lower in some cases. In a number of countries, however, female labor force participation declined more sharply than did men’s. Two main concerns persist:

unemployment rates. This proportion is not different from that in mature market economies; however, given high overall unemployment rates, joblessness among youth often reaches dramatic levels. For instance, in Bulgaria and the Slovak Republic, more than one-third of the youth labor force is unemployed.

Youth unemployment matters because it prevents new entrants in the labor market from gaining experience and developing labor market skills. Youth unemployment is also closely associated with poverty in some of the transition countries. For example, in Bulgaria and FYR Macedonia, the incidence of poverty among the unemployed youth is significantly higher than the average. In this case, the likely reason is that young people in poor families cannot afford to be out of the labor force. Low family income forces people to enter the labor market at a relatively young age. As long as young people are searching for jobs, they are counted as unemployed, and in this sense poverty gives rise to youth unemployment. Obviously, prolonged and unsuccessful job search by young family members can also contribute to poverty.

- Although the gender wage gap remains small, there is evidence of some wage discrimination in the Region. This wage gap can largely be explained in gender differences in the returns to some key individual characteristics, primarily education. In fact, the relatively small size of the gender pay gap largely results from the fact that women in the Region tend to be better educated than men, which helps to contain the wage gap in many of the transition countries.
- New gender differentials may have been created because of the increase in the size of the informal economy. On the one hand, the informal economy may offer employment opportunities to women in a context of a small, formal private sector and shrinking public sector. On the other hand, the informal economy does not provide adequate social protection, and there is some evidence that women are more vulnerable as they concentrate in lower-end jobs.

All in all, there is little evidence that the transition has been harder on women than on men, although women's labor market status varies greatly across countries. There is, however, some concern that the gender dimension of some developing phenomena—such as the rise of the informal sector—may hurt women disproportionately, but this hypothesis has not yet been tested. More generally, there is a need to mainstream gender issues into the debate about reforms of the labor market and social policy. This is particularly so given that many employment-protection provisions granted to women during the socialist era (for example, generous maternity-leave provisions with extended rehiring guarantees) may actually hurt women's employment prospects in a competitive labor market by raising the cost of employing women relative to that of employing men.

Sources: Paci 2002; Paci and Reilly 2004.

Either way, youth unemployment is significantly correlated with poverty (see also Kolev and Saget 2003).

Those in Backward Areas

Labor market conditions vary substantially across geographical areas of most of the transition countries, and in many cases such geographical disparities have increased over time. Large differences in the unemployment rate within countries illustrate the severity of regional labor market disparities. Differences between the regions with the highest unemployment rate and those with the lowest unemployment rate (usually the capitals) exceeded a factor of 3 in all countries but Romania and Slovenia in 2003.¹² These disparities in unemployment are also associated with large disparities in living standards. Regional GDP per capita levels ranged from 60 percent to up to more than 200 percent of the national average in most transition economies (table 2.3). The disparity in regional labor market conditions is much more

TABLE 2.3

Large Regional Disparities in Unemployment Rates, 2003

| | Average | Minimum | Maximum | Coefficient of variation | Capital city region |
|---------------------|---------|---------|---------|--------------------------|---------------------|
| Czech Republic | 7.5 | 4.2 | 14.8 | 40.1 | 4.2 |
| Hungary | 6.3 | 3.3 | 11.3 | 31.1 | 3.6 |
| Poland | 20.1 | 8.5 | 33.4 | 25.8 | 18.3 |
| Romania | 7.0 | 5.9 | 8.6 | 14.8 | — |
| Estonia | 10.6 | 0.4 | 17.4 | 32.2 | 9.0 |
| Latvia | 10.4 | 8.2 | 15.4 | 22.7 | 10.8 |
| Lithuania | 12.3 | 7.5 | 16.9 | 20.4 | 11.7 |
| Slovenia | 7.3 | 4.7 | 10.2 | 29.8 | 4.7 |
| Slovak Republic | 17.2 | 7.1 | 23.9 | 36.3 | 7.1 |
| Russian Fed. (2002) | 8.0 | 1.4 | 44.0 | 56.3 | 1.4 |

Source: Huber 2004.

Note: Registered unemployment rate, NUTS III level.

pronounced in Russia, which is not surprising, given the immense economic heterogeneity of the country's regions. In Moscow and St. Petersburg, open unemployment is negligible (less than 4 percent), while in Dagestan and (even more so) in Ingushetia, it is alarmingly high (24 and 44 percent, respectively). Even leaving these extreme cases aside, regional labor market conditions within Russia vary much more than those in European transition economies.¹³

High regional unemployment is usually coupled with lower labor force participation (resulting from discouragement), giving rise to the low employment/population ratio in high-unemployment regions. Differences between maximum and minimum employment rates range from more than 10 percentage points to more than 25 percentage points in transition economies; however, there are notable exceptions to this pattern. For example, the high-unemployment (nearly 20 percent) southwestern region in Romania has at the same time the highest employment rate (70 percent). In contrast, the low-unemployment (11 percent) capital region has by far the lowest employment rate (56 percent). This confirms that unemployment and nonparticipation are often different signals of poor labor market conditions and should be considered together. Nonetheless, the prevailing pattern is that of high unemployment being associated with low labor force participation, and thus low employment rates (Bornhorst and Commander 2004).

Job Creation Concentrated around Large Urban Agglomerations with Modern Economic Structure

Regional unemployment inequality reflects strong regional concentration of job creation and employment growth. Job creation and

employment opportunities are clustered mainly around large urban agglomerations with diversified industrial structures, particularly with large and expanding service sectors, developed infrastructures, and skilled workforces (figure 2.3). In contrast, employment prospects are dire and unemployment high in monoculture (highly specialized) industrial regions, which suffer from idiosyncratic demand shocks. For example, in Bulgaria and Moldova, employment expanded almost exclusively in the capital region (Rutkowski 2003c and 2004). Employment grew in only 4 out of 21 regions in Croatia and in 3 out of 16 regions in Poland (Rutkowski 2003c; World Bank 2001). Unemployment in rural agricultural regions is usually lower than in regions with industrial monoculture because workers in such regions have recourse to subsistence agriculture and can take temporary and seasonal jobs. In these regions, the problem is underemployment rather than open unemployment, a pattern more characteristic of developing countries.

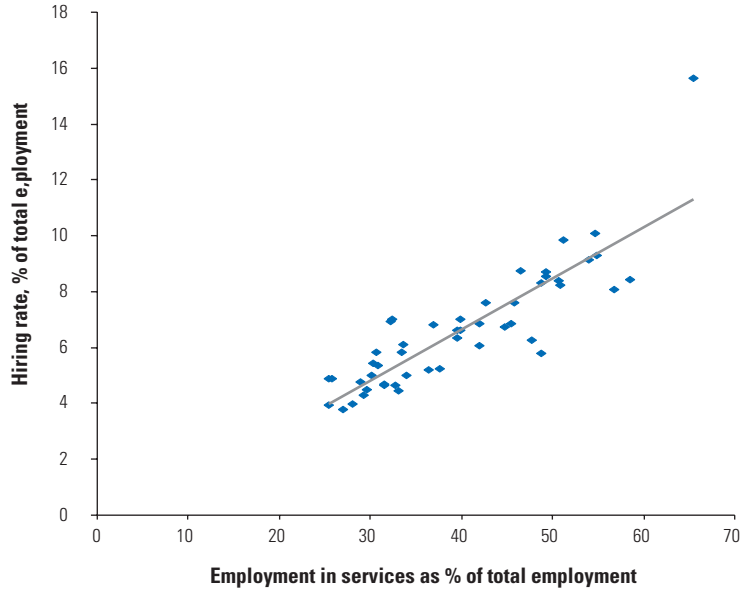
Regional labor market disparities are not specific to countries of the Region—they also occur in developed market economies. However, transition economies stand out in two respects. First, most transition countries display a degree of variation in unemployment rates that is generally higher than in most industrial (OECD) countries. For example, the coefficient of variation of unemployment for France and the United States is roughly one-half that for the Czech Republic and one-third that for Hungary (Boeri and Scarpetta 1996; Bornhorst and Commander 2004). These large differences in regional unemployment rates are associated with strong concentration of net job creation in a few relatively economically vibrant regions and the dominance of job destruction in most other, economically depressed, regions.

Second, labor market imbalances tend to be highly persistent in transition economies.¹⁴ Regions showing better performance at the outset have also tended to perform better in later phases. Correlation coefficients of the rank position of regions over time suggest strong persistence in the relative position of regions along different labor market indicators (Huber 2004). In other words, regions at the bottom (or at the top) of the regional distribution at the beginning of the transition were still in the same position late in the transition. Again, there are some important exceptions. Particularly in Bulgaria, Romania, and Russia, which may be considered as countries that were slightly slower in their reform process, there were some important changes in the regional distribution of unemployment rates, particularly in the early transition, and a similar observation applies to Estonia for wage levels.

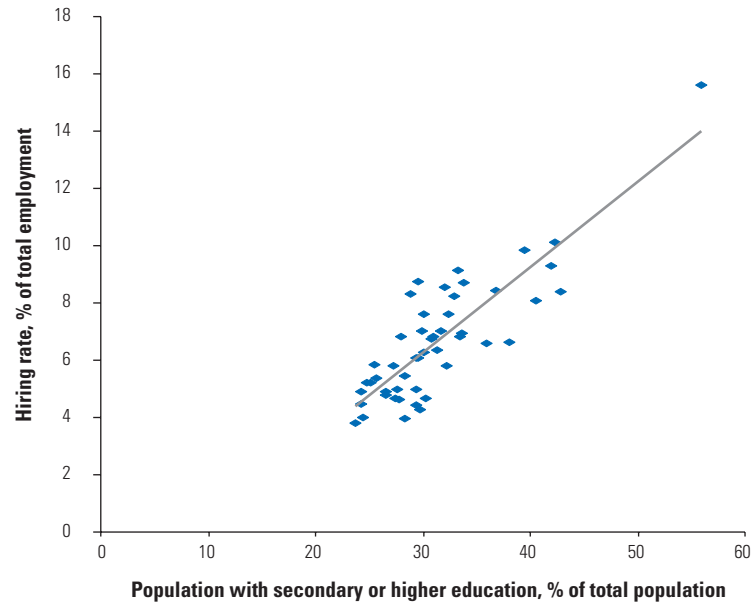
FIGURE 2.3

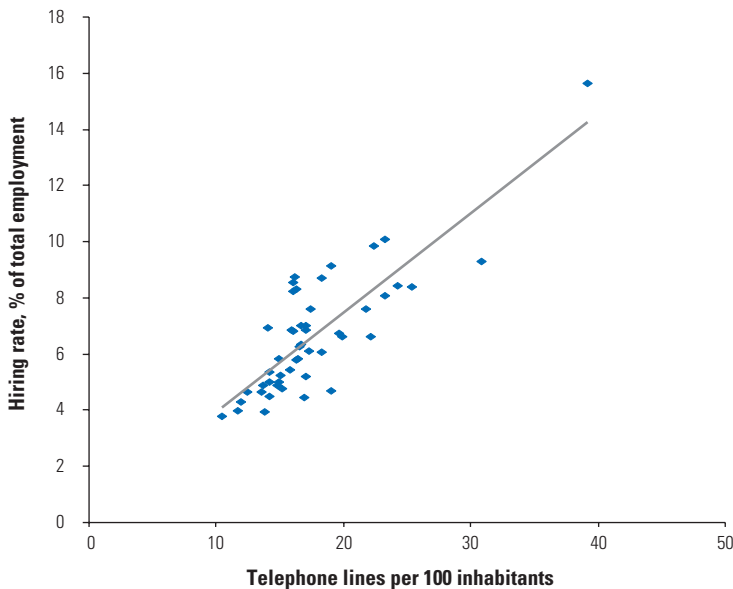
More Workers Are Hired in Regions with a Developed Services Sector, Educated Workforce, and Infrastructure (Poland's Regions, 1997)

Panel A



Panel B



Panel C

Source: Rutkowski and Przybyla 2002.

The strong persistence of regional labor market disparities suggests that they may be of a long-term rather than a transitory nature.¹⁵ Even though some of the divergence may be transitory, regions in the long run may become clustered into two distinct groups of prosperity: one covering a relatively small number of well-off regions, the other comprising a large number of relatively poor regions. This points to the weakness of equilibrating mechanisms, such as wage adjustment or interregional labor mobility, to accommodate region-specific shocks (Boeri and Scarpetta 1996; Fidrmuc 2004; Huber 2003; Bornhorst and Commander, 2004).

Limited Labor Mobility

Interregional migration in most transition economies is low relative to that of the European Union.¹⁶ Furthermore, results show that migration rates in transition countries have fallen during the transition, although regional disparities have widened.¹⁷ Commuting may be a substitute for migration, but evidence is scarce that this is indeed the case. A study on Hungary points to the high cost of transport as a potential barrier to commuting (Boeri, Burda, and Köllö 1998). Still, the pattern of migration is clear: people move away from declining regions, which offer few job opportunities, to expanding regions, often the capital city and other large urban agglomerations, where employment prospects are better (box 2.7).

BOX 2.7**Internal Migration in the Region in Search of Jobs**

Internal migration within transition economies generally appears quite low by international standards, and it is now declining from a peak in the early 1990s. Still, migration in the Region responds to differences in labor market conditions: people move away from regions where job opportunities are scarce toward regions offering better employment prospects—found largely in capital regions and other large urban agglomerations.

Internal flow levels increased sharply in a number of countries at the beginning of the transition. The largest of these streams were movements to national commercial and investment capitals from isolated, peripheral communities. For example, more than 1 million people relocated to more centralized areas of Russia from Siberia and the Russian North and Far East. This represents about 12 percent of the population of these areas. Russian census takers discovered nearly 13,000 “ghost towns” in peripheral regions where cities that had once existed have become fully depopulated and another 35,000 where the population had dwindled down to 10 or fewer people. This mass depopulation has been explained, apart from population aging, by large out-migration to urban areas—mainly to Moscow, where the population increased by 1.5 million from 1990 to 2002.

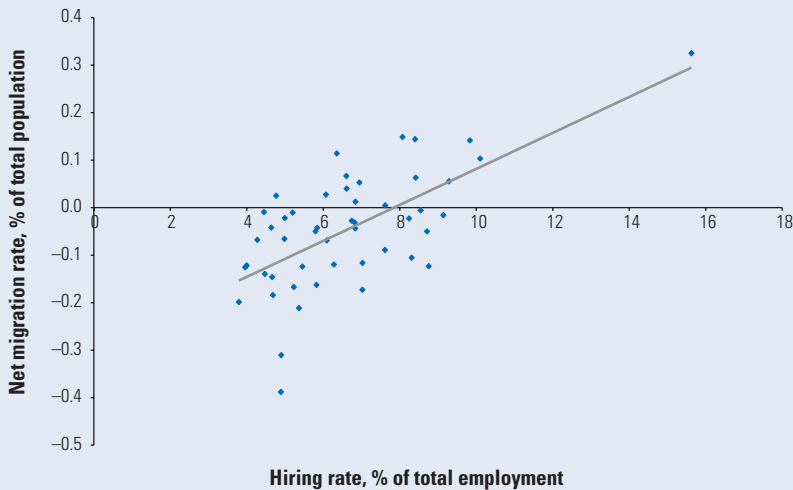
Similar patterns of considerable internal migration from peripheral regions to urban centers are evident in other parts of the Region. For example, although Albania and the Kyrgyz Republic have been net emigration countries since the early 1990s, the populations of Tirana and Bishkek have increased 41 and 23 percent, respectively, over the past decade as internal migration increased.¹⁸ In Poland, a clear pattern exists of people moving to where jobs are: large net migration flows are associated with hiring rates (figure A).

Low and falling migration in the face of large regional disparities in income and unemployment rates in the transition countries presents a puzzle. A number of explanations have been put forward:

- High nationwide unemployment rates might have discouraged internal migration because they suggest a low probability of finding employment (Decressin 1994). For example, in Bulgaria in the early 2000s, the unemployment rates were high in absolute terms even in relatively low-unemployment regions (for example, 14 percent in the capital city). A similar situation occurred in Poland.
- Spatial skills mismatches occurred. Unemployed workers in declining regions (largely less-skilled blue-collar workers) might have been reluctant to migrate to expanding regions because they lacked the skills in demand in these regions (white-collar skills in

Figure A Job Opportunities Are a Driving Force behind Migration Flows

Hiring Rate and Migration Rate in Poland's Regions, 1998



Source: Rutkowski and Przybyla 2002.

Note: Each dot represents one region in Poland in 1997.

Yet, the overall trend in the Region points to declines in internal migration since the early 1990s. Much of the spike in migration, especially in CIS countries, appeared to be driven by “diaspora” migration—the return of people to their ethnic homelands—and the movement of workers away from peripheral areas that had been assigned to them or their families by the Soviet central planners. These two effects appear to have run their course, and consequently migration has slowed despite persistent income and quality-of-life differentials.

Source: World Bank staff.

the services sector). In addition, spatial matching (that is, the process by which unemployed workers find employment in other regions) might have been inefficient (Faini and others 1997).

- Social protection mechanisms, being set at national levels, provide relatively generous income support to the unemployed or the inactive in regions with low costs of living (see chapter 6 for more details), therefore discouraging migration.
- Informal sector income may induce job searchers to stay at home rather than move elsewhere in the country.
- Inefficiencies in the housing markets have likely constrained migration. This may be especially relevant in countries where rent controls are important and taxation of housing transactions is high. For example, the cost of renting a studio apartment in Warsaw rep-

resents around 70 percent of the average monthly net wage of a less-skilled worker.

- Liquidity constraints could have prevented potential migrants from moving by making the migration costs unaffordable.
- Housing and other in-kind benefits associated with employment have effectively raised the opportunity costs of migration, especially in monoenterprise regions in the CIS (Friebel and Guriev 2000).

The evidence presented in existing studies—while delivering a far-from-complete picture—suggests that a combination of liquidity constraints, housing market imperfections, and in-kind transfers may go some way in explaining the low and falling migration rates.¹⁹

Rebounding Real Wages, but Widening Wage Differentials

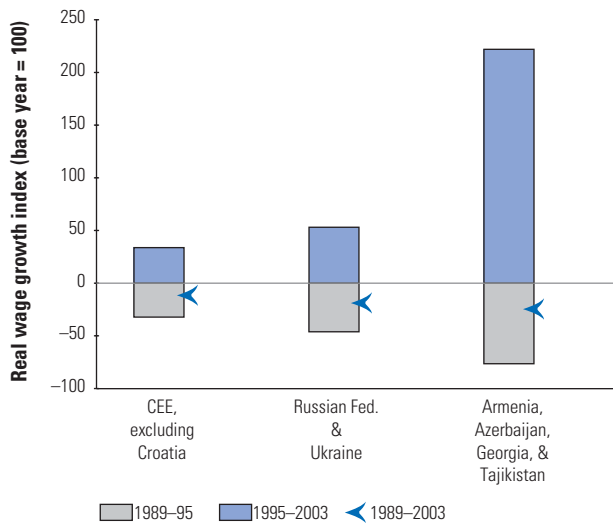
The early stage of the transition was associated with a deep drop in real wages, another manifestation of the fall in output and labor demand. During this initial stage, wages fell more in the CIS economies than in European transition economies, which was an unavoidable consequence of the limited employment adjustment to the output drop in the CIS. (In contrast, in European transition economies, the adjustment was more through employment reduction.)

Significant Wage Rebounds in the Mid-1990s

Unlike employment, wages have rebounded relatively quickly. Since the mid-1990s, real wages have grown in all transition economies at a relatively high pace.²⁰ However, despite the growth, in most countries the *measured* real wages are still below the pretransition level (figure 2.4), but in purchasing power, real wages have probably increased more than wage statistics suggest.²¹ Notwithstanding problems with real-wage measurement, in some early reformers (that is, the Czech Republic, Hungary, and Poland), wages are already higher than before the transition.

The real-wage growth that has occurred during the second stage of the transition is a reflection of concomitant productivity improvements (see chapter 4). Productivity gains resulting from enterprise restructuring were translated into higher wages, but at the same time contributed to the low elasticity of employment in relation to output growth.²² Therefore, the beneficiaries of productivity growth have

FIGURE 2.4
Real Wages Have Rebounded in the Mid-1990s



Sources: UNICEF, TransMONEE database, Bank staff calculations.

been the insiders (that is, workers with jobs) rather than the outsiders (that is, those without salaried employment).

Widening Wage Differentials

The wage distribution was compressed under central planning, resulting from the egalitarian ideology and the centralized wage-setting mechanism. Wages were not aligned with productivity, and the returns to human capital were relatively low, which dampened the incentives to invest in skills and education. The change in the wage-setting mechanism, from administrative to market-based (though this change has been less pronounced in the public sector, especially in CIS and SEE), has led to a sharp increase in wage dispersion. More-productive and expanding firms tend to pay higher wages in general, and especially to workers whose skills are in high demand.²³

Moreover, technological progress and structural shifts, such as that from the manufacturing sector to the services sector, raised relative demand for, and thus wages of, white-collar, skilled workers. At the same time, the process implied deterioration in the relative wages of less-skilled, blue-collar workers employed in declining manufacturing industries. For example, a university-educated worker in Poland currently earns (on average) 70 percent more than a worker with basic vocational training does. In the private sector, this premium to university education is even

higher (160 percent).²⁴ Under central planning, the differential was merely 20 percent.²⁵ The changes in the structure of the economy, and thus changes in relative demand for different types of labor, have given rise to various wage premiums to worker and firm characteristics (such as education, skills, occupation, industry, and location) and contributed to the increase in wage inequality. In particular, the increase in returns to education is the single most important observable factor accounting for the increase in wage inequality during the transition (box 2.8).

BOX 2.8

An Increase in Educational Wage Premiums Has Been an Important Factor behind the Rise in Wage Inequality

The rising wage inequality reflects an increase in wage premiums to various worker and firm characteristics. The increase in wage premiums to education is the most important observable factor that has caused the increase in wage dispersion in virtually all transition economies.^a Under central planning, wage differentials between highly educated workers and less-educated workers tended to be relatively small. Evidence for CEE and Russia shows that the situation changed dramatically during the first few years of the transition (Fleisher, Peter, and Wang 2004). Wages and salaries of well-educated and highly skilled workers have gone up, while wages of less-educated workers have gone down, not only in relative terms but often also in absolute terms. These developments have led to a substantial increase in returns to education, especially to university education. At present, the annualized rate of return to education is similar or higher than that in Western European economies (Orazem and Vodopivec 1995; Vecernik 1995; Rutkowski 1996 and 2001; Kertesi and Köllö 2001; Newell and Reilly 1999; Munich, Svejnar, and Terrell 2005; Peter 2003).

The premiums to high skills and education (especially university education) are particularly high in the private sector. For example, in Poland, while less-educated workers earn the same or less in the private sector, university-educated workers (on average) earn twice as much in the private sector as they do in the public sector (Rutkowski 1998).

The pace of the increase in returns to schooling has been positively related to the speed of market reforms. Returns to education increased faster in countries where regulatory and institutional constraints on wage setting were removed earlier. For example, in Ukraine, where the pace of market reforms has been slow, the increase in returns to schooling has been modest, and they are still lower than in the faster-reforming economies of CEE and in Russia (Fleisher, Peter, and Wang 2004; Gorodnichenko and Peter 2004).

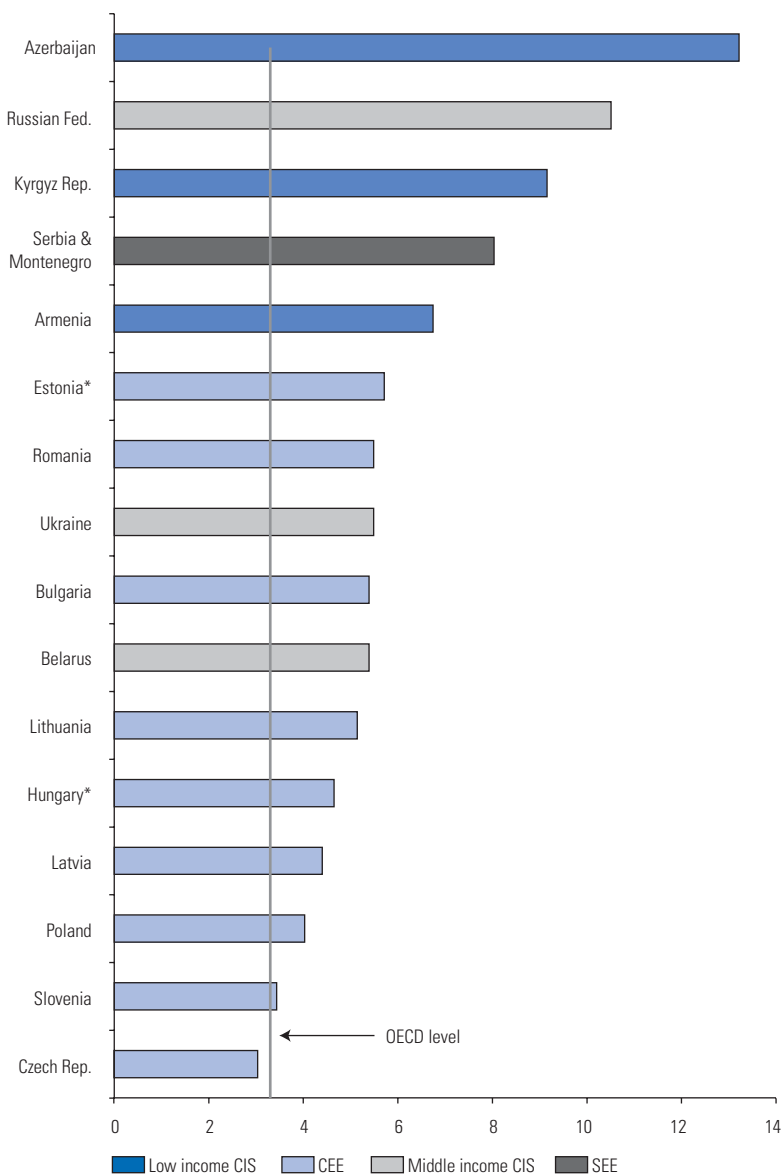
a. Evidence comes from CEE, Russia, and Ukraine. An earlier study (Newell and Reilly 1996) found that returns to university education in Uzbekistan in 1995 were significantly lower than in CEE, Russia, and Kazakhstan.

Wage inequality is presently high in virtually all transition economies; however, there are substantial differences among the Region's subgroups (figure 2.5). In European transition economies, wage inequality is high by EU standards, but still within the OECD range (although in its upper end). That is, wage disparities are large,

FIGURE 2.5

Wage Inequality in the CIS Is Higher than in the CEE

Ratios of 9th decile to 1st decile, 2002



Sources: UNICEF TransMONEE database; Bank staff calculations.

Note: * Signifies 2001.

but not exorbitant. In contrast, in most of the CIS, wage disparities have reached the extremely high levels characteristic of developing countries. The gap between workers at the bottom of the wage distribution and those at the top has become dramatic. As an illustration, in EU transition economies, the top decile worker usually earns four to five times as much as the bottom decile worker. In the Kyrgyz Republic, this ratio amounts to 9, in Russia 11, and in Azerbaijan 13. In contrast, in the EU, the decile ratio varies between 3 and 4.

In CEE countries, wage distribution has widened mainly at the upper tail, which means that high wages have become more prevalent. In the CIS, the wage distribution has widened at both the lower and the upper tails, which implies the emergence of both very low and very high wages. As a result, the wage position of low-paid workers has deteriorated in the CIS much more than in CEE.

The widening earnings differentials contribute to the growing labor market segmentation in the Region.²⁶ In high earnings-inequality countries, the labor market is divided into the increasingly large high-wage segment and the swelling low-wage segment. The high incidence of low pay is of particular importance, as it often translates into poverty (World Bank 2000). For example, in the Czech Republic or Slovenia (where earnings inequality is relatively low), less than 5 percent of all wage and salary workers earn less than 50 percent of median earnings. In Serbia and Montenegro, this fraction exceeds 20 percent; in Russia, it goes up to 25 percent; and it reaches 30 percent in Azerbaijan.²⁷

In European transition economies, minimum wages are set at a relatively high level, accounting for around 40–50 percent of the average wage. This acts as a floor on the wage distribution and is thus likely to lessen wage variation. In contrast, minimum wages in the CIS are much lower in relative terms. As a rule, they account for less than 20 percent of the average wage, often around 10 percent, which, together with weak enforcement, means that they are unlikely to be binding. This allows firms to maintain low-paid jobs and as such contributes to wage dispersion.

Wage dispersion also reflects the large disparities in regional labor market conditions discussed above. In theory, wage flexibility can act as an equilibrating mechanism and can be expected to lessen regional unemployment disparities. In practice, however, this mechanism is moderately effective, although in most CEE countries, wages were found to be responsive to regional unemployment (Huber 2004).²⁸ Wage flexibility is limited in many cases because of institutional factors, such as collective bargaining agreements or national minimum wages, which often do not allow for regional differences in labor market conditions. In addition, even lower wages in economically underdeveloped

regions often do not provide a sufficient incentive for firms to enter and create jobs if the infrastructure is poor and skilled labor scarce.

The Changing Nature of Jobs during the Transition

Job security was one of the salient features of the socialist economic system that has been undermined during the transition. Under central planning, the bulk of workers had permanent, full-time jobs in state-owned companies. The transition has been associated with the emergence and expansion of self-employment and informal sector employment and—a related development—a growing incidence of irregular, casual, or temporary jobs.

Expanded Informal Sector

The size of the informal sector (measured by its share in total output or employment) varies significantly across subgroups within the Region, as well as across countries. Still, the informal sector is an important source of jobs in all subgroups and in most countries (figure 2.6). Its role in the Region is much greater than in OECD countries. The informal sector contributes to GDP nearly twice as much in CEE countries as it does in OECD countries (29 and 17 percent, respectively, in 2000).

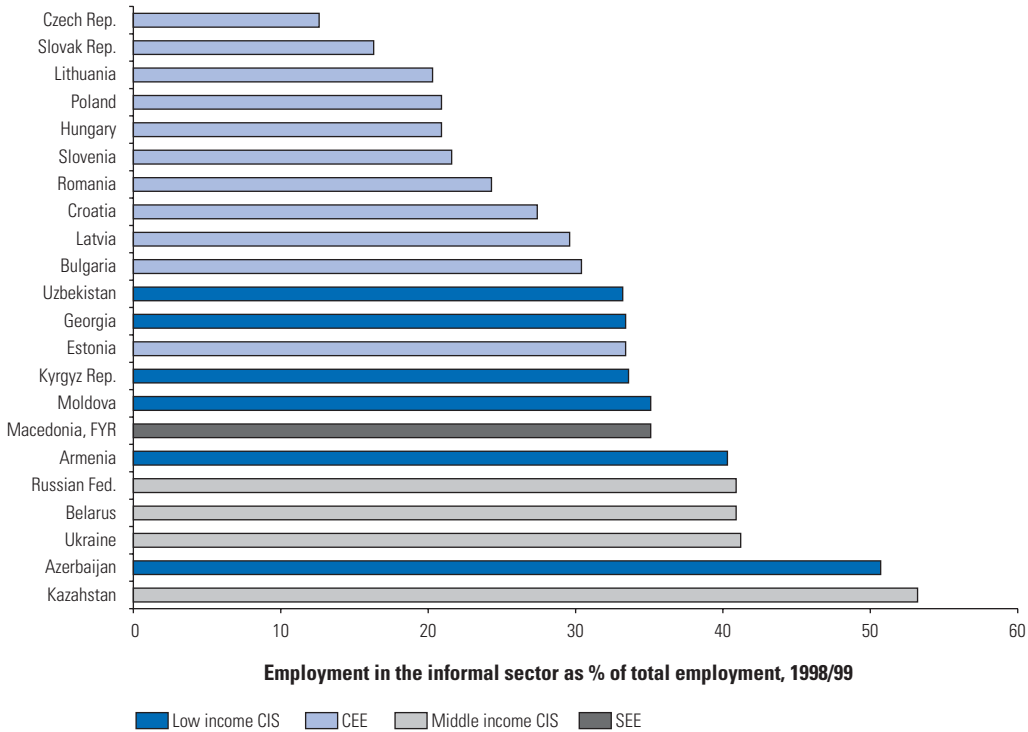
Informality tends to be smaller—although not negligible—in the more-advanced CEE countries, while it is particularly large in economies of the CIS. In CEE, between one in five and one in four workers is engaged in the informal sector. In other European transition economies, the proportion goes up to one in three. In the CIS, every third to every second worker has an informal sector job. The cross-country variation is substantial. On one end of the spectrum are the Czech and Slovak Republics, where the informal sector accounts for around 15 percent of employment, which is close to the OECD average. The percentage is about twice as high in Bulgaria, Estonia, and Latvia and reaches 40 percent in Belarus, Russia, and Ukraine. In Azerbaijan and Kazakhstan, the informal sector accounts for half of the economy. The characteristics of jobs in the informal economy vary across countries, but also within each country across individuals (box 2.9).

Self-Employment Also Expanding

Another dimension of the change in the structure of employment during the transition is the increase in self-employment. Self-employ-

FIGURE 2.6

Informal Sector Accounts for a Substantial Share of Total Employment, Especially in CIS



Sources: Schneider 2002; Schneider and Klingmair 2004.

BOX 2.9

The Surge in Informality during the Transition: Key Features and Policy Challenges

The characteristics of informal activities vary within each transition country and across them; nonetheless, there are some common patterns. In a number of countries in the Region, mainly in CEE, the rise in informal activities is associated with high taxes and strict regulations in product and labor markets. In other countries, including the low income CIS group, the informal economy has a clear rural connotation and has played the role of an employer of last resort to provide subsistence income.

Different motives drive firms and workers into informality. Many small firms choose to stay informal because fixed costs—such as licenses or permit fees (and even bribes)—tend to impose a disproportionate burden on them, and they prefer to remain invisible to public officials. Professional workers may prefer to develop their own activities as self-employment rather than working as employees when taxes on labor use are high and social benefits from affiliation to

(continues on the following page)

BOX 2.9 (continued)

the social security uncertain. At the same time, informal employment may be the only available alternative for less-skilled workers displaced in the wake of enterprise restructuring.

Microeconomic evidence from Household Panel Data in four transition economies (Albania, Georgia, Hungary, and Ukraine) sheds some light on the incidence of informality²⁹ and self-employment across different groups of workers and on the mobility in and out of informality and self-employment.

The incidence of informality varies substantially across different workers. The youth, poorly educated, and unskilled blue-collar workers are disproportionately represented among the informal workers. In Ukraine, for example, unskilled workers account for one-third of informal sector employment, compared with less than one-fifth of formal sector employment. In Hungary, the unskilled account for about 70 percent of informal workers, while they account for only 50 percent of formal sector workers. In pay, informal sector jobs are comparable to formal sector jobs, once due account is taken of individual and firm-specific characteristics. In other words, the observed wage differentials between formal and informal sector jobs are largely the result of selection of workers in the two sectors; low-skilled and less-experienced workers tend to be sorted into informal jobs, often in small firms with low-productivity potentials. At the same time, high-skilled workers in self-employment tend to earn more than similar workers in formal sector jobs, especially when taking account is made of the fact that they tend to work longer hours.

The analysis of the transition across the different types of jobs in the Region suggests a number of common patterns across countries:

- In all countries, informal workers have a higher chance of moving into unemployment than into formal jobs.
- At the same time, exit from unemployment is more likely to take place to an informal job than to a formal one.
- Mobility into and out of self-employment is more limited than mobility into and out of informality.
- Informality and self-employment are also more likely entry points into the labor market than formal employment is.

Individual characteristics not only affect the type of job that workers hold but also their chances of moving from one type of job to another. In all four countries, young workers are more mobile than adults and especially older workers. The unskilled are generally more mobile than skilled workers and are more likely to move into informality than skilled workers. Finally, women have less access to self-employment and more likely to be in formal employment than in informal jobs. However, they also have higher chances of moving out of the labor force if they lose their formal job.

Source: Duryea and others 2005.

ment plays the most important part in low income CIS countries, where (on average) it accounts for 50 percent of total employment. The share of self-employment is much lower in middle income CIS countries (17 percent) and in CEE (20 percent). By way of comparison, in EU-15 countries, self-employment accounts for about 15 percent of total employment.

What are the reasons behind the surge in self-employment? On one hand, people are *pushed* into self-employment by a lack of work opportunities. In this case, self-employment is the only available means of earning subsistence income. Sometimes employers also force workers into self-employment to lower hiring and firing costs. For example, in Bulgaria and Poland, some health care sector employees were turned into independent self-employed contractors. This obviously inflated the number of self-employed, although there was no corresponding change in the nature of jobs. On the other hand, people can be *pulled* into self-employment if the expected benefits, mainly earnings, exceed those of wage employment. Self-employment, then, is a voluntary welfare-maximizing choice among different alternatives. In such a case, self-employment often becomes a springboard for firm creation.

In reality, self-employed workers make up both categories— aspiring entrepreneurs and those for whom self-employment is a last-resort grasping for survival where regular jobs are scarce and poorly paid. However, there is some evidence that in the Region, the push factors tend to prevail and that most of the self-employed resort to self-employment to avoid unemployment and earn at least subsistence income (Earle and Sakova 2000; Verme 2004). The recourse to subsistence agriculture (as has happened in Poland, FYR Macedonia, and Romania and in the most of the CIS) supports this point.

Service Sector Jobs Replacing Manufacturing Jobs

The reallocation of jobs and labor, which has been an integral part of the transition, entailed an increase in service sector employment and a decline in manufacturing employment. The expansion of the service sector has been more pronounced in CEE than in the CIS. For example, the share of market services in total employment during the 1990s went up by about 14 percentage points in Estonia, but only by a mere 2 percentage points in Russia (see chapter 4 for more details).

Deindustrialization and the expansion of the service sector have been associated with the change in the skill profile of labor demand. The skill content of jobs has shifted upward, especially in the new sector. Jobs destroyed during the transition were disproportionately low-skilled,

blue-collar jobs. In contrast, newly created jobs tend to require higher educational attainment and white-collar skills. Thus, job creation in the new sector has been biased against low-skilled workers, largely because of skill-biased technological change. For example, in Estonia, the share of nonmanual workers in total employment increased by 8 percentage points during 1990–2000, so that presently nonmanual workers account for 55 percent of total employment. In Russia, the share of workers with higher education increased by 6 percentage points during 1992–2000, and it currently exceeds 20 percent of the workforce. A similar increase occurred in Poland and other CEE economies (Peter 2003). Clearly, job destruction has fallen mostly on manual workers, who are mainly unskilled (Commander and Köllö 2004). This mismatch between the skill content of jobs that are being destroyed in the old sector and those that are being created in the new sector contributes to structural unemployment in transition economies.³⁰

Labor Market Outcomes: Disappointing during the Transition?

In most cases, the labor market outcomes that have emerged during the transition were expected and have been an unavoidable consequence of the profound institutional changes and restructuring associated with the transition. Some unemployment, for instance, is a natural phenomenon in a market economy, in which workers continuously move across jobs and the process is not frictionless. In addition, the pace of industrial restructuring, which is a salient characteristic of the transition, is bound to contribute to unemployment by creating structural mismatches.

Persistent Unemployment and Growing Labor Market Disparities: Sources of Concern

There have been, however, a few unpredicted, negative outcomes. The first is persistently high unemployment and the long duration of unemployment periods. High unemployment was expected to be transient. It was assumed that a fast-growing private sector would soon absorb workers released from the shrinking public sector, so that workers would experience only relatively short periods of unemployment. This has proved not to be the case. Workers who lost their jobs found it extremely difficult to find new ones because the pace of job creation lagged behind the pace of job destruction for a long time (see Chapter 4). As a result, unemployment has become a stagnant pool. Only in those countries such as the Baltic States, where the rate of job creation has picked up

and caught up with the rate of job destruction, have outflows from unemployment increased and unemployment started to decline.

The second outcome has been the sharp increase in, and high level of, wage inequalities. Again, some increase in wage inequality was expected and was a desirable phenomenon, improving labor market incentives. However, in many countries, wage inequalities have reached extremely high levels.³¹ This may undermine the sense of fairness and negatively affect worker morale and motivation. Moreover, wage inequalities translate into income inequalities and thus can have a negative effect on poverty.

The third unanticipated, negative outcome has been the development of dual labor markets: the often shrinking formal sector offering considerable employment protection, and the growing informal sector promising little job security. This can be mainly traced to high labor taxes and to strict labor regulations. But while for some workers, mainly in the poorer CIS countries, the informal sector is the employer of last resort, for others, mainly in richer CEE countries, it is a preferred alternative to work in the formal sector, offering better earning opportunities and more scope for entrepreneurship.

The fourth unexpected outcome was the significant growth of regional labor market disparities. This largely reflects strong regional concentration of job creation and high unemployment coinciding with low wages. A few centers of job creation and good employment prospects have emerged, surrounded by depressed regions where few new jobs are being created and employment opportunities are scarce.

These negative labor market outcomes—in particular, the high and persistent unemployment along with high wage inequality—have a number of important welfare implications:³²

- The underutilization of labor resources translates into lower output and therefore lower welfare.
- Unemployment and wage disparities translate into even larger income inequalities.
- Large income inequalities imply, all else being equal, higher poverty rates.
- Long-term unemployment and persistent poverty often lead to social exclusion.
- Unemployment, inequality, and eventually poverty carry high economic, social, and political costs.

For all these reasons, improving labor market performance is critical for poverty reduction and the political sustainability of market-oriented reforms.

A widespread assumption concerning labor market outcomes during the transition was that they would initially deteriorate because of intensive restructuring, but then improve as the reforms started to bear fruit. Put differently, one could hypothesize that changes in labor market outcomes are U-shaped. Is this hypothesis borne out by the evidence? Although the transition has been under way for more than 10 years, it is too early to tell. It has taken longer for labor markets to adjust to the transition shock than initially assumed, and the process of transformation is still far from complete, at least from a microperspective (see below). Therefore, one currently observes a dynamic process whereby key labor market variables, such as employment and unemployment, continue to adjust to various shocks associated with the transition. Present levels of employment and unemployment are thus unlikely to represent steady-state values. Some countries, where reforms have been slow, are still on the downward slope of the U curve. That is, employment is relatively high and open unemployment low, as for example in Moldova or Ukraine. Other countries are close to the bottom of the U (that is, unemployment is high and employment low, such as in Bulgaria or Poland). But it seems that some countries have already started to move up the right-hand side of the U curve (that is, employment has started to increase and unemployment to fall). Examples include the Baltic States of Estonia, Latvia, and Lithuania, as well as Bulgaria and Hungary. Particularly in the Baltic States, the employment rate, after being well below the EU average, is presently quite close to it. The gap is narrowing.

It is noteworthy that the EU average employment rate is significantly below the one that was prevailing under central planning. This suggests that there is probably no return to the extraordinarily high employment rates observed before the transition (at least in the short to medium term). But reaching the current EU average employment rate should not be seen as the ultimate objective. After all, this rate is considered too low by the EU, as illustrated by the Lisbon target of raising the employment rate to 70 percent of the working-age population from the current level of 65 percent. Therefore, even in the most successful transition economies, there is room for improving labor market performance.

Summary: Key Stylized Facts on Labor Market Transition in the Region

The main features of labor market transition in the Region can be summarized as follows:

- Transition has led to a substantial underutilization of labor, negatively affecting social welfare and growth prospects. However, the adjust-

ment to the transition shock has taken different forms in various subgroups of the Region. In the European transition economies, the job fall has translated into open unemployment. Within this group, there are differences in labor market conditions associated with the pace of enterprise restructuring and the rate of job creation. In the CIS, the fall in labor demand has led largely to underemployment (hidden unemployment). Many workers hold low-productivity jobs in unstructured and unprofitable enterprises, in the informal sector, and in subsistence agriculture, which is the employer of last resort.

- Limited job opportunities have also led to discouragement and massive labor force withdrawal, especially among younger and older cohorts, as well as women. The combined effect of unemployment and labor force withdrawal was a substantial fall in the employment-to-population ratio. This fall was stronger in European transition economies than in CIS countries.
- The low open unemployment and high employment rates that prevail in many CIS countries hide significant problems in their labor markets. They often indicate delayed enterprise restructuring with persistent overstaffing and—especially in low income CIS countries—to the dominance of low-productivity jobs in the informal sector to earn subsistence income. The latter feature is typical of developing countries, where social protection is lacking and so for most workers unemployment is not an affordable option.
- Coping strategies of displaced workers differed between European and CIS transition economies, too. In European transition economies, many displaced and discouraged workers took advantage of relatively generous nonwork benefits (early retirement and disability pensions, unemployment benefits, and social assistance). In most CIS countries, these benefits are less available and many laid-off workers have moved to subsistence agriculture, self-employment, and casual work in the informal sector.
- Although the emergence of unemployment in the wake of the transition was expected, its persistence is a source of major concern. In particular, outflows from unemployment to jobs have been low in many cases, leading to a buildup of a large pool of long-term unemployed, with a negative effect on their employment prospects.
- Real wages fell sharply during the early phase of the transition, but have rebounded since the mid-1990s, following the resumption of economic growth. The fall in wages was much more pronounced in the CIS economies (where enterprises restructured slowly and

were reluctant to lay off workers) than in European economies (where enterprises restructured by shedding redundant labor). The uniform wage growth during the second stage of the transition (when economic growth resumed), coupled with limited, if any, employment growth, implies that output and associated productivity growth are translated into higher wages, rather than into higher employment.

- Wage inequalities have increased substantially across the Region; however, the increase has been more moderate in European than in CIS transition economies. As a result, the current level of earnings inequality is still relatively modest in CEE and SEE, while it is very high by international standards in most CIS countries. One important driving force behind the growth in wage inequalities has been the increase in returns to education and high (white-collar) skills. However, wage inequalities also reflect firm-specific characteristics, such as profitability, ownership, industry affiliation, location, and so forth.
- The segmentation of the labor markets has been an important feature of the transition in the Region's countries. Although the informal sector has become sizable in European transition economies (by European standards), it often accounts for the bulk of the private sector in some low income CIS countries, resembling developing countries in this respect. In European transition economies, the informal sector is mainly driven by tax evasion, as well as by the avoidance of strict regulations. In contrast, in CIS countries, the informal sector is largely the employer of last resort. The informal sector there is concentrated in agriculture, while in European transition economies, it is concentrated in the expanding services sector. The growth of the informal sector is associated with the increased incidence of casual jobs, as well as with self-employment.
- Regional disparities in labor market conditions across the Region are large and persistent. Job creation and employment prospects are heavily concentrated around large urban agglomerations with diversified economic structures and, in particular, an expanding service sector. These growth poles are surrounded by economically depressed regions, often one-company towns, where job opportunities are scarce and unemployment is high. Equilibrating forces are too weak to alleviate the imbalances. Labor mobility in the Region is relatively low, resulting from (among other things) an underdeveloped housing market. Although regional wages tend to

respond to regional unemployment, this is not enough to entice the entry of new firms and investment, which are prerequisites for job creation.

- Labor market transition has created both losers and winners. The former include less-skilled blue-collar workers in declining industries and regions, among whom unemployment is high and wages are low and falling in relative terms. The latter constitute well-educated white-collar workers who find employment mainly in the expanding services sector and who command high wages. The dramatic shift of labor demand away from low-skilled labor—giving rise to high unemployment and the fall in relative wages—is one of the most notable features of labor market transition in the Region.
- There are signs of an emerging divide between labor markets in the transition economies of Europe and those of Central Asia. Labor markets in European transition economies in many respects resemble those in developed economies of Europe, in both positive (for example, productivity growth) and negative aspects (for example, high and stagnant unemployment). In contrast, labor markets in low-income CIS countries seem to become similar to those in other low-income countries, with typical characteristics such as the dominant informal sector, underemployment, and low-productivity employment.

Notes

1. The study focuses on the transition economies of Eastern Europe and the Former Soviet Union. The transition economies of Eastern Europe and the Former Soviet Union, plus Turkey, are all part of the World Bank's Europe and Central Asia (ECA) Region. Labor market developments in Turkey are discussed in a separate box (box 2.2). Turkmenistan is not covered in this chapter because of lack of reliable data.
2. Self-employment and informal sector employment have acted as shock absorbers in many transition economies, providing a source of earnings and helping the displaced workers to avoid poverty. At the same time, informal sector jobs in the CIS are often of low productivity and casual in nature.
3. See annex 1.1 for the country grouping within the Region.
4. The scope of this chapter is limited to the presentation of basic labor market trends and patterns in the Region. A comprehensive overview of labor markets during the transition is provided in Svejnar (1999). Useful analysis of labor market outcomes during the transition is also provided in Boeri and Terrell (2002), Riboud and others (2002), and Haltiwanger, Scarpetta, and Vodopivec (2003).

5. Turkey's GDP per capita at PPP is close to that of the average for SEE and middle income CIS.
6. This report uses internationally comparable indicators of unemployment based on the labor force surveys. For some countries, however, these data are not available, and the report refers to administrative data on unemployment as collected by labor offices. These latter data are not fully comparable with those of other countries and may also vary over time because of changes in unemployment benefit systems that change the incentives for the unemployed to register with the labor offices.
7. However, employment has started to grow in Hungary since the early 2000s, while it has continued to decline in Poland, so the employment rates in both countries have diverged.
8. Female labor force participation rates continue to be high in most transition economies. Before the transition, they were extraordinarily high by international standards, so their fall may represent a movement toward an equilibrium. The fall in the youth labor force participation, in turn, partly reflects the increased demand for higher education, which has led to a dramatic increase in college enrollments. For example, in Russia, the number of college students increased more than two times during the transition.
9. Outflows from unemployment to jobs account for about two-thirds of all outflows from unemployment (the other being to inactivity), so doubling the outflows-to-jobs rate (holding the outflows-to-inactivity rate constant) results in shortening the average duration of unemployment and thus lowering the unemployment rate by one-fourth.
10. Russia does not fully fit into this pattern because the labor market there is quite vibrant, providing jobs to migrants from other CIS countries. Still, many jobs are in the informal sector and of low productivity. For example, according to Goskomstat (Russian Federation State Statistics Committee) data, more than 40 percent of firms in Russia were reporting losses in 2002.
11. Measurement of employment and its changes is not straightforward, and various sources, using different definitions, show somewhat different trends. In particular, employment data coming from household-based surveys (for example, labor force surveys and household budget surveys) differ from those coming from establishment-based surveys. The former cover self-employment and informal employment in addition to regular employment and thus use a broader definition of employment than the latter, which cover only regular (registered) employment.
12. In the OECD countries, the ratio of the maximum to the minimum regional unemployment rate is around 3. The coefficient of variation in most cases is in the range of 25 to 30 percent (OECD 2000). These values should be regarded as illustrative only because they depend on the number and size of regions. In general, the greater the level of aggregation (that is, the larger the regions), the less is the variation in unemployment rates.
13. Regional variations in labor market conditions in Russia are less pronounced and similar to those in CEE if one weighs regional indicators by the labor force.
14. Regional disparities also tend to be persistent in many Western European economies (Italy being the best-known example), but much less so in the United States. A high degree of persistence in transition economies is

somewhat surprising, given the large-scale reallocation of resources associated with the transition.

15. Recent econometric evidence by Römisch (2001) for EU-accession candidate countries and new member states, by Profit (1999) for the Czech Republic, and by Solanko (2003) and Granberg and Zaitseva (2002) for Russia, supports this hypothesis. They find that divergence has been accompanied by an increased polarization of regions.
16. Fidrmuc (2004), comparing internal migration in the Czech Republic, Hungary, Poland, the Slovak Republic, and Slovenia with that in Germany, Italy, the Netherlands, and Spain, concludes that migration rates are largely ineffective in reducing regional disparities in the new EU countries. Ederveen and Bardsley (2003) find evidence that, after controlling for methodological and data construction differences between studies, migration in the new EU countries is less reactive in particular to differences in unemployment rates. In addition, Andrienko and Guriev (2003) state that overall migration in Russia is low, although Russia is the only country—aside from Hungary—where migration rates approach European levels, but clearly fall short of U.S. levels (EBRD 2003).
17. Fidrmuc (2004) for the big central European candidate countries, Hazans (2004) for the Baltic states, Kallai (2003) for Romania, and Andrienko and Guriev (2003) for Russia all find this decline in migration rates to be a stylized fact of the transition period in the countries they analyze.
18. Caution is required in interpreting these findings as these studies may differ in methodology and definitions. The cross-country comparability of migration rates is limited as these depend on the size and degree of homogeneity of regions and these vary across countries.
19. Kallai (2003) and Andrienko and Guriev (2003) provide some evidence on the importance of liquidity constraints in shaping migration in Russia and Romania. Bornhorst and Commander (2004) argue that housing market imperfections are an important aspect.
20. The substantial real-wage growth despite high unemployment reflects a combination of market and institutional forces: employers maximizing profits by using efficiency wages (that is, wages set above the market-clearing level so as to motivate workers), union pressures, and government wage policies.
21. The purchasing power of wages under central planning was overestimated because prices of many consumer goods were set below the equilibrium level, as attested by widespread shortages. Therefore, the fall in real wages during the initial stage of the transition, when prices were liberalized, was most probably overestimated.
22. One reason why productivity gains have been translated into higher wages rather than employment is that they have been largely achieved through defensive restructuring by firms—that is, by eliminating overstaffing and shedding redundant labor (see chapter 4). High hiring and firing costs may have contributed to this process (see chapter 6).
23. There is some econometric evidence that in Russia the relationship between a firm's wage rates and its performance (profitability or productivity) is particularly strong—stronger than in CEE countries. This points

- to a less-competitive labor market in Russia because, under perfect competition, wages are independent of firm performance (Gimpelson and Kapelyushnikov 2005).
24. Background calculations for the World Bank (2001), using data from the firm-based 1998 Survey of Earnings.
 25. Rutkowski 1996.
 26. The contribution of wage inequality to overall income inequality is substantially larger in CEE, where wages account for a high share of total income, than in the CIS, where wages account for a much lower share (World Bank 2000).
 27. Earnings dispersion and thus the incidence of low pay may be overestimated as a result of the practice of underreporting wages to avoid taxes on labor.
 28. The estimation of the so-called wage curve, which is the relationship between individuals' wages and regional unemployment rates (controlling for human capital and other characteristics), shows that for a sample of CEE countries, wages are at least as responsive to regional unemployment rates as in most developed market economies (Huber 2004).
 29. Informal employees are identified as those who do not have a written contract or who are not affiliated with the social security system.
 30. In principle, the skill-mismatch problem can be addressed by training programs. However, in practice, the potential of training programs to successfully address large skills mismatches is limited. First, if the skill profile of displaced workers is much different from the skill profile of new jobs, then successful retraining can be extremely, perhaps prohibitively, expensive. Second, for retraining to be successful, there need to be unfilled vacancies for which the training participants can apply. If, however, job openings are few, as is often the case in transition economies, then training is of little help in finding a new job. Existing evaluation of training programs indeed confirms that training is not an efficient tool for addressing mass unemployment resulting from large-scale industrial restructuring (Betcherman, Olivas, and Dar 2004).
 31. It is an open question whether existing wage differentials reflect a labor market equilibrium or are still of a disequilibrium nature.
 32. The term "unemployment" is used in its broad meaning, which covers workers of working age who withdraw from the labor force, as well as different forms of underemployment.

