

## The Role of Labor Markets and Safety Nets

In 2003, more than two-thirds of the poor in the Region (or around 40 million poor people) belonged to families where someone worked. Although economic growth has served the poor well (particularly the working poor), they remain the largest group among the poor. This chapter analyzes the main channels through which growth affected the well-being of the poor during 1998–2003. It shows that alongside higher wages, increased transfers were instrumental in reducing poverty. But neither higher wages nor increased transfers can be expected to sustain poverty reduction in the Region. The chapter concludes that higher productivity and enhanced employment generation are needed to sustain poverty reduction. To achieve this, policy makers need to push for the continuation of structural reforms to bring market discipline to old enterprises and encourage entry by new firms.

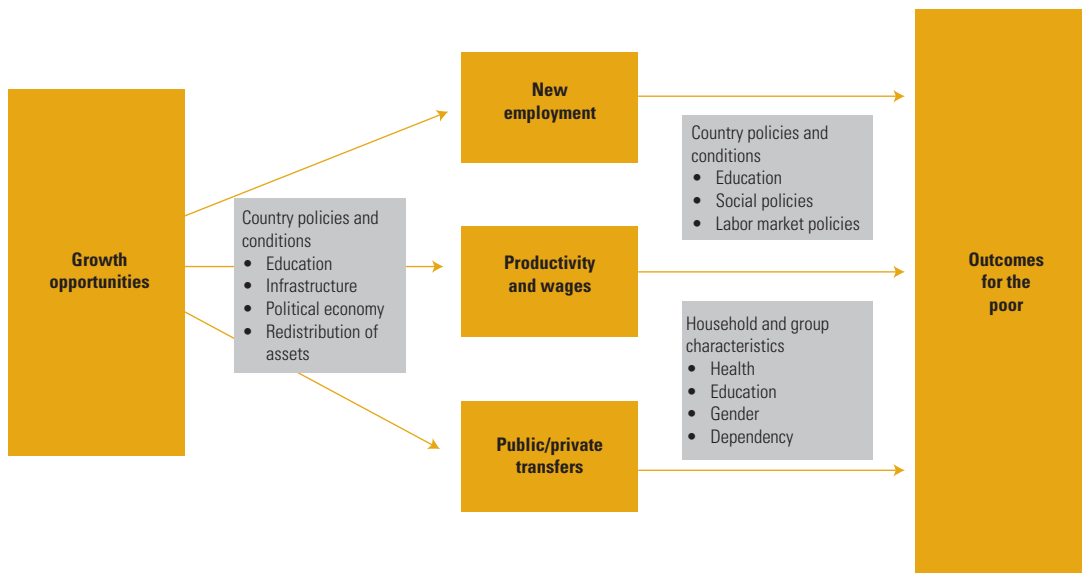
### How the Poor Can Connect to Growth

The poor connect to growth processes in various ways, direct and indirect. This chapter adopts a simple framework (used by “Pro-Poor Growth in the 1990s,” World Bank 2005f) to analyze how economic growth shapes the opportunities available to the poor in the Region.

There are three main channels that affect different groups among the poor. The *unemployed poor* directly benefit from increased employment resulting from growing demand for their labor. The *working poor* gain from rising real wages or higher productivity of their self-employment. Growth can also trickle down to the *nonworking or economically inactive poor* through increased public and private transfers (figure 3.1). Policies affect the scale of opportunities open to the poor. Geographic location, gender, or membership in a specific group (ethnic, political, and so forth) influence access to these opportunities. Other individual circumstances (dependency rates and so forth) determine whether a given growth in earnings or transfer income is sufficient to move a household out of poverty.

Different patterns of growth have different effects on the poor, depending on where they are. Table 3.1 presents labor market profiles of the poor (defined as employment status of the household head) in four representative countries of the Region: Poland (EU-8), Romania (SEE), Russia (middle income CIS group), and Moldova (low income CIS group). This table complements the data on poverty by individual labor market status discussed earlier (chapter 1, figures 1.4 and 1.9). This study adopts the definition of the working poor in line with the one developed by the Indicators Subgroup of the EU Social Protection Committee.<sup>1</sup> It defines the working poor based on the work intensity

**FIGURE 3.1**  
**Connecting the Growth to the Poor**



Source: Adapted from World Bank 2005f.

TABLE 3.1

**Work Does Not Protect Families from Poverty in the Region**

Poverty Profile by Sector and Type of Employment of the Household Head, Selected Countries, around 2002

Household head employment	Poland		Romania		Russian Federation		Moldova	
	Poverty rate	Share of Poor	Poverty rate	Share of Poor	Poverty rate	Share of Poor	Poverty rate	Share of Poor
Sector of employment								
Agriculture	35.8	15.1	26.3	33.7	20.1	24.8	67.1	35.7
Industry	35.3	24.2	9.1	9.8	13.4	14.3	51.3	9.1
Services	19.2	29.5	10.7	21.4	3.2	27.9	48.3	26.9
Type of employment								
Public employee	18.8	16.7	5.0	5.0	5.0	35.4	48.9	11.6
Private employee	31.8	35.4	7.6	11.6	5.5	28.2	56.3	35.6
Self-employed	25.7	16.8	26.3	48.3	9.9	3.4	61.9	24.3
Employed	25.6	69.0	14.8	64.9	6.6	67.1	56.7	71.4
Not employed	30.4	31.0	16.3	35.1	12.7	32.9	57.4	28.6
Total	27.1		15.3		8.6		56.9	

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

Note: For Poland \$4.30 a day at 2000 PPP is used as a poverty line; for other countries in this table \$2.15 is used.

of the household as a whole. If no member of a household with work-capable members worked for even a single day in the reference period, such a household is classified as “jobless”; all other households with employed work-capable members are classified as “working.”

Work does not protect families from poverty in the Region. Table 3.1 shows that the working poor (in a broad sense) constitute two-thirds of the poor. Their risk as a group is noticeably lower than the average poverty incidence, especially in Poland and Russia, but it is definitely above zero everywhere. There are also clear differences across sectors, with agriculture characterized by an elevated poverty risk and services by a significantly lower risk. The growth of the service sector, therefore, can be expected to have different consequences, depending on whether it is translated into the increase in *employment* (in which case, it will strongly contribute to poverty reduction) or the rise in *earnings* (in the latter case, the impact on poverty will be minimal because workers in the sector are above the poverty line already). With regard to ownership structure, the public sector has the lowest incidence of poverty, while self-employment is characterized by the highest incidence.

These channels may reinforce each other, but they can also interact negatively. There are complex interactions between the three channels presented in figure 3.1. For example, if wage growth outpaces productivity improvements, it may depress the demand for labor. Excessive and poorly designed transfers may create dependency traps and discourage the poor from taking advantage of new

employment opportunities. Underdeveloped safety nets may, on the other hand, prevent the poor from changing jobs, thereby locking them into low-productive activities.

This chapter is organized around the three channels presented in figure 3.1. The next (second) section presents trends in wages, employment, and public and private transfers during 1998–2003. The third section assesses not only how well the poor in the Region were able to take advantage of new opportunities by entering the labor market or moving to more productive and remunerative occupations but also how well they were served by the transfer system. The fourth section explains why the poor were able to connect to growth in different degrees. The fifth section concludes by reviewing the main findings and discussing implications for policy.

### **Economic Opportunities Have Expanded**

Rapid real wage growth outpaced employment generation in the Region. Figure 3.2 presents the evidence on broad economywide trends in employment and wages. It shows that between 1998 and 2003, *real wages* increased in all countries in the Region. Successes in generating new employment were less impressive, especially in SEE and the EU-8, where job destruction during the period exceeded job creation (see box 3.1).

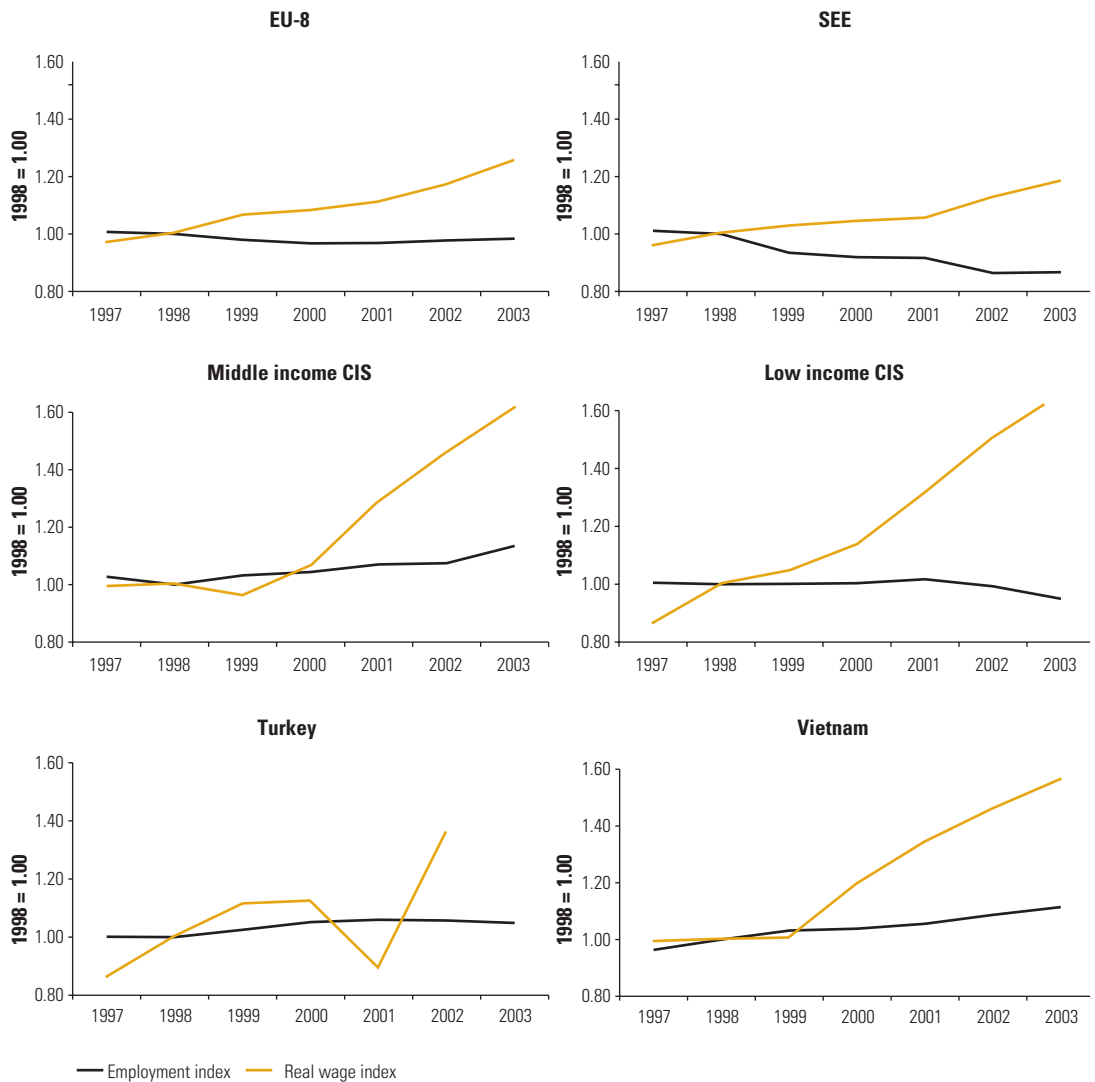
In the poorest CIS countries, average real wages have almost doubled since 1997. This rebound should be put in an historic context. In the early 1990s, real wages in transition economies fell sharply. In CIS countries, where enterprises adjusted to the fall in output by delaying salaries rather than by shedding redundant labor, real wages generally fell more than in the EU-8, where enterprise restructuring was carried out through labor retrenchment. Since the mid-1990s, real wages have recovered everywhere, rising faster than output and productivity in most cases. Comparison with Vietnam in figure 3.2 suggests that rapid increases in wages (from a low base) are not unique to the Region, but issues of sustainability are key (discussed in the last section of this chapter).

Average wages are above the poverty threshold for most countries in the Region. The increase in real wages translated directly into raising consumption of workers and pulled many out of poverty. Although around 1998, practically all countries in the low income CIS group had average wages below the poverty standard (\$2.15 a day per capita),<sup>2</sup> in 2002, wages would put an average worker in poverty only in Tajikistan. In the EU-8 and SEE (except for Serbia and Montenegro), average wages also exceeded the economic vulnerability threshold (\$4.30).

FIGURE 3.2

**Real Wage Growth Typically Outpaced Net Employment Growth in Transition Economies**

Real Wages and Employment by Country Groups and Benchmark Countries; 1998 = 1.00



Sources: ILO Key Indicators of the Labour Market (KILM); LABORSTA (ILO); General Statistics Office of Vietnam; and Turkey's State Planning Organization.

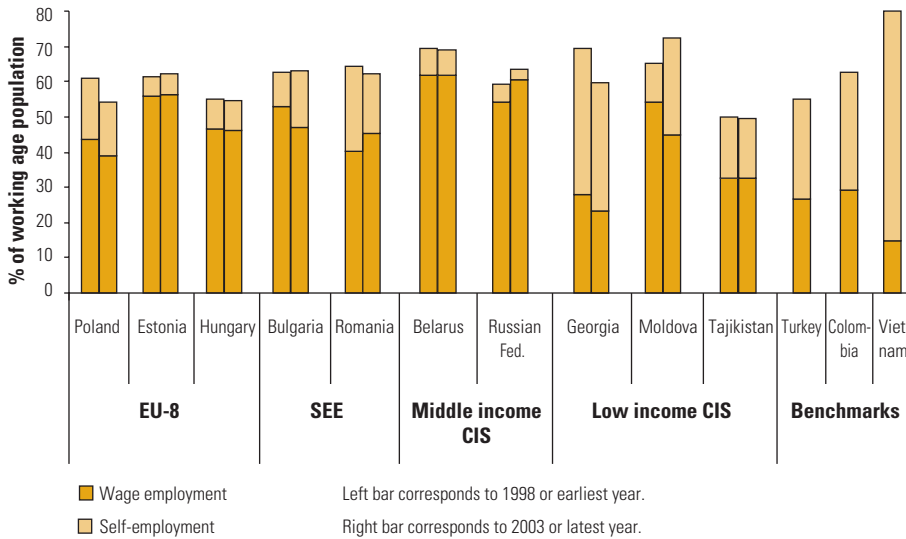
Note: The following countries were used to compute averages. Wage data are average wages of full-time workers in all sectors of economy deflated using CPI indexes. Simple averages are used. The Consumer Price index was used to deflate current wages. For Vietnam: Data on wages includes only state sector employees. For Turkey: Wage data is for private sector employees only. Employment data before 2000 included persons 12 years or older, and later—persons 15 years or older. Employment data is for civilian employment only.

The structure of employment has changed, even though employment levels might have been stable or declining. Figure 3.3, based on household data (which is typically different from official unemployment data, as discussed in box 3.1) reports dynamics of employment for selected countries in the Region and for benchmark countries, breaking

**FIGURE 3.3**

**The Structure of Employment Has Changed**

Wage- and Self-Employment Rates Over Time for the Region and Benchmark Countries



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

Note: Employment and self-employment levels are derived from household survey data and may differ from official statistics; includes full-time and part-time employment with at least one hour of gainful work in the reference period of the survey. The age brackets are 16-64 (inclusive) for all countries.

it down by wage employment and self-employment. In Bulgaria, Georgia, Moldova, Romania, and Russia, noticeable structural shifts between self-employment and wage employment occurred during the period. But even in 2002, all transition economies in the Region (except for Georgia) had significantly lower rates of self-employment, compared with benchmark countries. It suggests that there exists a potential for further shifts in the employment structure (box 3.1).

The major source of new employment in low income CIS countries has been the growing sector of self-employed (own-account) workers. Self-employment was the main source of employment growth in the low income CIS group. In these countries, self-employment accounts for about half of total employment, compared with 17 percent and 20 percent for middle income CIS countries and the EU-8, respectively. Figure 3.3 shows significant reallocation between two main forms of employment, wage employment and self-employment, suggesting the existence of large flows in the labor market.

The process of labor reallocation between sectors is far from over. The transition process has disproportionately affected the manufacturing sector, resulting in a reduction in the share of employment in industry, while the service sector share of total employment has

## BOX 3.1

**In Most Countries, Household Survey Data Report Higher Employment Figures than ILO Statistics**

This report relies on information from the Household Budget Survey (HBS) or variations on it, such as the Integrated Survey or the Living Standards Measurement Study (LSMS). Even though this type of data is not primarily intended to measure employment, it provides representative coverage and collects information on earnings alongside information on characteristics and activities of household members. The HBS programs across transition countries have benefited from international technical assistance, with a fair degree of useful unification and standardization. As a result, their quality is sound. HBS data have been used extensively in empirical studies that explore the relationships between employment, earnings, and poverty. However, HBS-based figures may differ from official labor data, which rely on different sources. As the table in this box suggests, trends in employment, as reflected in different sources, point in the same direction (except for Bulgaria, Georgia, and Moldova). Such discrepancy is not unique to the Region, with HBS data generally capturing higher employment ratios than specialized labor market surveys. Such a discrepancy may come from a different reference period to qualify respondents as employed (in the HBS, typically a longer survey period) or to better capture some informal activities in the HBS/LSMS integrated surveys.

**Employment Rates from HBS/LSMS and Official Labor Data, Percentage of Population**

	EU-8						SEE			
	Poland		Estonia		Hungary		Bulgaria		Romania	
	1998	2002	2000	2003	2001	2002	1995	2003	1998	2002
Survey	60.9	54.0	61.4	62.3	63.1	61.4	61.6	62.7	63.9	61.9
ILO data	59.0	51.5	60.3	62.0	56.5	55.5	42.2	41.5	64.2	57.6
	Middle income CIS				Low income CIS				Benchmarks	
	Belarus		Russian Fed.		Georgia		Moldova		Turkey	Colombia
	1998	2002	1999	2002	1999	2002	1998	2002	2002	2002
Survey	69.7	67.7	64.0	67.3	69.2	59.7	64.2	71.0	55.0	62.8
ILO data	65.4	64.3	57.6	65.0	49.5	53.2	52.9	52.4	50.8	51.6

Sources: World Bank staff estimates using data from ECA Household Surveys Archive, ILO Key Indicators of the Labour Market (KILM), and Labor Statistics (LABSTAT), <http://laborsta.ilo.org/>.

Note: Age brackets in HBS/LSMS are chosen to be consistent with the official definition.

generally expanded in response to rising demand for services from both consumers and enterprises (World Bank Forthcoming-a).

The shifts of employment between sectors of the economy continued between 1998 and 2003. Figure 3.4 reports shifts in employment between agriculture and services over the past five years. In most countries, even where aggregate employment ratios have been stagnant, the shift of employment between sectors continued. These shifts imply that

in a typical country, at least 5 percent of workers change their jobs on a net basis.<sup>3</sup> Data for two benchmark countries (Colombia and Turkey) suggest that these developments are in line with sectoral reallocation observed in rapidly developing economies with structural transformation. Expansion of services, a general pattern observed in all countries in the Region, is reflecting a global trend and has generally meant good news for the poor in the Region because this sector is characterized by the lowest poverty risk (see table 3.1). In contrast, the evolution of agricultural employment varies by subregion. In most EU-8 countries, agricultural employment has fallen, and its share is now close to the EU benchmark; however, agriculture employment has increased slightly in most SEE and low income CIS countries.

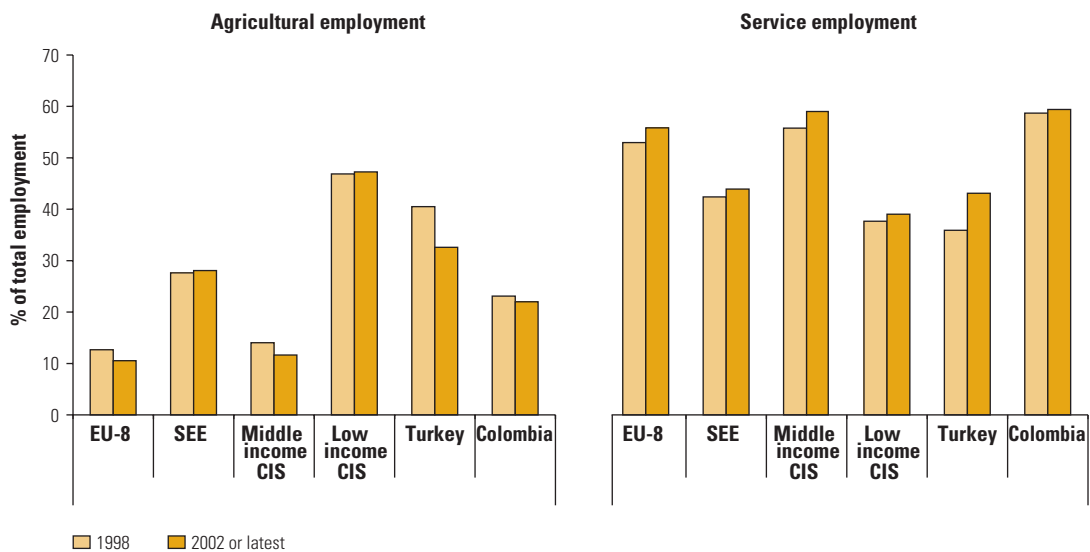
Employment shifts have generally enhanced productivity. The implications of the reallocation of labor across sectors are better understood by taking into account the productivity differentials between sectors. Data on sectoral productivity (measured as value added per worker) reported in figure 3.5 are fully consistent with the poverty profile by sectors of employment (table 3.1): higher productivity implies lower poverty.

Figure 3.5 also illustrates differences in productivity levels across sectors and across country groups. In EU-8 and middle income CIS coun-

**FIGURE 3.4**

**Employment in Service Sector Expanding; in Agriculture, Mixed**

Structure of Employment by Sectors for Subregional Groups and Benchmarks, 1998–2003



Sources: ILO Key Indicators of the Labour Market (KILM) database and World Bank staff estimates.

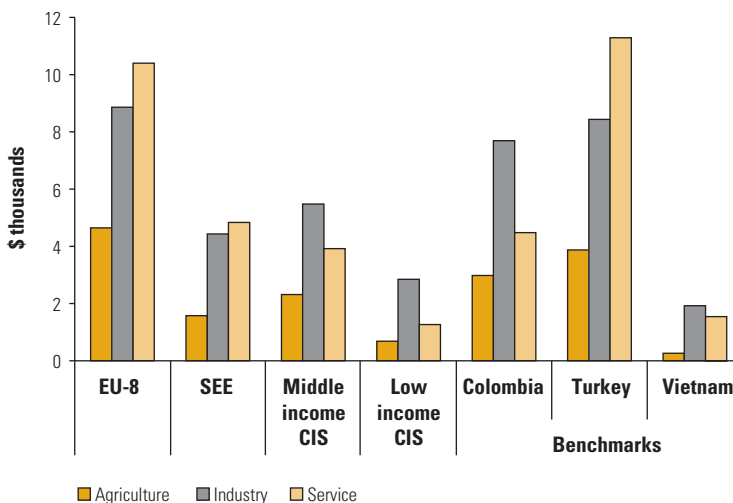
Note: In 2000 US\$. For this figure CEE countries include the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovak Republic, and Slovenia. SEE countries include Bulgaria, Croatia, and Romania. Low income CIS countries include Armenia, Azerbaijan, Georgia, the Kyrgyz Republic, Moldova, Tajikistan, and Uzbekistan. Middle income CIS countries include the Russian Federation.

tries, the recent shift in employment away from agriculture and into services can be seen as movement into more productive sectors. It also reflects general trends in productivity-enhancing job reallocation within and across industries, or resource flows from less productive to more productive firms within industries (Brown and Earle 2004a and b). While EU-8 countries approached or exceeded levels of productivity typically observed in middle-income developing economies, the middle income CIS group and SEE significantly lagged behind. At the same time, low income CIS economies exhibit levels and patterns of productivity typical of low-income developing countries.

The increase of agricultural employment in the low income CIS group also potentially enhances productivity. In low income CIS countries, agricultural self-employment has underpinned the growth of aggregate employment and the reduction of poverty. Because it generally reflects the movement of people from unemployment (or potential unemployment) into agricultural self-employment, the growth of agricultural employment has improved household welfare. In fact, the evidence presented in this report (see box 3.2 and appendix B. Key Poverty Indicators, table 3) suggests that where labor intensity is highest (that is, where the ratio of labor to land is high, as is typical in the poorest CIS countries),

**FIGURE 3.5**  
**Value Added per Worker Is Lowest in Agriculture**

Sectoral Value Added per Worker, Subregional Groups and Benchmarks, in 2000 PPP Dollars



Sources: World Bank World Development Indicators (WDI) database; ILO Key Indicators of the Labour Market (KILM) database; and World Bank staff estimates.

Note: In 2000 US\$, 2002 or latest available year. For this figure CEE countries include the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovak Republic, and Slovenia. SEE countries include Bulgaria, Croatia, and Romania. Low income CIS countries include Armenia, Azerbaijan, Georgia, the Kyrgyz Republic, Moldova, Tajikistan, and Uzbekistan. Middle income CIS countries include the Russian Federation.

**BOX 3.2****The Role of Agriculture in Transition**

Transition to market has affected agriculture through several channels. The liberalization of prices and the trade and subsidy cuts caused a dramatic decline in farm profitability and rural incomes in the Region at the onset of the transition. Reduced domestic demand, with falling incomes and subsidy cuts, was reinforced by falling foreign demand and increased import competition with trade liberalization. Land reforms, farm restructuring, privatization of agrifood companies, and liberalization of markets have initially caused important disruptions and sometimes reinforced output declines and income falls. More recently, these reforms have been sources of growth.

The process of reforms, the implementation, and the effects, both initially and more recently, have varied tremendously between countries. There are differences between groups of countries in the Region in the levels of agricultural productivity and implications for labor markets and poverty. Productivity in agriculture remains lowest in low and middle income CIS countries, but it is also relatively low compared with other sectors in national economies elsewhere. The employment levels are high in the low income CIS group and SEE. In some EU-8 countries (Hungary), agricultural productivity was increasing very fast and converged to average levels, while in others (Poland), the gap remains wide open. But employment levels in agriculture are declining very rapidly there. Thus, the challenges and policy implications are different.

In the EU-8, large-scale agriculture led productivity growth, with major labor shedding from farms. Effects on poverty have been mitigated by increased social transfers. In those countries, large-scale privatized farms have laid off surplus workers, who have either found jobs in other sectors, become unemployed, or gone into early retirement. The countries could manage associated fiscal costs because initial levels of agricultural employment were low. Productivity growth came mainly from major gains in labor productivity on large farms, rather than from yield increases, which started only as of the mid-1990s.

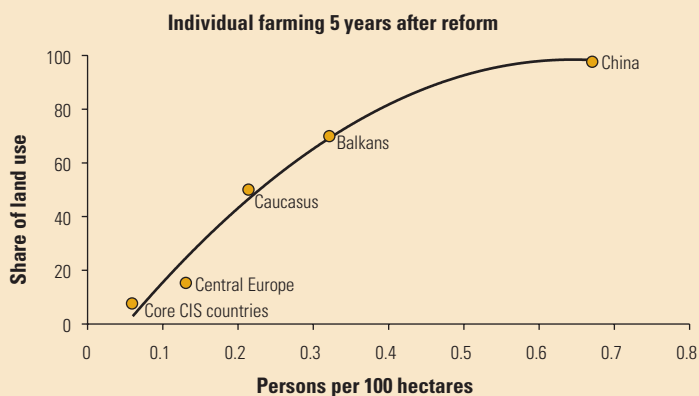
SEE faced different challenges. Rural households in Bulgaria, Romania, and countries in the Balkans possessed relatively developed and capital-intensive agricultural production systems, and productivity gains from shifting to small farms were less than those in poor, labor-intensive agricultural countries, while the costs of losses of scale economies and technology disruptions were larger. With limited access to credit, inputs, and technology and few off-farm employment opportunities in rural areas, there were many constraints limiting growth or investments. The safety net systems were less developed than in the richer Central European countries, and households that were laid off by large farms had to fall back to farming to complement their income. As a consequence, relatively few people left farming, and there was even some inflow of labor into agriculture as people laid off in industry fell back to semisubsistence agriculture. The problems were further complicated because land restitution concentrated land ownership in the group of older households. Young and dynamic people left the rural areas in search of better op-

portunities in the urban areas, and often abroad, pushing up the share of older, low-skilled, and less-educated people in rural areas and dampening productivity improvements.

In the middle income CIS group (for example, Kazakhstan and Russia), large farms have remained, and the restructuring of these large-scale farms did not lead to significant income gains in rural areas, but it has not resulted in open unemployment either. This can be explained by the more capital-intensive nature of agriculture in these countries. Indeed, raising productivity of large farms depends to a much greater extent on access to other inputs and factors, which collapsed in the early years of transition. Low agricultural productivity in these countries is further exacerbated by relatively poor human capital stock. The recent improvements in rural poverty in those countries are likely due to an improvement in agricultural prices and overall liquidity in the economy, which have pushed up wages and improved services and wage payments, but not through significant gains in productivity.

In the low income CIS countries, although it is true that observed productivity is extremely low, one should take into account the extremely low capital intensity of this production, which often developed as a coping strategy. An important factor mitigating against even lower agricultural productivity was land reform. Land distribution to poor rural households during transition induced important productivity gains and enabled self-employment in agriculture, which helped mitigate the negative shock of transition. Figure 3.6 shows the high degree of correlation between labor intensity in agriculture and the growth of household farming. In labor-intensive rural economies, access to land through distribution of land plots to rural households induced important growth in productivity and income in rural areas. This is what happened in China in the late 1970s, in Vietnam in the mid-1980s, in Albania in the early 1990s, in the Kyrgyz Republic in the mid-1990s, in Azerbaijan in the late 1990s, and in Moldova after 1999 (which may explain why Moldova is the only country where rural poverty declined much more strongly than urban poverty during 1998–2003).

### Factor Intensity and the Growth of Household Farms



Sources (figure): Rozelle and Swinnen 2004; (box): Macours and Swinnen 2004.

the ratio of rural to urban poverty rate also tends to be lower—an association consistent with the critical role of labor-intensive agriculture in mitigating poverty. Nevertheless, the expansion of agricultural employment in low income CIS countries also reflects the reallocation of labor toward a sector where productivity is lowest and where further increases in productivity may not be possible without addressing market imperfections in factor and output markets. By contrast, reallocation of labor to services has been slow (see box 3.2).

Changes in employment and earnings discussed so far represent only a part of the channels that connect the poor to growth. Changes in the real value and direction of transfers represent another major channel. The Region is characterized by a significant amount of redistribution that takes place both through the government budget in the form of taxes, social contributions, and transfers and through private channels in the form of remittances, gifts, and in-kind intrafamily reallocations (see World Bank 2000a). At the onset of transition, the severe recession led to large declines in government revenues throughout the Region and consequently large declines in social safety-net spending. However, better macro and fiscal performance after 1998–99 helped to address major gaps in financing safety nets and to increase the real value of transfers. This has facilitated the regularization of pensions and social benefit payments and relieved poverty pressures on the working poor and on the elderly.

There are substantial differences between countries in the Region in the role of public transfers, with richer countries spending two times more in GDP shares than poorer countries do. By 2000, spending on social security and welfare in the low income CIS group constituted (on average) 6.5 percent of GDP, while in the EU-8, it represented 13.8 percent of GDP. Fiscal management (with some exceptions) has been careful over the period and avoided major spikes in transfer payments, but even with roughly stable shares of GDP, economic growth resulted in increases in real transfer payments.

The expansion of real transfers is reflected in the real value of pensions, which constituted between 70 percent of all public transfer spending in the EU-8 and 50 percent in the poorest CIS countries. Table 3.2 shows that there was an increase in the real value of pensions in all country groups, particularly strong in SEE and the middle income CIS countries. Public transfers (at least pensions) played a much more limited role in the low income CIS countries, and an average public pension remains well below the poverty threshold. However, very high levels of transfer payments in the EU-8 and SEE

**TABLE 3.2**  
**The Evolution of Pension Spending by Groups of Countries**

	EU-8		SEE		Middle income CIS		Low income CIS	
	1998	2002	1998	2002	1998	2002	1999	2002
Pension spending/GDP	9.72	9.47	7.80	8.45	6.85	6.90	4.50	3.34
Real Pension Index	1.00	1.05	1.00	1.30	1.00	1.40	1.00	1.04
Pension Spending, \$*	871	917	434	565	241	339	59	61

Source: Regional Fiscal Database

\* Annual per capita in 2000 PPP

Note: EU-8 = Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, and Slovak Republic; SEE = Albania, Bulgaria, and Croatia; middle income CIS = Belarus, Kazakhstan, the Russian Federation, and Ukraine; and low income CIS = Armenia, Azerbaijan, Georgia, the Kyrgyz Republic, and Moldova.

are causes for concern because they may introduce perverse incentives to the nonworking poor and contribute to fiscal imbalances that hamper prospects for growth.

Private transfers compensated limitations of public transfers in low-income countries. Data on private transfers are extremely scarce in the Region, but they are believed to exceed by several times what is available as public social welfare, especially in countries where remittances play a major role (see box 3.3). As economic growth in several large countries in the Region attracted migration of workers from poorer economies, remittances have expanded too.

The evidence presented in this section suggests that the economic growth in the Region's countries translated into an expanded set of opportunities open to people. Were the poor able to take advantage of these opportunities? The next section assesses how the gains from economic growth were distributed among various groups.

### The Poor Took Advantage of New Opportunities

Opportunities have expanded everywhere in the Region, in the form of either increased earnings or new employment. Parallel increases in public and private transfers made it easier for the poor to connect to growth. Among these factors, increasing real wages were of paramount importance so far. Figure 3.6 presents evidence on how the gains in real wages were associated with poverty reduction in the Region between 1998 and 2003, as well as in several benchmark countries. Each symbol on the graph represents a period of poverty changes as measured by the survey data and a corresponding change in the economywide average real wage. The Region's countries clearly stand out in the size of the changes in real wages and in their impact on poverty.

**BOX 3.3****The Role of Remittances in the Region**

During the past 15 years, there were huge migration flows within the Region, as well as from countries in the Region to the rest of the world. By 2003, close to 30 million citizens of the Region's countries were residing abroad. It is evident that such size of migration, most of which is due to economic reasons, has had an effect on the economies of both the receiving and sending countries. Migrants' transfers to relatives and friends at home have recently gained prominent importance in several countries of the Region. In 2003, remittances to the Region from relatives and friends working or living abroad amounted to about 10 billion U.S. dollars. The Balkans and Eastern Europe received the major bulk of total migrants' transfers into the Region. In Albania, Bosnia and Herzegovina, Moldova, and Tajikistan, they account for more than 10 percent of GDP (in Moldova, a quarter of GDP in 2002). These numbers, based on the balance-of-payments statistics, are likely to underestimate the scale of remittances because of the predominance of informal channels to remit. Remittances can play an important role in poverty alleviation. They spur domestic consumption, investments, and human capital accumulation and thus contribute to growth. The study of their effects on the poor is made difficult by relatively poor reporting in the household surveys, but available statistics suggest that the poor rely more on remittances than the nonpoor.

*Source:* Chernetsky Forthcoming.

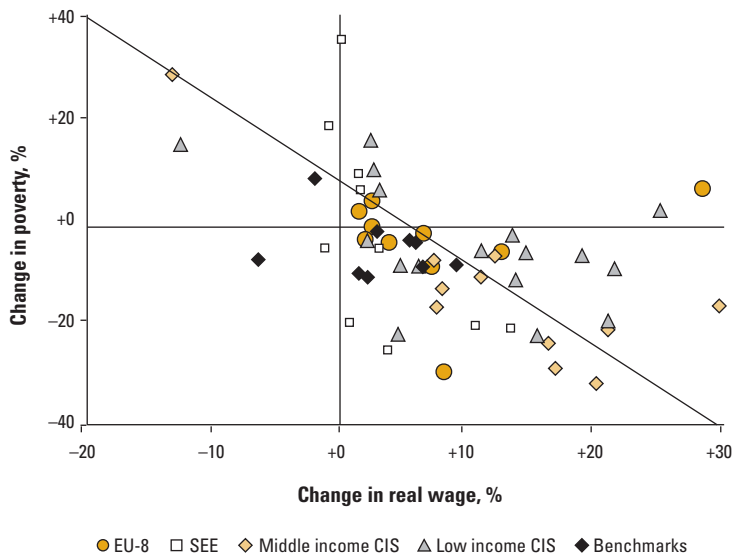
The differences across countries highlight the different roles of channels connecting the poor to growth. Some growth periods in the EU-8 resulted in a sizable wage growth in highly productive sectors, with initially zero poverty accompanied by fixed or falling overall employment levels. Thus, there are some periods over which wage and poverty changes were not correlated. In SEE, employment has fallen; gains in real wages have been moderate, while transfers have expanded considerably; hence, the potential for dissociation between poverty and wages. In the middle income CIS group, employment opportunities, earnings, and transfers have all increased at a similarly high pace, and the relationship between wages and poverty was the tightest. Finally, in the low income CIS group, there was a growing divide between expanding job opportunities in less-productive agriculture and stagnant employment in increasingly better-paid, more-productive sectors. These differences had important implications for the poor.

Higher average economywide wages were good for the poor. Figure 3.6 suggests that despite some dissociation between wage and poverty movements in the Region, there remains a strong link between changes in real wages and poverty. Earnings growth helps

FIGURE 3.6

**Real Wage Changes Correlate with Poverty Changes**

Change in Poverty and Change in Real Wages in Percentage by Country Groups, Annual Periods, 1998–2003



Sources: World Bank staff estimates using data from ECA Household Surveys Archive for poverty and ILO for data on wages. Data on benchmark countries are from World Bank 2005f and include Bangladesh, Bolivia, El Salvador, Tunisia, and Vietnam during 1990–2002.

Note: The line represents a trend derived with the OLS regression across points representing the Region's countries.

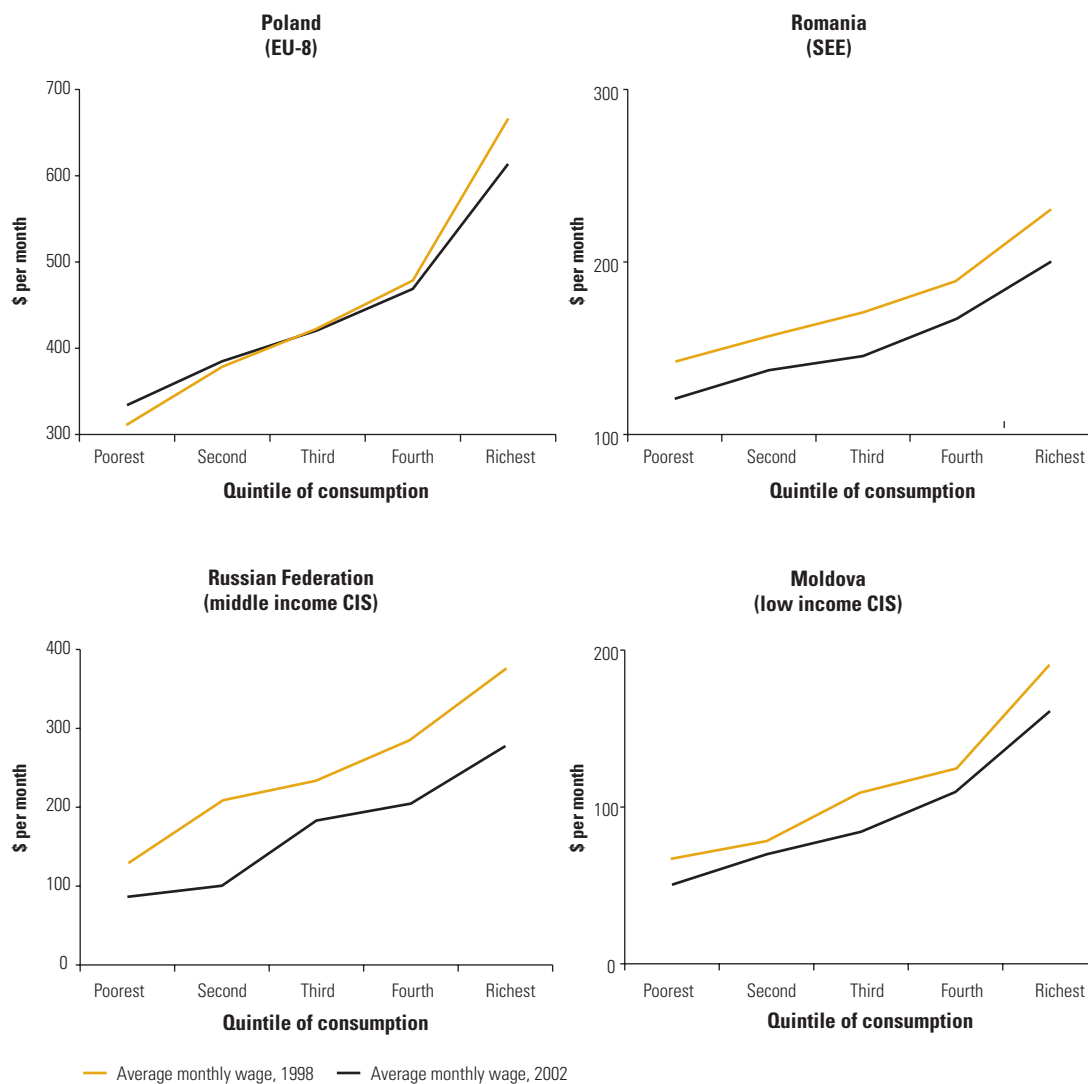
the working poor. Because many poor in middle income CIS countries were working poor, employed for wages, the relationship between real wage growth and poverty reduction is the strongest for this group. But if the working poor represent a smaller fraction of all poor (in the EU-8 and SEE), or the working poor consist predominantly of the self-employed (low income CIS countries), the real wage gains will have less-consistent effects on poverty. Moreover, if the growth in wages is not equitable, increases in inequality may undermine the impact of wage gains on poverty reduction.

The poor gained from wage increases in many countries. Figure 3.7 uses household survey data to examine the relationship between average economy-wage changes and poverty by tracing the evolution of real wages across the spectrum of distribution. It shows that real wages have typically improved for both rich and poor workers, but by different degrees. In Poland, only the well-off have gained, while in Moldova, Romania, and Russia, there was a similar rate of increase for the top and bottom quintile.

Occupational wage data also suggest broad-based wage growth across the Region. The International Labour Organization (ILO) data on monthly earnings for selected occupations for a sample of CEE and CIS countries during 1998–2003 also suggest that real earnings have generally increased across occupations and across countries. Most important, real earnings of blue-collar workers have increased, in some countries more rapidly than in the others. Wages of construction laborers and welders have increased by about 30–50 percent

**FIGURE 3.7**  
**Poor Gained from Real Wage Gains in SEE and the CIS**

Real Wage by Quintiles of Consumption: 1998–2003 (\$ per month in 2000 PPP)



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

Note: Per capita consumption, reported monthly wages in 2000 PPP US\$.

between 1999 and 2003 in the Czech Republic, Latvia, and Moldova, but only by 5–10 percent in the Kyrgyz Republic, Poland, and Romania (ILO 2004).

Wage inequalities have recently declined, especially in countries with initially high levels. Chapter 2 provided decompositions of inequality changes and highlighted the role of wages as a driver of the overall inequality outcomes. Direct estimates of the Gini coefficient for wages based on survey data show stability or declines for most countries in the Region. Declines in earnings inequality were also more pronounced than the increases.<sup>4</sup>

Improvements of wage distribution in CIS can be traced to a reduction of wage arrears. As economies have recovered, the incidence of wage arrears has fallen in all CIS countries. In Russia, for example, the proportion of workers with arrears rose steadily from 1994 through 1998, when it reached 63 percent, then fell sharply in 2000 to 29 percent. Similarly, the average number of overdue monthly wages fell from 3 to 1 between 1998 and 2000. At its peak, wage arrears were regressive in impact, driving up inequality among wage recipients (Lehmann and Wadsworth 2001). Not surprisingly, arrears reduction has been beneficial to equality (World Bank 2005g).

Returns to education have stabilized. Extensive literature has emerged in recent years documenting the rapid increases in returns to education during the early stage of the transition. Few country case studies cover the pretransition period in the EU-8 and middle income CIS countries all the way through the late 1990s using comparable data; those that do suggest that the sharpest increases in returns to skills happened in the early transition and that returns seem to have largely stabilized by 2000 at around 8 percent per year of schooling, a level observed in most market economies.<sup>5</sup>

Nonworking poor had problems connecting to growth in countries with little job creation. In many EU-8 and SEE countries, notably in FYR Macedonia and Poland, unemployment rates have been increasing, despite growth. Over the past five years, unemployment rates have fallen only in a few countries, particularly in the middle income CIS group and the Baltic States. Where major industrial restructuring was postponed (for example, in Bulgaria and Romania in SEE), unemployment exploded in the aftermath of renewed reform efforts.

Another concern is long-term unemployment. The incidence of long-term unemployment in transition economies is higher than that in their advanced-economy counterparts, and some countries have experienced rapidly increasing shares of long-term joblessness among the unemployed. Among advanced market economies, the incidence of long-term unemployment is below 40 percent, and some countries

have successfully reduced long-term joblessness in recent years. In contrast, in the EU-8, some 40 to 50 percent of the unemployed have been jobless for at least a year; the incidence of long-term unemployment has been generally stagnant, although in some countries it has risen rapidly since 1997. For example, long-term joblessness among the unemployed in Poland rose from 38 percent in 1997 to 48 percent in 2002. Over this same period, long-term unemployment increased from 28 percent to 50 percent of the unemployed in the Czech Republic. In low income CIS countries, long-term unemployment is also remarkably high. Some 70 percent in Armenia have been unemployed for at least a year. In the Kyrgyz Republic, the incidence of long-term unemployment among the registered unemployed increased from less than 10 percent in 1995 to nearly 30 percent in 2001 (Babetskii, Kolev, and Maurel 2003). Youth unemployment also remains high throughout the Region, about two to three times the average unemployment rate. This has discouraged many young workers and, in some cases, has led to increasing inactivity.

Women took advantage of new opportunities. Gender inequality in employment over the transition does not point to a specific disadvantage of females (Paci 2002). Transition affected men and women differently; but in nearly two-thirds of the countries, the ratio of female to male activity rates has increased slightly, indicating that women are more likely to be employed than men (only Bosnia and Herzegovina, the Kyrgyz Republic, and Tajikistan show worsening outcomes for female employment). There is limited evidence to suggest a reversal of these trends in the recent past. However, there are also emerging gender differentials in the extent to which formal employment has been replaced by informal economic activity, but with ambiguous effects on poverty.

The poor benefited from expanded job opportunities and lost out where they shrank. Figure 3.8 uses household survey data to see how the employment rate has moved over time for the poor as compared with the rich. It shows that in countries where employment has increased noticeably (Moldova and Russia), all income groups have benefited from this increase, and the poor benefited approximately to the same extent as wealthier households. In Poland, where employment fell, all groups suffered, but the poor suffered disproportionately. In Romania, the employment rate has not moved for any quintile of the distribution, and the poor have an employment rate well below that of the rich.

Where job opportunities have been shrinking, it has hurt youth and workers with poor human capital endowments the most. As mentioned previously, long-term unemployment is high and, in

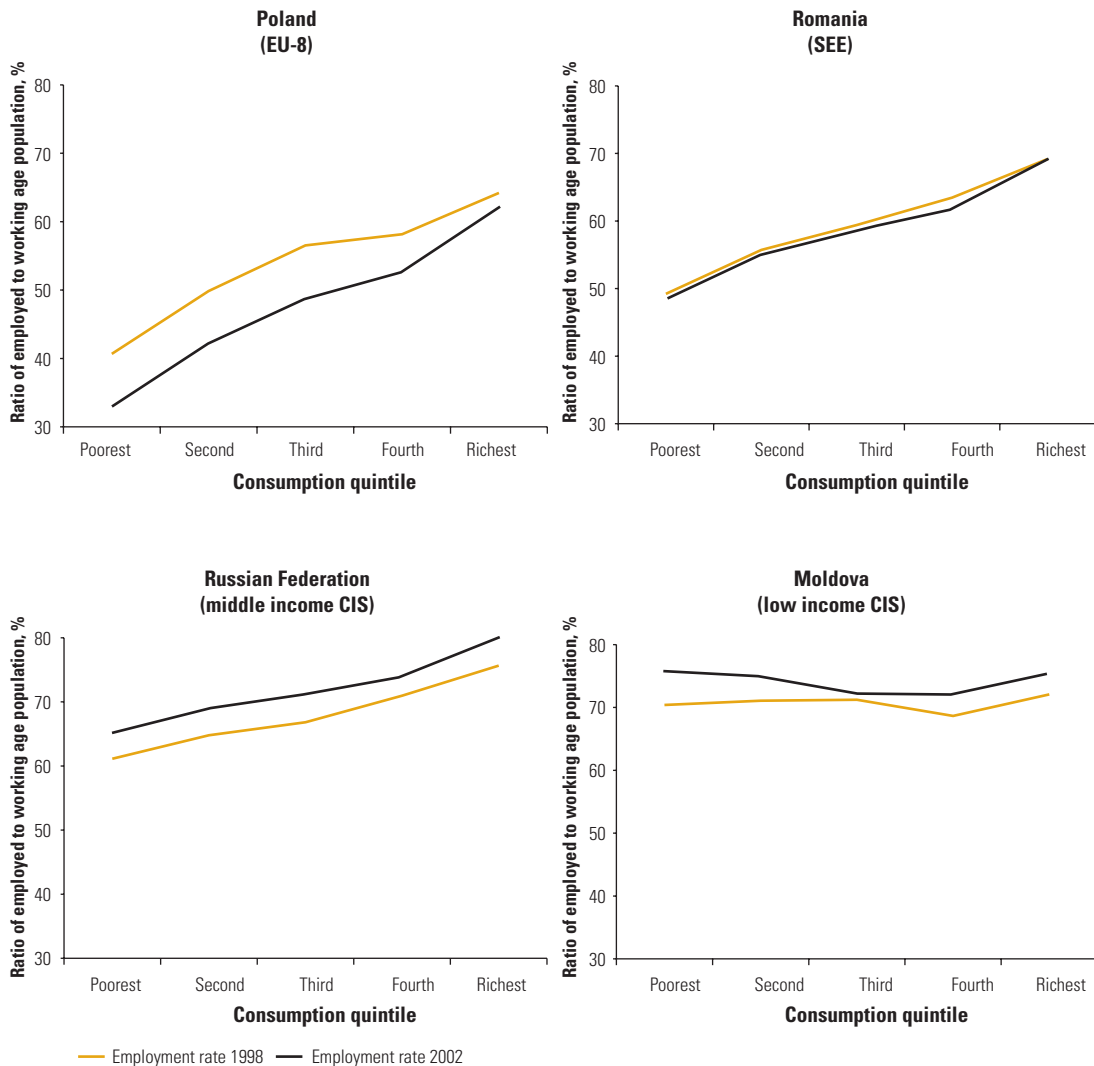
many instances, growing. Across all countries, the bulk of long-term unemployed are those with lower education attainment, inhabitants of rural and remote regions, and representatives of ethnic minorities (for example, Roma in the EU-8 and SEE).

Some groups among the poor literally face handicaps to participating in the growth process through employment. Rising health inequalities could well be an important obstacle to equitable (and sustainable) economic growth and poverty reduction because the relationship between health status and employment is extremely strong. For those individuals who are between ages 40 and 59, Mete and Liu (2005) find that poor health status leads to a 56.7 percentage-point decline in the probability of employment in Romania. Reflecting on the past, deteriorating population health status during transition might have contributed to the decline in employment rates. As for the upcoming challenges in the future, deterioration of health status could emerge as a serious obstacle in achieving higher employment rates, productivity, and (by extension) a more-equal distribution of income.

Unemployment in depressed regions has proven to be stubborn. Bornhorst and Commander (2004) find that regional disparities in unemployment rates are large and grew from 1991 to 2001. In recent years, the gaps between regions with the lowest unemployment rates and the regions with the highest unemployment rates have remained large, about 10 percentage points for most countries for which data are available and more than 50 percentage points in Russia. In Russia, the gap narrowed between 1997 and 2000, but has steadily increased since then. Compared with selected OCED counterparts, transition economies have experienced a higher degree of variation in regional unemployment rates; the dispersion in Russia, in particular, is higher than that in most comparators. Bornhorst and Commander argue that this labor market phenomenon is consistent with rising long-run unemployment. It is also associated with rising inactivity, because high unemployment rates have tended to discourage workers.

As noted earlier, the real value of transfers increased in most countries, and quite substantially in the middle income CIS countries and in SEE. This increase occurred largely through the existing social safety nets, which on aggregate and in most countries in this group are distributionally neutral. This implies that increases in transfers during 1998–2002 were passed on to the poor and nonpoor alike. The story in the low income CIS group is more complex. Although there was a small gain in the overall amount of public transfers, social assistance programs aimed at improving their targeting to the poor, so it is possible that income gains for this group are greater than the averages would suggest.

**FIGURE 3.8**  
**Changes in Employment Rate, 1998–2002, by Quintiles for Selected Countries**



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

Note: Per capita real consumption used to rank households. Employment rate is the share of wage and self-employed among 16- to 64-year-olds.

Private transfers, especially remittances, grew during this period and came to play a major role as a source of income growth for the poor, especially in the low income CIS countries. The employment opportunities that expanded in the middle income CIS countries and easier access to labor markets in developed countries set off migration flows. The ensuing flow of workers’ remittances has been a sizable source of hard currency for many economies (see box 3.3). Massive outflow of migrant labor from low-income countries of the CIS

toward middle-income countries may have also had effects on local labor markets, pushing real wages up.

Public and private transfers not only expanded but their effect on poverty also seems to have become stronger. Where data are available, they suggest that social benefits have also improved in targeting, coverage, and adequacy. The reduction in arrears, particularly in pensions but also in other benefits, has no doubt contributed to these improvements. As a result, social protection transfers have come to play an important role in reducing poverty.

Figure 3.9 puts together available evidence on the coverage of social protection programs in general, and pension systems in particular, across the Region's countries. It is derived from household survey data. To make an assessment of coverage, the poor are defined based on *ex ante* consumption (before the receipt of transfers). As the figure suggests, there is some overlap between social insurance (pensions) and other forms of social protection.

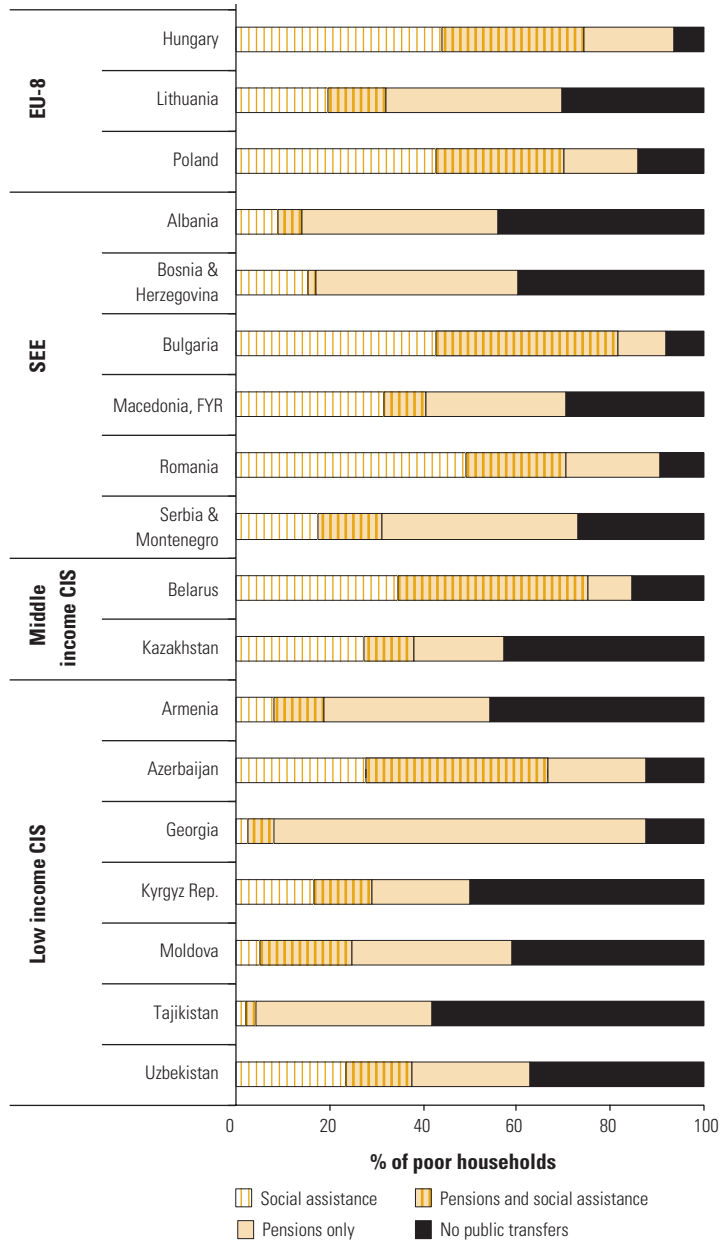
Figure 3.9 shows that social protection programs generally cover the poor quite well. In Azerbaijan, Belarus, Bulgaria, Georgia, Hungary, Poland, and Romania, nearly 100 percent of all poor (assessed based on consumption before transfers) receives some form of social transfer. But even in the poorest CIS countries, coverage rates are high, exceeding 50 percent (except for Tajikistan). But there are stark differences across countries in coverage by social assistance programs targeted at the poor. In EU-8 and SEE countries, close to 80 percent of the poor are captured by these programs. The low income CIS countries show coverage rates around 20 percent (except for Azerbaijan and Uzbekistan). Although the size of transfers in the EU-8 and SEE makes them relatively efficient in reducing poverty, constrained funding of social programs in low income CIS countries, combined with low coverage, translates into relatively small effects on poverty (see table 3.3).

In part, the efficiency of programs in many countries is due to programs targeting the poor increasingly well, although the improvements are slower than anticipated (see box 3.4). In Romania, for example, 50 percent of all social protection spending is going to the poor, compared with 47 percent five years ago, a rather limited success for significant reform efforts. Efficiency also varies enormously between countries. In the Kyrgyz Republic, only 20 percent of funds go to the poor, as opposed to 70 percent in Poland. There is strong evidence that the targeted part of social protection is operating increasingly well (in Kazakhstan, the share of social assistance spending received by the poor increased from 6 percent five years ago to 56 percent in 2003).

**FIGURE 3.9**

**Safety Nets Cover Many Poor in the Region**

Coverage of Social Protection by Country Groups, around 2003



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

Note: Poor are defined based on ex ante consumption levels, \$2.15 is used; see also box 3.4 for detailed references to the ongoing study.

Social protection transfers were helping to reduce poverty, and poverty would have been significantly higher in a hypothetical “no-transfers” situation (table 3.3). Although somewhat simplistic (particularly in assuming no behavioral response in the no-transfer scenario, except in a few instances), the data are nonetheless illustrative of the importance of public transfers to poverty reduction, especially *outside* the low income CIS group.

Data on private transfers are scarce and do not allow any systematic assessment of trends. The limited data on remittances (see box 8) suggest that private transfers play a much more important role than public transfers in low income CIS and some SEE countries. Unfortunately, it is unclear what happened to the distribution of private transfers over time (Chernetsky Forthcoming).

Government transfer policies sometimes conflict with labor supply incentives among the poor, although this is more likely to be an issue in the EU-8 and (to some extent) SEE. The design of public transfer systems often implies high marginal tax rates (withdrawal of benefits) for earnings if the poor move from inactivity and unemployment to jobs. This creates powerful disincentives for the poor for entering the labor market (Poland: World Bank 2004h; the Slovak Republic: World Bank 2002g).

### Why Are Many Workers in the Region Still Poor?

Despite the evident progress to the benefit of the working poor, every third worker in countries of the Region remains poor or economically vulnerable. Although this is a lower incidence than observed globally because of the low workers-to-population ratio in the Region (see box 3.5), the employed nonetheless represent the largest group among the poor.

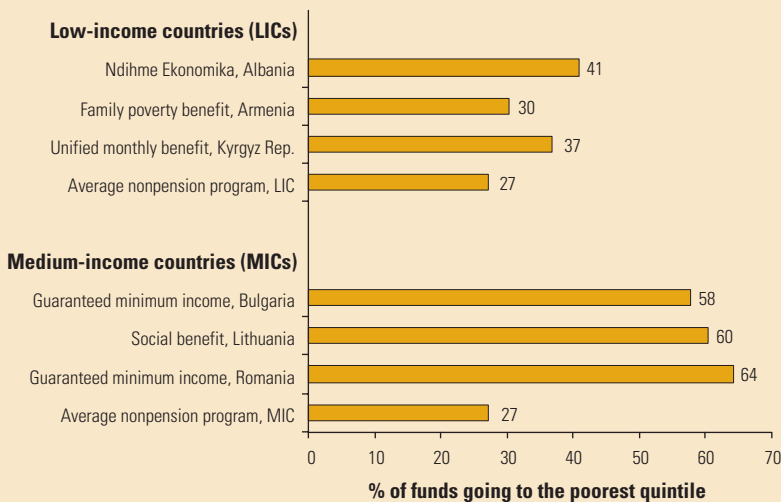
This section provides answers to a question: why, despite gains to the employed across all countries of the Region in the past five years, do many workers remain poor? There are **three groups of explanatory factors**. First, the level of productivity (real wages) in the economy or in a particular sector determines whether an average worker is productive enough to earn incomes above the poverty threshold. Second, group and individual characteristics of workers, their human capital, and dependency rates may explain why their living standards are lower than those of nonpoor workers. Third, policy, institutional, and structural causes inherent in the process of transition explain why, despite similar characteristics, some workers remain in poverty despite the nationwide productivity gains. These three sets of factors are discussed in turn.

## BOX 3.4

**Improvements in Targeting: Lessons from Recent Policy Reforms**

Most countries of the Region target social benefits to the poorest. The range of benefits encompasses social assistance (cash or in-kind), scholarships or free school supplies, health-fee waivers, subsidized medicines, and utility services (heating, electricity, transport, and so forth). Although the overall targeting performance of these programs is very heterogeneous, a few of the Region's programs are among the best performers in the world (Coady, Grosh, and Hoddinott 2004).

To study targeting performance further, the World Bank has studied key design and implementation arrangements of six well-targeted programs in the Region: Family Poverty Benefit (Armenia) and the Unified Monthly Benefit (the Kyrgyz Republic) in the low income CIS group, *Ndihme Ekonomika* (Albania) and Guaranteed Minimum Income (Bulgaria and Romania) in SEE, and the Social Benefit (Lithuania) in the EU-8. All programs under review transfer a larger share of their benefits to the poorest quintile, compared with other social assistance programs (see figure that follows).

**Share of Social Protection Benefit to Lowest Quintile**

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

Although the overall cost of these programs is rather modest, they provide an effective shield against poverty and destitution. Two models seem to emerge. In the EU-8 and SEE, targeted programs are residual programs that serve those households not assisted by other programs, such as social pensions, unemployment benefits, and child allowances. Targeted programs with budgets between 0.25 and 1 percent of GDP are found to reduce the extreme poverty in such countries. In contrast, in the low income CIS countries, fiscal constraints have led to the replacement of the diversified system of social assistance inherited from the socialist regime by one large, targeted program. These programs transfer about 1–2 percent of GDP and cover 25–35 percent of the bottom decile of the population.

Programs that use more than one targeting method to select their beneficiaries have better targeting performance. Although all programs use means or proxy means tests, these are often combined with work requirements or categorical filters to strengthen targeting. All successful programs seek to balance the need to protect the poorest with maintaining adequate work incentives. All programs use a comprehensive indicator of household means, which include both formal and informal income, as well as tests of assets—an important feature for reducing inclusion and exclusion error. An important finding of the World Bank’s evaluation is that administrative costs are moderate, and the marginal costs associated with targeting are only a small component of the total cost.

Source: Coady, Grosh, and Hoddinott 2004.

**TABLE 3.3**  
**Transfer Payments for Social Protection Have Had an Important Role in Reducing Poverty outside the Low Income CIS Countries**

Country	Year	Increase in poverty without all social transfers, %
EU-8		
Poland	2001	141
SEE		
Bosnia & Herzegovina	2001	68
Bulgaria	2001	156
Romania	2002	49
Serbia	2003	41
Montenegro	2002	34
Middle income CIS		
Belarus	2002	143
Kazakhstan	2002	100
Russian Fed.	2002	68
Low income CIS		
Armenia	2001	12
Kyrgyz Rep.	2001	10
Benchmark Countries		
Guatemala	2000	9
Vietnam	1998	5

Sources: For ECA, World Bank, various poverty assessments; for Guatemala, World Bank 2003; for Vietnam, Van De Walle 2002.

Note: Simulations use national poverty lines. Some behavioral response is assumed in Romania (50 percent of transfer income is replaced) and Serbia (72 percent of transfer income is replaced in rural areas, 87 percent in urban areas). For Guatemala, transfers include both public and private transfers.

## Sectoral Profile

Low levels of productivity in the low income CIS countries explains why most workers are poor there. Figure 3.5 showed average levels of productivity (in US\$ value added per worker) by groups of countries and sectors in the Region. Clearly, when an average agricultural worker

**BOX 3.5****Global Trends in the Number of Working Poor**

A recent ILO report (2004) finds that some 1.39 billion workers and their families are living below the US\$2-a-day level in the world. It estimates that one-third of all employed *in transition economies* were poor around 2003. This aggregate estimate is quite close to the assessment presented in this report, based on actual country-level data. There are important differences in the way ILO and this report estimate the number of working poor. The difference in PPP is one source of these differences (ILO used poverty estimates based on 1993 PPP). This report uses different poverty lines (\$2.15 in CIS countries, but \$4.30 in the EU-8). The ILO estimates the number of working poor based on the overall poverty rate multiplied by the total labor force. The formulation *assumes* that the poverty rate of working-age people is equal to that of the population as a whole and that the labor force participation rate of the poor is equal to that of the population as a whole. Both assumptions, according to evidence presented in appendix tables, may not be true for individual countries of the Region, but they reflect the average levels well. Direct evidence on consumption levels of those in employment used to establish whether they are poor or not poor provides much richer insights.

Source: Kapsos 2004.

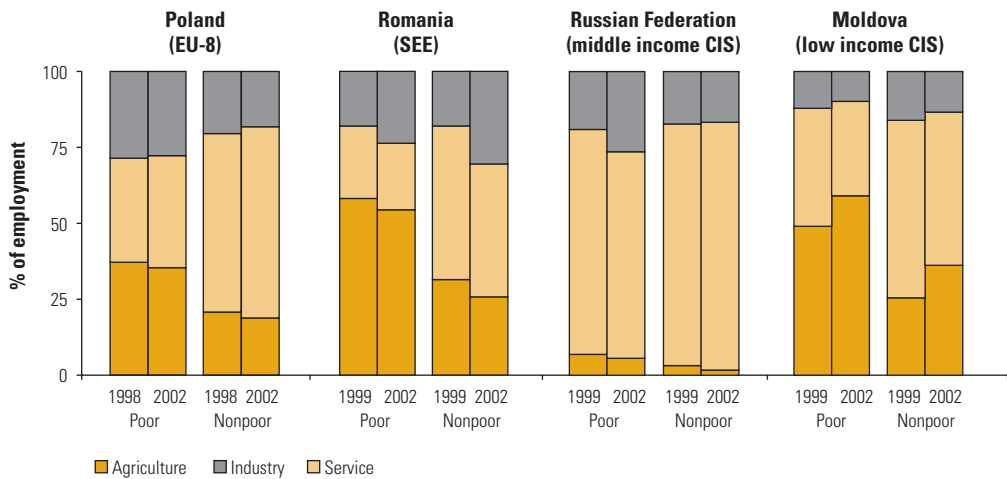
in the low income CIS group adds less than 2 dollars per day of value to output, it is impossible to expect that he or she will not be poor.

Low agricultural productivity in the middle income CIS countries and in SEE drives agricultural workers into poverty. Low productivity of agriculture in these countries keeps workers there mired into poverty. It is important to understand country variations and patterns of change (see box 3.2), which reflect not only the initial conditions of these countries but also their policies. The analysis suggests that low agricultural productivity in these countries reflects a failure to address the main constraints to rural growth.

The poor have not moved to more-productive occupations to the same extent as the nonpoor have. Comparison of changes in sectoral employment shares over time shows that the differences in employment patterns between poor and nonpoor remain large. Figure 3.10 reports results for four representative countries (similar data for other countries yield similar conclusions). The poor are overrepresented in agriculture, the least-productive and shrinking sector, but in some countries, employment in agriculture has even expanded for the poor.

The poor are overrepresented among the self-employed, especially in low income CIS countries. In principle, self-employment covers a wide range of occupations, from aspiring entrepreneurs to subsis-

FIGURE 3.10

**Sectoral Wage Employment for the Poor and Nonpoor in Selected Countries**

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

Note: Sectoral employment data are derived from household survey data and may differ from official statistics; includes full-time and part-time employment with at least one hour of gainful work in the reference period of the survey.

tence farming. Subsistence agriculture, however, is normally characterized by high poverty risks. Applying the criteria for defining subsistence farming discussed in chapter 2 (analysis of inequality), 20 percent of the population in Georgia, 24 percent in Kazakhstan, and 40 percent in Moldova rely on subsistence farming as the main source of their livelihood. Only 2 percent in Hungary and Poland, 11 percent in Romania, and 14 percent in Russia do the same (see figure 3.10).

Informal employment plays an ambivalent role for the poor. Informality is often discussed as a synonym of self-employment, although this is not entirely correct (box 3.6). The informal sector represents a conglomerate of different activities, some of which result in low productivity and poverty and some of which do not. But many among the working poor are found to be employed in the informal economy. A large informal sector may also have indirect effects on poverty by reducing the tax collections and thus limiting resources available for social programs and services. However, the definition of the informal sector remains one that is difficult to implement in empirical studies of poverty. It is even harder to analyze distinct types of informal employment and their implications for poverty. So far, there is no solid evidence that informality in itself drives workers to poverty in the Region.

**BOX 3.6****Informal Employment in Transition Economies**

Informal sector jobs are usually defined as value-adding activities outside the tax net and regulations. These activities may be unregistered and untaxed by their nature (household subsistence economy) or emerge because of purposeful evasion and noncompliance. According to the ILO, the informal economy is a sum of production units operating as unincorporated enterprises. This definition emphasizes that the direct relationship between operating revenue of the production unit and workers' well-being is a constituent feature of informal sector employment. There are four distinct types of informal employment: (a) subsistence-type activities; (b) small-scale entrepreneurial activities; (c) informal wage labor, usually of a casual nature; and (d) employment in formal businesses, with part or all of payment consisting of undeclared wages (for tax reasons or to avoid the withdrawal of social payments and other benefits they are entitled to as unemployed).

Evidence shows that some informal sector activities, especially of types (a) and (c), are characterized by lower productivity and by higher inequality of outcomes (risk). That would normally imply that poverty of workers in the informal sector is higher than in the formal sector, which is indeed the case in a typical developing country. In transition countries, there is evidence that some small-scale firms chose to remain informal, with resulting undercapitalization and lower productivity than comparable firms in the formal sector. Several studies have documented that many working poor in the Region are employed as wage laborers in such "classical" informal sector activities. But this is only a part of the informal sector employment in transition countries.

**Individual and Group Characteristics**

Differences in consumption between the poor and nonpoor can be decomposed into several factors: measures of dependency, labor market participation, labor earnings per income earner, and other factors (such as transfers). Workers from the lowest consumption quintile in all countries in the Region for which such analysis has been undertaken have higher dependency ratios (usually about 10–20 percent more dependents for each employed) and lower employment rates (sometimes significantly so, especially in SEE and the EU-8, where poor households have a third less employed than nonpoor households).

But the importance of these factors as drivers of poverty diminishes compared with the role of *earnings*. Results presented five years ago and updated in various country studies (Bosnia and Herzegovina, see World Bank 2003d; Serbia and Montenegro, see World Bank 2003l) eloquently show that between 60 and 75 percent of the gap in

In addition, formal employment in transition also often takes characteristics that make it indistinguishable from informal employment. For example, workers of old unrestructured enterprises subject to wage arrears often are characterized by high uncertainty of earnings and low capital endowments, exactly as their informal sector counterparts. On the other hand, workers choosing to hide their jobs in fear of losing entitlements to social benefits are generally not poor. Thus, a formal sector job in transition does not automatically imply incomes above the poverty line, and not all informal workers are poor (because of the risk premium, informal activity can be highly rewarding). In addition, a buoyant informal sector can generate additional dynamism in the economy and have positive spillover effects on the poor in general.

Although the size of the informal sector is notoriously difficult to estimate, informality is reportedly large in low income CIS countries (close to one-half of all employment) and smaller in CEE countries (about a quarter of employment). In relative importance of various types of informality, there are significant differences between the low income CIS group (predominantly subsistence farming), middle income CIS countries and SEE (undeclared wage employment in manufacturing and services, with extensive subsistence), and the EU-8 (household entrepreneurship and undeclared paid jobs in the service sector). Informal sector activities also follow different dynamics in the EU-8, SEE, and CIS. The EU-8 countries are characterized by a “flat” trend line representing the size of the informal sector in the recent period. The SEE countries seem to have the size of the informal sector peaking around 1996–99 and have recently seen some reduction. Little is known with certainty about the role and dynamics of the informal sector in low income CIS countries.

*Sources:* ILO 2004; Yoon and others 2003; Schneider 2002; and Commander and Rodionov 2005.

consumption levels between poor and nonpoor workers can be explained by this single factor: differences in earnings per each employed.

The education profile of poor workers helps to explain some part of this earnings gap. Lower education results in less pay and thus correlates with higher levels of poverty. The empirical analysis of earning functions undertaken for the purposes of this report shows that by 2003, a worker with primary education faced a wage disadvantage of 20–40 percent across countries of the Region, compared with a worker with secondary education (Yemtsov, Mete, and Cnobloch 2005). A recent analysis of detailed firm surveys in several countries reveals the presence of education-specific wage differentials within blue-collar skill grades. In particular, blue-collar workers with relatively less education have seen their wages fall in Hungary, Romania, and Russia (Commander and Köllö 2004), reflecting relative productivity developments.

Workers with low skills have lower chances to find employment, and once they do, their wages are lower. Thus, differences in labor market prospects between skill groups are translated into different poverty outcomes. But what is interesting is that there are large differences in wages within the same educational clusters between poor and nonpoor workers, suggesting that skills are not a full explanation of why certain workers are receiving low wages.

Gender is also a major source of wage differentials in the Region. The crude gender gap is significant—but declining—in most countries. Controlling for other characteristics, women currently face 3 percent (Bosnia and Herzegovina, 2002) to 25 percent (Tajikistan, 1999) lower wages compared with those of males, with most of the differential not accounted for by their human capital characteristics (Paci and Reilly 2004).<sup>6</sup> Although being an important indicator in itself, the wage gender gap cannot explain why certain workers are poor. Low-paid female workers often come from nonpoor families and provide secondary sources of income; therefore, their low pay is not a critical factor in determining the poverty status of the household.

Standard human capital characteristics explain only a small fraction of the wage gap between poor and nonpoor workers. In-depth studies of wage gap determination for EU-8 countries (Poland, Newell and Socha 2005; the Czech Republic, Munich 2003) and middle income CIS countries (Russia and Ukraine, Gorodnichenko and Peter 2004) find that less than half of the gap in wages between the bottom decile and the median worker can be accounted for by standard Mincerian human capital characteristics (age, education, gender, and so forth). In addition, this gap is quite persistent. Although the explained share of the gap has increased remarkably compared with that of the mid-1990s in all countries studied, it remains much less determined by human capital characteristics than similar gaps in market economies.

### **Institutional Factors**

To understand the nature of wage differentials between poor and nonpoor workers requires going beyond individual and household characteristics and connecting earnings of workers to performance of their enterprises. Labor markets in the Region are still functioning less than optimally, with serious barriers to competition and free movement of workers, which are required to equalize wage rates across firms (World Bank Forthcoming-a). This results in persistent differences in pay across firms within the same sector and close links between firm-level productivity and wages. Unfortunately, there are practically no data in the Region that would connect household infor-

mation on workers to firm characteristics; therefore, indirect evidence must be relied on.

Two observationally similar workers may have very different pay rates in the Region. Figure 3.11 presents household survey data on average monthly wages for male urban prime-age full-time workers in private manufacturing enterprises by levels of skill and poverty status (expressed in PPP terms). The figure shows that there is a significant gap between poor and nonpoor workers with the same characteristics across all country groups. Expressed not as absolute differences in monthly pay rates, but as a percentage gap, it is greatest in Moldova and Russia (more than 50 percent). Remarkably, the gap is significantly narrower in Colombia than in any country in the Region, and there are no manufacturing full-time workers with vocational education who are poor in Turkey.

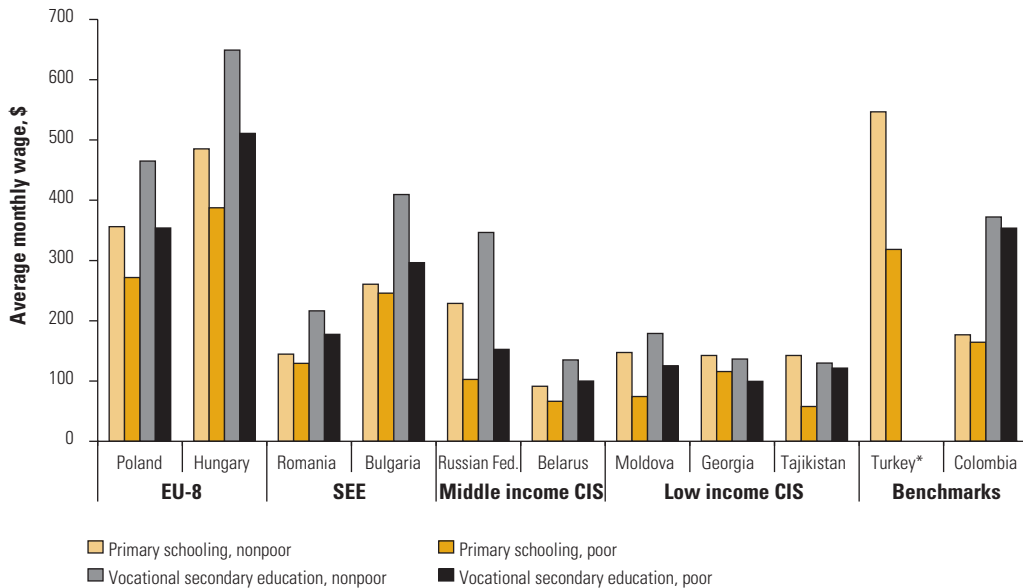
These differences can be traced to several factors: differences in wages across firm sizes, differences in wages across subsectors of manufacturing, and differences in wages between the formal and informal sectors. Most likely, all these factors coexist and are not entirely unique to transition. But on top of these common factors is also an additional unique source: persistent differences in productivity that are observed between old, restructured, and new enterprises of the same sector in transition economies. As argued elsewhere (see World Bank 2002h), interaction between old enterprises, restructured enterprises, and new entrants is key to economic growth in transition. These differences in productivity are illustrated in figure 3.12. The historical legacy in the form of persistent differences in productivity between old, restructured, and new enterprises can persist, reflecting political economy factors blocking or facilitating reforms that bring about discipline over the old and restructured firms and encourage the entry of new firms.

Several sources based on survey data suggest that dispersion of productivities and the resulting dispersion of earnings are indeed larger in transition economies compared with market economies, reflecting the historical legacy described above. First, a detailed study of wage dispersion by narrowly defined subsectors of manufacturing (European Commission 2003) reveals that new member states and accession countries are characterized by a much lower explanatory power of regressions that predict average wages (by subsectors) based on a set of common industrial structure characteristics than are the EU-15. The highest share of “unexplained” dispersion in sectoral wages is found in Bulgaria, the Czech Republic, and the Slovak Republic; the lowest in Hungary and Latvia. But even in the most advanced transition countries, the unexplained portion of dispersion

FIGURE 3.11

**Large Wage Gap between Poor and Nonpoor Persists across the Region**

Average Monthly Earnings in PPP Dollars for Full-Time Urban Prime-Working-Age Males Employed in Manufacturing Private Firms



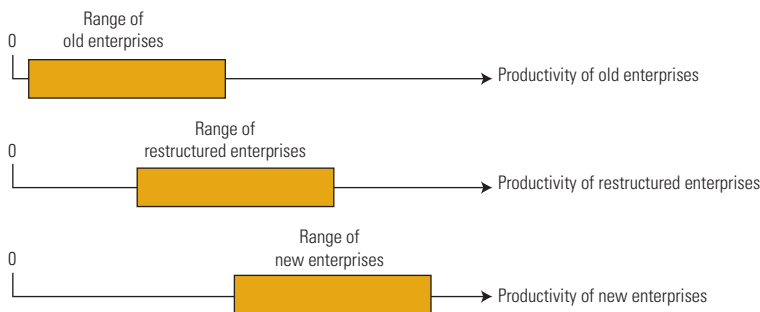
Source: World Bank staff estimates using data from ECA Household Surveys Archive.

Note: US\$ in 2000 PPP, prime age is between 35 and 45 y.o. Poor defined as per capita consumption levels below \$2.15, and \$4.30 in Poland, Hungary, Bulgaria, Colombia, and Belarus. \* In the Survey no worker with vocational education is poor in Turkey.

in wages is far greater than in Germany, Ireland, Italy, or the United Kingdom. Such differences are reflected in excessively large *regional variation* in wages within subsectors.

Second, a large literature on wage determination continues to show that the explanatory power of the Mincerian earning function<sup>7</sup> remains significantly lower in transition countries of the Region than in market economies. It suggests that standard factors used to explain wage dispersion, such as human capital characteristics, location, and standard job and firm characteristics combined (including sector and occupation), explain around 30–40 percent of hourly wage dispersion in transition economies (more in the EU-8 and less in the middle income CIS group); in market economies, 55–65 percent of variation is fully accounted for by these characteristics (Ukraine and Russia, Gorodnichenko and Peter 2004; Hungary, Delteil, Pailhé, and Redor 2004). It is important to note here that compared with the mid-1990s, the explanatory power of standard earning functions in transition has increased by at least 10 percentage points (as documented in Newell and Reilly 1997; also see Fleisher, Peter, and Wang 2004), reflecting that restructuring that took place led to clear association between indi-

FIGURE 3.12

**Productivity Distribution of Old, Restructured, and New Enterprises**

Source: World Bank 2002h.

vidual productivity, job characteristics, and wages. The gap in how well an earning function predicts wages between markets and even the most advanced transition economies suggests that transition is not over.

Finally, Munich (2003) directly compares wages and factors of wage determination between new private firms, restructured firms, and state firms in the Czech Republic. He finds not only persistent wage gaps between these groups of firms but also differences in returns to human capital.

These studies suggest that the presence of a wage gap between poor and nonpoor workers can be traced to the productivity differentials at the micro level and that such differences can possibly be a further explanation for the working-poor phenomenon. These productivity differentials can be traced in turn to a number of *institutional factors*, but they are normally reflected in the degree of wage dispersion across the enterprises. Two observationally similar workers may earn very different wages for the same types of job within the same sector. These differences are unique to the transition process and are persistent because there are barriers to competition to equalize productivity across historic types of firm and because workers are not taking full advantage of mobility. Lack of discipline and encouragement in economic policies may thus be a factor behind poverty.

Workers' mobility, in principle, could mitigate some of disparities in productivities, but transition economies are characterized by a legacy of low labor mobility springing from a high concentration of enterprise production and a history of low voluntary migration. These, in turn, have been sustained by institutional factors. First, compensation in Russia and many CIS countries tends toward nonmonetary benefits such as housing and childcare, thus sustaining worker attachment to firms. Second, moving costs have been high, commuting costs have

increased, and information about job opportunities has been poor. Third, institutional incentives discourage mobility. Subsidies have disproportionately favored home ownership over rentals. Privatization of cooperative houses and flats has promoted home ownership.

Andrienko and Guriev (2004) find complementary evidence that migration is constrained by low liquidity and poor asset value of workers. High wages have encouraged outward migration, while high unemployment has tended to discourage it. Rising income thus increases, rather than decreases, labor outflow. Their estimates suggest that up to a third of Russian regions could be locked in poverty traps.

## Conclusions and Policy Recommendations

The analysis up to this point has not addressed this question: what are the implications for policy? Trends described in this chapter are fully exploited in the companion study on labor markets in the Region (see box 3.7). The study also focuses on policy recommendations, varying by country groups, providing a comprehensive analysis of policy actions needed to spur job creation. The discussion here is limited to the linkages between the labor market and poverty.

This discussion begins by considering three major concerns regarding poverty and the labor market highlighted thus far:

- Wage increases have outpaced productivity growth. Wage gains in many countries have outpaced productivity improvements, squeezing out profit margins (figure 3.13). These developments underpin jobless growth and constrain further scope for employment generation. To sustain poverty reduction and to permanently improve the welfare of working families, wage increases need to be driven by real improvements in productivity.
- There is stubborn unemployment in the EU-8 and SEE. Employment opportunities have been stagnant or declining, thus leading to a missed opportunity to reduce poverty further. In these countries, transfer systems have been instrumental to smooth social costs of transition to the market. They have cushioned the poor, but by their design created perverse incentives and discouraged employment.
- There is a persistence of low-productive employment in the low and middle income CIS countries. In many poor countries, the expansion of employment reflects an increase in low-productive

**BOX 3.7****Labor Market Study Discusses Ways to Enhance Job Opportunities in the Region**

The forthcoming labor market study for the Region, *Enhancing Job Opportunities in Transition Countries: Eastern Europe and the Former Soviet Union*, finds that the economies' growth in the 1990s in the Region had not resulted in an equivalent improvement in employment: only Slovenia had (barely) exceeded the employment rate of the early 1990s. The study diagnoses the key causes of the Region's disappointing labor market outcomes. The dominant role has been played by the demand-side factors, while the supply-side effects were relatively limited. The study claims that the crux of labor market problems in the Region is insufficient rates of job creation. Thus, widespread defensive restructuring is an important factor behind relatively low rates of job creation, despite often significant economic growth. Another important reason is the high cost of doing business. Investment climate constraints to job creation range from the high risks associated with operating a business in low income CIS countries (for example, policy unpredictability, insecure property rights, weak contract enforcement, and unreliable infrastructure) to the considerable administrative barriers in middle income CIS countries (for example, numerous permits, inefficient regulations, and red tape) to the high monetary costs in the EU-8 and SEE countries (for example, high taxation).

The study examines the set of policies that are still needed to create more and better jobs in the Region's countries. It argues that improving labor market outcomes in the Region as a first priority requires removing key constraints to firm entry and growth—that is, reducing the costs of doing business. In most countries of the Region, higher investment rates are necessary to accelerate economic growth and job creation. A second priority is to enhance labor market adaptability through less-stringent employment-protection regulations and decentralized bargaining between employers and workers. Active labor market programs, if properly designed and implemented, can also contribute by providing greater incentives for the unemployed to go back to work and for employers to employ disadvantaged individuals.

The specific mix of policies that each country needs to adopt varies and depends upon its particular economic and labor market situation, and thus priorities for reform are country-specific. To spur job creation, measures to improve the business climate can be identified by comparing the regulatory and institutional settings in the Region's countries with those of other economies with a vibrant private sector. As to improving labor market adaptability, countries where employment protection legislation is stringent, but enforcement capacity is weak (mainly in the CIS and SEE), need to simultaneously liberalize the law and promote compliance so that core worker rights are protected. Countries where the enforcement capacity is strong and legislation relatively flexible (mainly in the EU-8) need to focus on addressing specific constraints to labor market flexibility. For example, countries where there are few regulations on temporary employment, but regular employment is highly protected, need to reduce protection granted to regular employees to avoid creating labor market duality.

Source: World Bank Forthcoming-a.

agricultural employment. In richer countries, a stagnant pool of workers, often characterized by poor endowments, remains employed in low-productive occupations. This casts doubt on whether poverty reduction will be sustained over time. Employment, particularly when associated with low productivity, does not offer protection from poverty.

What are some of the policy actions that would help address these concerns?

*Raising productivity and employment.* With increasing productivity levels and growing wages, all or most of those who are already employed will be out of poverty. For those who are not employed, success in reducing poverty will critically depend on the ability to expand employment because small or negative overall employment change makes the growth process less favorable to the unemployed or new entrants. In the Region, the main job flows consist of mobility between jobs (World Bank forthcoming-a). Thus the “extra” pull of labor demand is needed to bring nonworking poor to the labor market.

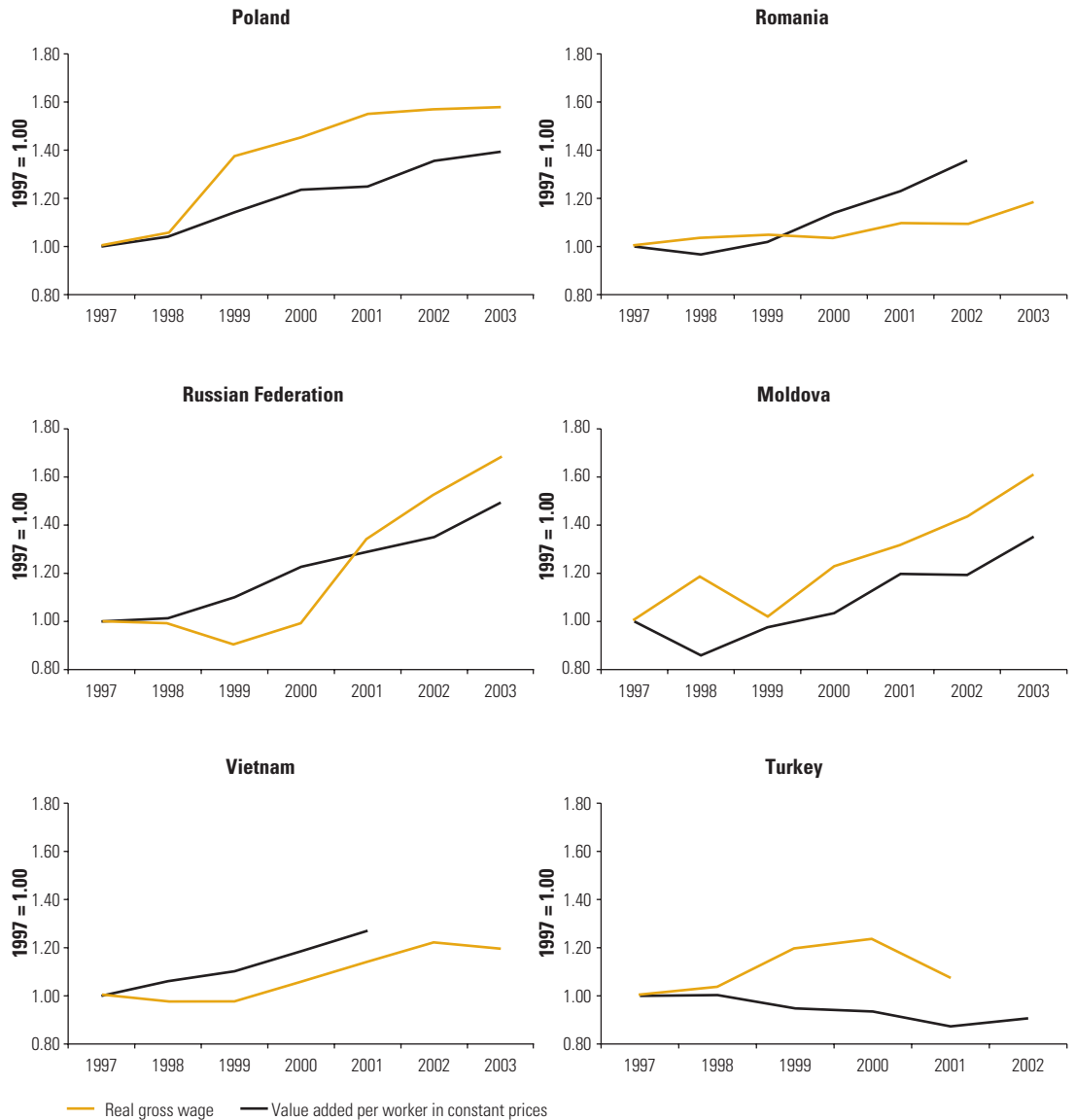
Whether the issue is to generate more employment or to raise productivity, it would seem that countries need to focus on improving the climate for investment, which will reduce obstacles for job creation. World Bank (forthcoming-a) provides a detailed set of recommendations tailored to the Region’s subregions, spanning a wide range of policy action and instruments. For the CIS countries in particular, but also the SEE countries, balancing discipline over the old enterprises and encouragement of new entries is critical. This requires a policy environment that disciplines low-productivity old enterprises into releasing resources and encourages high-productivity new enterprises to absorb those resources and to undertake new investment. There are also the well-known elements that create a better investment climate. In low income CIS economies, special attention is needed to ensure productivity gains in agriculture (box 3.8).

Resisting noncompetitive pressures to boost wages, for example, through unsustainable increases of minimum wages, will also be important. This is more of an issue in the EU-8, where minimum wages represent a high proportion of the average wage, around 40 or 50 percent. This binding minimum wage constrains wage flexibility at the bottom end of the distribution. In Poland, for example, a binding minimum wage appears to be linked to the experience of downward wage rigidity (World Bank 2004h). In recent years, the real value of the minimum wage has been somewhat eroded, but it remains a barrier to wage flexibility. Similarly, a relatively high minimum wage is found to

**FIGURE 3.13**

**Wage Increases Outstripped Productivity Gains during the Economic Recovery in the Region**

Real Wages and Value Added per Worker in Manufacturing in Selected Countries, 1997–2003; Indexes: 1997 = 1.00



Sources: ILO, Key Indicators of the Labour Market (KILM) and WDI 2005; LABORSTA (ILO), and General Statistics Office of Vietnam.

Note: Constant international 2000 US\$ used (WDI 2005) to deflate current local currency units figures. For Vietnam, data on wages includes only state sector employees.

constrain employment opportunities for low-skilled workers in Lithuania (World Bank 2002h). In Estonia and Hungary, experience with minimum wage increases in recent years indicates such hikes reduce the employment prospects of selected groups of workers, in particular

**BOX 3.8****Raising Agricultural Productivity**

Agricultural growth is crucial for poverty reduction, in particular in the poorest countries, where agriculture remains a major source of income and employment. Several policy actions can raise the productivity of agriculture. These include promoting land reforms where they are lagging (for instance, in middle income CIS) and improving land markets (for instance, in several SEEs) to facilitate land restructuring. Improving the investment climate in general, and in rural areas specifically, is very important. Investments in food processing, agribusiness, trade, and retail companies play a crucial role in helping small farmers to overcome input and output market imperfections, to upgrade the quality of their products, and to access markets. Integration of the rural poor in the labor markets (either through rural off-farm employment generation or by improving access to urban labor markets) will be crucial for sustained income growth, in particular in middle-income countries. Further increasing rural-urban mobility might help compensate for the human capital disadvantage of rural areas (for example, through private transfers). The integration of rural credit markets is crucial for investments and productivity growth in rural activities, including agriculture.

*Source:* Macours and Swinnen 2004.

those directly affected by the increase, those in small firms, and those earning low wages (Hinnosaar and Rõõm 2003; Kertesi and Köllö 2003).

In countries where the minimum wage does not represent a large proportion of the median or average wage, it may still be relatively high, particularly in depressed regions with large pools of unskilled workers. This is the case in Poland (World Bank 2004h). In Hungary, large disemployment effects of the minimum wage have been documented, for the low skilled and those in depressed regions. However, in other countries such as the Slovak Republic, the minimum wage is low and does not appear to be binding even in poorer areas (World Bank 2002g).

Reshaping social protection to aid the restructuring of the economy and employment growth will also be important. Countries need to maintain the momentum in the ongoing social insurance and social assistance reforms designed to improve sustainability and enhance coverage and targeting of the poor. In low-income countries, the main constraint will continue to be the fiscal means to cover the population adequately. Better alignment between public and private resources (which could start with improving the understanding of, and collect-

ing better data on, private transfers) is needed to raise the efficiency of public funds. Although more fiscal space for social protection exists in the middle income CIS countries, there may also be greater resistance to reforms, as suggested by the difficulties with the monetization of privileges in Russia. Although the objective of the reforms is not in question, the difficulties in implementation are a useful reminder as to the importance of sequencing with other social and economic reforms, the need to protect the most vulnerable groups, and an appropriate communications strategy to explain the benefits of reforms. In countries in SEE and the low-poverty countries of the EU-8, which have the most extensive social protection, a balance will need to be struck between the need for protection and labor market incentives.

## Endnotes

1. Dennis and Guio 2003. See also Atkinson and others (2002) and the Web site of the Directorate General: Employment and Social Affairs, of the European Commission, [www.europa.eu.int](http://www.europa.eu.int), for details.
2. "Poverty wage" is defined as the level of wage in 2000 US\$ PPP sufficient to keep a worker and 1.5 dependents (the typical ratio of workers to dependents in the Region) above the poverty line of \$2.15 a day (if it is fully spent on consumption and the household does not have any other sources of income).
3. This is the net change; gross changes required to bring about such sizes of net changes are much higher.
4. Between 1999 and 2002 in Russia, the Gini coefficient for wages fell from 0.47 to 0.42; in Tajikistan, from 0.55 to 0.53. In contrast, in Poland, the Gini index for wages rose from 0.30 to 0.32; in Moldova, from 0.44 to 0.45. (Data on individual wages are from the Regional Household archive and represent all wage earners reporting positive wages in the reference period of the survey.)
5. For example, see Fleisher (2005); also Kertesi and Köllő (2001) for Hungary; Vodopivec (2004) for Slovenia; and Newell and Socha (2005) for Poland.
6. Countries included in the study of gender wage gap are Albania, Bosnia and Herzegovina, Bulgaria, Serbia, Poland, Tajikistan, and Uzbekistan.
7. Mincerian earning functions are based on the seminal research by Jacob Mincer (1974), which estimated the rate of return to education using log of earnings as the dependent variable and education (as well as experience and experience squared) as independent variables.