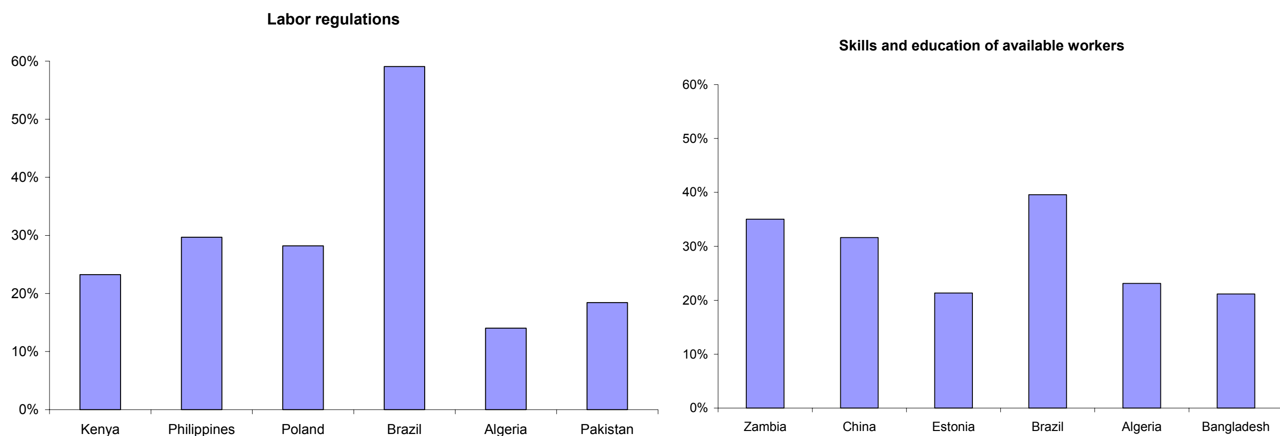
Chapter 7 Workers and labor markets

7.1 Many firms in developing countries rate skill shortages and labor regulations as major constraints on their operations (figure 7.1). Government policies in both areas have wide ranging impacts on the investment climate. Shortages of skilled labor prevent firms from entering new markets or adopting more advanced technologies. Regulations can restrict the ability to adjust the organization of work, reducing incentives to pursue new opportunities. An unskilled population may increase the need for firms to invest in basic training of its workers, while regulatory interventions can increase labor adjustment costs. Together, these policies can have a significant impact on the incentives firms face to create new jobs and improve their productivity.

Figure 7.1 In many countries firms rate skill shortage and labor regulations as "major" or "severe" constraints



Note: Percentage of firms (20 employees or more) reporting that *Labor regulations or Skills and education of available workers* were a major or severe obstacle to the operation and growth of their business.
Source: World Bank Investment Climate Surveys.

7.2 While labor is essential for firms, access to productive jobs that offer decent pay largely determines the well-being of people. Technical progress that leads to higher productivity and economic growth improves working conditions and wages. But it also involves rapid changes in industries and firms. In market economies, many firms are created and destroyed every year—about 20 percent in many countries—involving 10 to 20 percent of the workforce. Public policy needs to balance the dual goals of facilitating the allocation of labor to its most productive use while helping workers cope with the costs of labor mobility. A good investment climate does both.

7.3 This chapter looks at three key issues policymakers need to confront when developing labor market policies for a sound investment climate:

- *Fostering the development of a skilled and healthy workforce that can contribute to a productive and prosperous society.* Improvements in the investment climate go hand in hand with enhancement of human capital. But in many low and middle-income countries the provision of secondary and tertiary education tends to be designed for

the non-poor or for political patronage. And the government can take a lead role in making education more inclusive and relevant to the skill needs of firms.

- *Crafting labor market interventions to improve opportunities for people to find productive jobs that offer decent wages and working conditions—while also fostering incentives for firms to invest, create jobs, and expand.* In many low- and middle-income countries, current labor regulations provide a high standard of protection to a few workers but no, or minimal, protection for most of those in the un-regulated economy, including many youths and the unskilled. Adapting existing labor regulations to the realities of developing countries would combine greater access to decent jobs with stronger incentives for firms to invest and create jobs.

- *Helping workers cope with changes in a more dynamic economy.* Reforming the labor market without cushioning adjustment costs for workers limits the scope of, and support for, reforms and restricts entrepreneurship and the adaptability of workers. In many developing countries, a narrow tax base hampers the task of cushioning adjustment costs for workers. But even within limited resources, improving the insurance component in income support schemes and the pooling of risks across individuals can go a long way to smooth adjustment costs for workers. Innovative programs can reach out to the poor and informal workers who cannot be covered by insurance schemes. When properly targeted, they can provide a cushion against shocks and promote entrepreneurship.

Fostering a skilled and healthy workforce

7.4 People's skills and health affect their ability to participate in society, escape poverty, cope with economic and natural risks, and contribute to productivity increases and growth. The availability of skilled and healthy workers also shapes the decisions of firms to adopt new technologies, expand or enter new markets. There are strong complementarities between education and health, and between them and economic growth. Education improves health – through greater awareness and access to information. Health strengthens incentives and ability to invest in education. And apart from the human gains, controlling diseases such as malaria and AIDS increases the productivity of workers, encourages foreign investors to pursue worthwhile opportunities in once affected locations (box 7.1). Government strategies for addressing these issues can help to improve the investment climate.

Box 7.1 Malaria and AIDS cloud the investment climate

Malaria and AIDS have a debilitating impact on people—and growth. They can also be debilitating for the incentives and opportunities facing firms to invest productively, to create jobs, and to expand.

Malaria-affected regions tend to have lower worker productivity and lower per capita incomes than other regions. And AIDS is also having a pervasive impact, with an estimated 40 million people living with AIDS worldwide, including 2.5 million children under 15. Sub-Saharan Africa accounted for more than 80 percent of the new infections and 75 percent of the deaths in 2003. Not surprisingly, almost 90 percent of firms are concerned about HIV/AIDS, and a survey of African enterprises has quantified its impact on economic productivity in the region in the neighborhood of 1 percent of GDP.

AIDS erodes morale, harms productivity, weakens confidence in the future, and undermines the willingness to save and invest. Investors are understandably concerned about the implications of the AIDS epidemic. It affects the most economically active age groups and reduces the quantity and quality of labor. Skilled professionals are being lost, and shorter life expectancies are raising the cost of training and reducing short-term returns. AIDS not only destroys human capital—it also weakens the transmission of knowledge and abilities from one generation to the next.

Source: Sachs (2003), McArthur and Sachs (2001); Joint United Nations Programme on HIV/AIDS (2003); Bloom and others (2003); United Nations Economic Commission for Africa (2000); (Bell, Devarajan, and Gersbach (2003).

7.5 These two-way links between education, health and growth imply virtuous circles: good education and health enable growth, which in turn promotes further investment in them. But the circles can also be vicious—poor education and health reduce incentives for productive investment and entrepreneurship, which in turn limits resources for enhancement of education and health.

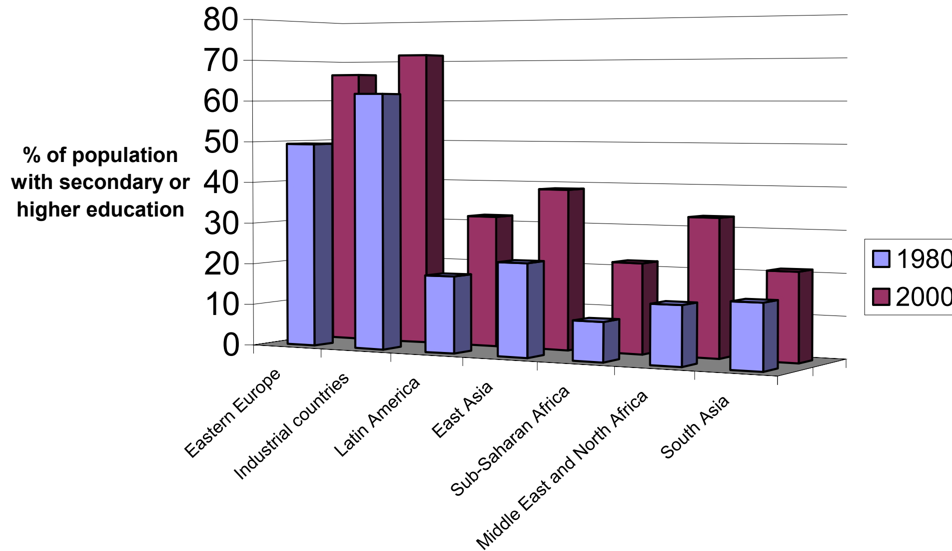
7.6 Issues associated with the delivery of health and education services were discussed extensively in the *World Development Report 2004* and will not be revisited here. This section looks at the complementarities between the education and skills of workers and the investment decisions of firms—and at some of the ways education policies need to evolve to equip individuals with the skills required in a more productive and dynamic economy.

The skills of workers and the investment climate

7.7 Educational attainment has improved in all developing regions, in particular in East Asia and in the Middle East and North Africa (figure 7.2). But it remains low in many developing countries. In Sub-Saharan Africa and South Asia more than 40 percent of those aged 25 and over had no schooling in 2000. And while there have been significant gains in the proportion of adults who have completed secondary and higher education in all regions, their share in the working-age population remains very low in many countries.

7.8 *Strengthening the impact of education on growth requires better incentives.* There is a strong link between education and living standards across industrial and developing countries. But the strength of that link largely depends on the quality and delivery of education and on the incentives firms face to hire more skilled workers. And the link between education and living standards has often been broken, prompting some to ask "Where has all the education gone?"[1] For example, some African countries with rapid increases in human capital over the past two decades have been growth disasters.

Figure7.2 The share of the population with secondary or higher education has increased but it is still very low in many developing countries



Population aged 25 and over with secondary or higher level of education attainment.
Source: Barro and Lee (2000).

7.9 More schooling tends to raise individual wages. Indeed, private returns to schooling are high in many countries around the world, even if social returns to education in the form of higher output are often disappointing.[2] The quality of education is essential: higher investment in schooling of very low quality may not lead to stronger productivity.[3] More educated workers may still receive higher wages because schooling signals to employers positive individual characteristics, like ambition and motivation. But these characteristics may have modest or no effect on actual productivity if opportunities to take advantage of them are not available. Social returns to education can also be low when the demand for educated workers is stagnant. If firms are not subject to competitive pressures that stimulate technical progress and the demand for more skilled workers, effective demand for education will be weak.[4]

7.10 Human capital may also not be applied to its most productive uses. Bloated bureaucracies and overstaffed state enterprises can crowd skilled workers out of private sector activities. In some cases their contribution to society can be low or even negative.[5]

7.11 *Investment climate improvements interact strongly with education.* The link between investment in human capital and growth is mediated by the way education services are delivered and skills are allocated in the economy. But investment climate improvements almost inevitably lead to greater demand for human capital. Facing more opportunities and better access to new technologies, firms demand more skilled workers and have stronger incentives to engage in growth-enhancing activities, raising the private and social returns to education.

- Skilled workers are needed to adopt new technologies because they are better at dealing with changes.[6] This is true for different types of firms and different levels of technological development. Technology transfers by multinationals, as well as technology adoptions by local firms, require a minimum level of human capital and of training and R&D in firms (box 7.2). Moreover, new technologies generally require significant organizational changes, handled better by a skilled workforce.[7] But even among self-employed farmers in low income agricultural countries, having at least primary education enables them to use more efficient production techniques (fertilizers, irrigation).[8]

- Skill constraints are a common problem for many firms in developing countries. But they are particularly constraining for those planning to innovate. The World Bank's Investment Climate Surveys show that the firms that consider a lack of skilled workers to be a "major" or "very severe" constraint are those upgrading their production process. These firms are also more inclined to invest in training their workforce (figure 7.3). But, while large firms have the capacity to organize internal training for their workforce, small and medium sized firms often lack this capacity.

- A sound investment climate enhances the incentives for individuals to pursue educational opportunities. This is best exemplified by the major surge in returns to education in the formerly centrally planned economies during their transition to market systems. Similar patterns have emerged in other countries. In Cambodia, for example, investment climate improvements, coupled with higher returns to well-trained people, have boosted the demand for vocational training, mostly provided by private firms.

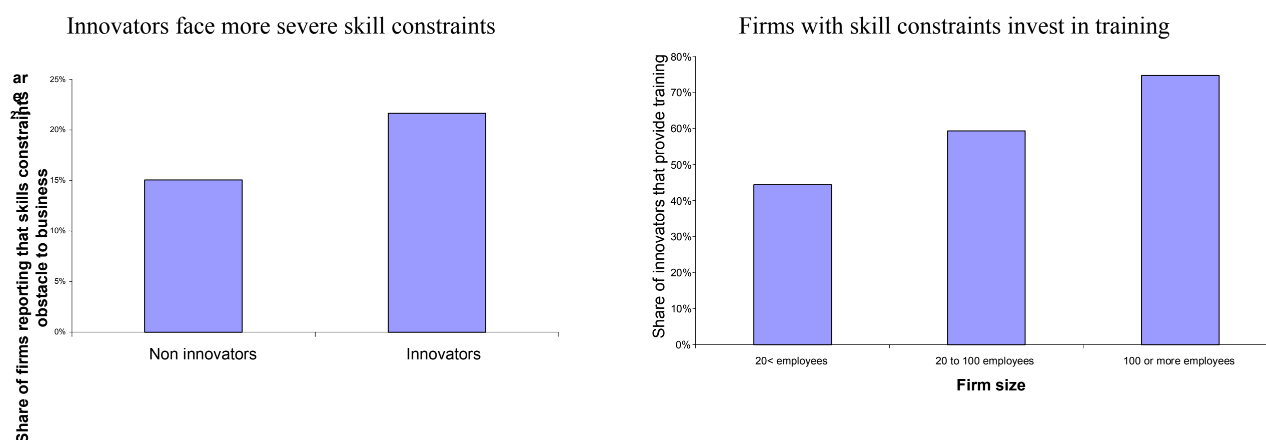
Box 7.2 Why Intel chose Costa Rica as the site of a multimillion dollar plant

In 1996 Costa Rica beat out Brazil, Chile, Indonesia, Mexico, the Philippines, and Thailand to become the site of Intel's $300 million semiconductor assembly and test plant. Many factors made Costa Rica attractive to Intel, as well as other U.S. companies: its stable economic and political system, its central location within the hemisphere, its openness and liberalized economy, including the absence of capital controls, its receptive investment environment, and its incentives and tax breaks. But a key factor was its educated labor force and government's commitment to invest in further training.

Since 1948, when democracy was restored, Costa Rica has placed strong emphasis on education, adopting a demand-driven approach. The government invested heavily in education and technology training, and it adopted a bilingual English as a Second Language curriculum. Computers were introduced in elementary schools as early as 1988 and by 1996 many schools were equipped with them. And in response to the large investment by Intel and other U.S. companies, several education centers—providing technical skills in the electric and electronic fields—have emerged.

Source: World Bank (2003b), Spar (1998).

Figure 7.3 Skill constraints are a serious problem especially for "innovating" firms



Note: Innovators are firms that have upgraded an existing product line or developed a major new product line in the previous three years. Skill constraints refer to those firms that considered lack of adequate skills a major or very severe obstacle to the operation and growth of their business. The left panel is based on a sample of 13,300 firms in 33 developing and transition economies. The right panel is based on a sample of 12099 firms in 29 transition and developing countries.
Source: World Bank Investment Climate Surveys.

7.12 High levels of formal education are not a prerequisite for all firms or activities. The availability of workers with tertiary education may be more of a constraint for firms in higher valued manufacturing and services than for those in less complex industrial processes. For some activities, language proficiency may be important. For example, a large English-speaking population helped India attract "back-office" services for international firms. In many cases, education to provide basic literacy and numeracy skills can be complemented by on-the-job or vocational training to enhance the productivity and hence potential wages of workers (box 7.3).

7.13 Lifelong learning also improves the adaptability and employability of workers in economies undergoing economic and technological changes. Worldwide, annual spending on corporate training reached $28 billion in 2002. In the United States that spending was more than 15 percent of total public spending on higher education. By the end of the 1990s, almost half of workers 35-54 years of age in the United States were adult learners.[9]

Box 7.3 Tackling skill imbalances with training and retraining programs—some examples

Training and re-training the workforce is an important component of investment in human capital. Skill demand evolves rapidly to accommodate change in technological opportunities and workers whose jobs disappear often find that they lack the right skills for the jobs being created. Although most workers are involved in some form of on-the-job training, this is often not enough to enable them to adjust to major changes in technology or to move across different jobs. And firms may have difficulties in internalizing the returns to investing in the training because re-trained workers may move to other firms. At the same time, workers' incentives to invest in training may be low if wages are compressed or if workers cannot finance their training because credit market inefficiencies. In all these cases, there is a potential role for government support to training and retraining, although evaluations of public retraining or support for firm-provided training offer mixed results.

Publicly supported labor market training programs can be provided either directly (in public training institutes) or through financial support (funding training costs and/or subsidizing trainees). Relying on a network of employment services that circulate information on skill needs training programs in Bulgaria, Poland, and the Slovak Republic increased the probability of leaving unemployment. In Mexico the Job Training Program for Unemployed Workers (*PROBECAT*) combines short-term training for unemployed and displaced workers with income support (at the minimum wage) and, more importantly, placement services from the local employment offices. On-the-job training in Mexico is found to be more effective than classroom training, and private training centers seem to outperform government-run centers.

Training programs for youths, even when well targeted, tend to have a poor track record. Earlier interventions at the schooling stage are likely to be more effective than trying to remedy education failures. But the experience of some Latin American countries offers some interesting insights. The "*Jovenes*" programs in Argentina, Chile, Peru, and Uruguay are targeted at disadvantaged youth—combining training and work experience with other services including psychological development, and vocational assessment. While effective in promoting employability of the targeted youths, they tend to be costly. The evaluation in Argentina estimated that at least nine years of higher earnings due to the program would be required to show a positive net present value for the groups with statistically significant results. Moreover, the enhanced job opportunities for the targeted group tend to be associated with displacement of other workers from employment opportunities.

Enterprise-based training can be promoted using different instruments. In Brazil, SENAI (national service for industrial training), training funds come from a compulsory contribution of one percent of payroll on industries. SENAI has been associated with an increase in the provision of training especially amongst medium and large firms. In the Singapore *Skills Development Fund* (introduced in 1979), training levies are reimbursed by the amount of training provided: the number of individuals trained tripled in the country since inception, and the number of firms benefiting from the fund has more than doubled since 1991.[10]

Although such schemes may facilitate a more systematic, structured approach to enterprise training, many firms, especially small ones, may not have the capacity to provide training to their workers. Singapore set up a special unit for training assistance to small firms to help them develop training plans. Training funds are also difficult to manage in countries with low administrative capacity and tend to be supply-led (lacking employers' support). Some alternative schemes can promote effective demand for training. For example, Kenya's voucher scheme promotes demand for training and facilitates competition among providers through trainee choices of institutions and courses.

Source: Middleton, Ziderman, and Adams (1993); Calderon-Madrid and Belem (2001); Betcherman, Olivas, and Dar (2003); Aedo and Núñez (2001); de Ferranti and others (2003).

Creating a skilled workforce

7.14 The *2004 World Development Report* discussed strategies for improving the delivery of basic education. Secondary and tertiary education also matters for a good investment climate. Governments can foster secondary and tertiary education by providing resources and improving the efficiency of their allocation. In Latin America, for example, the allocation of large resources to public universities, often of low quality, leaves little funding for secondary education. This has constrained the expansion of tertiary education and the access of poor students to further education.[11]

7.15 In addition to improving the efficiency of public provision, governments can facilitate the involvement of the private sector. The private market for education has grown in many developing countries. This expansion has mostly occurred in response to the need to increase the quality of education, a higher willingness to pay by people

because of the higher expected returns to education also associated with stronger skill demand from firms. For example, in Brazil, the number of tertiary education institutions grew more than 70 percent between 1995 and 2002, with most of the increase in private colleges and universities, which accounted for more than 70 percent of higher education enrollments in 2002.

7.16 Large increases occurred also in Sub-Saharan Africa, where the private sector now plays a significant role in providing secondary and tertiary education (Gambia, Ghana, and Côte d'Ivoire),[12] in Eastern and Central Europe (which went from no private tertiary institutions at the beginning of the 1990s to close to 350), and more recently in some Middle East and North African countries (Iran and Jordan).

7.17 *Improving the regulatory environment for public and private providers.* By setting minimum quality requirements and quality assurance mechanisms—including evaluation, accreditation, national examinations, rankings and publication of information on the quality of educational establishments[13]—governments can boost demand for education by students, increase demand for skills from firms, and foster improvements in quality at universities. By improving the investment climate for private providers, the government can harness additional resources and expertise to improve education. Private providers indeed confront many of the same constraints as other firms in developing countries, including barriers to entry with slow and costly registration procedures, a weak legal and regulatory framework with even weaker enforcement capacity, and red tape. In addition to poorly defined regulatory frameworks, many countries skew funding and other policies to favor public providers. Underdeveloped financial markets can also constrain the ability of students and families to borrow for education.[14]

7.18 *Promoting access to education.* Funds can be channeled directly to individuals who then have a choice of both public and private institutions and courses. Demand-side financing improves the equity in the system by enhancing opportunities for those who cannot afford higher education. Options include combining cost-sharing with public subsidies,[15] income contingent loans (as in Namibia),[16] and voucher schemes of various kinds. For example, the Africa Educational Trust provides educational vouchers in Somalia to enable disadvantaged girls and young ex-militia men to attend special afternoon and evening classes.[17] A voucher scheme in Colombia incorporated students from poor families in a cost effective way.[18]

7.19 *Developing public-private partnerships.* In addition to purely fee-paying private schools, the government can retain the financing of education but subcontract the provision of education to the private sector. Historically, contracting has focused on ancillary services, but core teaching and management functions can also be contracted out. For example, with the aid of an IDA credit in 1994, Burkina Faso launched a plan to develop private sector involvement through the rent or sale of colleges of general education, delegating the management of those colleges, and encouraging the best existing private institutions to build complementary classrooms.[19]

Crafting labor market interventions to improve opportunities

7.20 Policymakers intervene in the worker-firm relations on two main fronts. They regulate working conditions and the labor contracts between workers and employers. And they fix minimum wages and set the legal framework for social partners to bargain over wages. These interventions are theoretically justified by the (perceived or effective) inability of *laissez faire* conditions to deliver efficient and equitable outcomes. Efficiency arguments stress information problems and a need to improve the matching between labor demand and supply. There may also be equity arguments if there is unequal bargaining power between employers and workers, discrimination against vulnerable groups, or incomplete or imperfect insurance of workers against risks.

7.21 But beyond the core labor standards—the minimum framework for a sound labor market (box 7.4)—government interventions need to strike a balance between the incentives for firms to hire and innovate, and worker preferences for job protection and income stability. This balance is influenced by social preferences in each country. But there has been a tendency in many low and middle income countries to overregulate the labor market and pay too little attention to local priorities, conditions, and capacities. Indeed, as in other areas of regulations (chapter 5), many developing countries have labor regulations that mimic or even exceed those of industrial economies—even if the latter have approached these conditions only gradually during their process of development.[20]

Box 7.4 The economic effects of core labor standards

The international community has identified four core labor standards as the minimum requirement for all countries, whatever their stage of development: eliminating all forms of forced or compulsory labor, abolishing child labor, providing equal opportunity and nondiscrimination in employment, and ensuring the freedom of association and the right to collective bargaining. Most countries have signed conventions on forced labor and nondiscrimination, and a growing number of them have recently signed conventions on the freedom of association and child labor.

The economic effects of enforcing core labor standards depend on the interventions and socio-political circumstances. Ensuring the freedom of association and collective bargaining can go a long way to promoting labor market efficiency and better economic performance. And there are obvious economic and social reasons for banning slavery and all forms of forced labor. But child labor and different forms of explicit or implicit discrimination, while generally perceived as violations of human rights, are still widespread in many low and middle income countries.

Child labor still looms large in the developing world, where one in six children between the ages of 5 and 17 are at work. Child labor hinders human development, reducing future earnings for the children themselves and aggregate growth potential of the economy. For example, children in India perform tasks that require no particular skills and develop no human capital. And cheap child labor, if combined with poor investment conditions, reduces the incentives for firms to invest in new technology that have higher productivity potential but require more skilled workers.

The timing and design of interventions to eliminate child labor are however crucial determinants of their success. Reforms that promote stronger economic growth are of tantamount importance. In Vietnam strong economic growth in the 1990s led to a significant rise in poor families' wealth which in turn contributed to reduce the number of children in the workforce by 28 percent. And improving the delivery of education (including targeted educational subsidies), which gains parental support, is generally more effective than an outright ban on child labor. Such bans are generally not enforced in many developing countries. A ban can

also force child laborers into more dangerous, hidden forms of work (prostitution), especially where parents have no choice but to use child labor as a risk management tool.

Discrimination leads to the underuse and misallocation of human capital, creating inefficiencies and impeding economic growth,. It can also weaken the economic position of households because they cannot secure more income if they need to. Household consumption may fall as a result of women's inability to find work (e.g. in Jordan).

Source: ILO (2004); Burra (1995) ; Burra (1995) ; Edmonds (2004) ; Krueger (1996) ; Brown (2000); OECD (2000), Martin and Maskus (2001); Miles (2002).

7.22 High levels of labor protection would not constrain firms' performance and job creation if workers fully valued their benefits and were willing to trade them off for lower wages or greater effort.[21] But heavy regulation may not be fully accommodated by lower wages or higher productivity, thus raising labor costs for firms and creating strong pressures to avoid them by turning to informal arrangements. Even in middle income countries of Latin America, firms bear up to 50 percent of the costs of non-wage benefits.[22] The result is that many developing countries provide a fairly high standard of protection to a few workers but no, or minimal, protection for most of those in the unregulated economy. So while a small proportion of the workforce gains, it is at the expense of workers in the informal economy or the unemployed.

7.23 The sheer magnitude of the informal economy in many developing countries underscores the point.[23] In many countries informal workers are the majority in the nonagricultural sector: they account for about 50 percent of total employment in Latin America, 45-85 percent in different parts of Asia, and more than 70 percent in Africa.[24] And evidence from several countries suggests that the size of the informal sector has increased in the past decade, with many workers moving back and forth between the formal and informal sectors.[25] While some high-skilled workers may voluntarily opt out of the formal sector—to start a small business or to seek higher wages at the expense of unreliable social and health provisions—most informal workers receive lower wages and limited or no protection against old age, unemployment or sickness.[26]

7.24 Striking a balance between protecting jobs or workers and promoting job creation by firms is particularly contentious in a period of reforms—when the long-term benefits of increased employment and wages are often clouded by short-term concerns for the job and wage security of those affected during the transition. Successful reforms bring about higher wages and better working conditions—as well as higher employment and lower unemployment and informality in the long run.[27] But there are some short-term costs due to the changes in job characteristics and the greater labor mobility in a modern, productive economy. Those costs can be large and protracted if the reallocation of resources is sluggish—because relative prices do not adjust, because labor adjustment costs are high, or because old jobs are destroyed before new jobs are created.

7.25 Improving interventions in labor markets requires governments to do three things:

- Promote wage adaptability and ensure that workers are properly compensated for their work.

- Improve the institutional fit of workplace regulations.
- Balance employment stability with firms' needs to adjust the workforce.

Promoting wage adaptability

7.26 Fostering opportunities for firms to invest productively largely depends on their ability to remunerate factors of production, including labor, according to their productivity and to adjust inputs to accommodate changes in demand. Properly compensating workers also fosters their effort in the production process and strengthens their incentives to invest in human capital. Governments intervene in the wage-setting process by establishing rules for wage bargaining and for industrial relations. These interventions can reduce negotiation costs if they do not reinforce the monopoly power of the parties or impose rigidities in wage adjustments. Many governments also set wage floors in an attempt to reduce the number of working poor. But setting the floors too high can reduce the jobs available for lower skilled people and the opportunities for low-tech firms to emerge in the formal sector.

7.27 *Wage bargaining needs a clear legal framework.* The dialogue between freely elected (and representative) associations of workers and employers can reduce uncertainty and transaction costs and improve information flows.[28] And collective bargaining also offers a platform for involving both employers and workers in discussions with government about structural reforms. Consider the tripartite negotiations promoting macro and structural reforms in several western European countries in the past decade. Also consider the pivotal role of unions in promoting political openness and democracy in other countries, as with Solidarity in Poland and black labor unions in South Africa. But unions sometimes act as monopolists, improving wages and working conditions for their members at the expense of non-unionized workers and the broader society.

7.28 Three main features of collective bargaining affect the flexibility of wages and the performance of firms. First is the bargaining power of unions combined with the monopoly rent that can be shared between firms and workers. The bargaining power of unions is generally measured by their membership, which varies across developing countries. Unionization tends to be low in most of Asia and Africa, but fairly high in Europe. It has generally been declining in the recent past, because the membership is often concentrated in manufacturing and public services, both downsized substantially in many countries.[29]

7.29 In countries where regulations shelter firms from competition and promote rent-seeking, unions are likely to bargain for a share of the rents (box 7.5). An unstable political environment also tends to reduce incentives for unions to "invest" in wage restraint in exchange for expected better economic outcomes in the future.[30] High union wage premia and bigger drags on productivity are indeed found in countries and sectors lacking competitive pressure. Investment climate improvements that enhance competition in output markets and economic stability are likely to promote union behavior into one more conducive to stronger economic growth and job creation.[31]

Box 7.5 The role of unions

The effects of unions on wages and economic conditions vary greatly across countries and regions and depend largely on the economic and the social environment they operate in. Union wage markups tend to be fairly small in industrial countries[32] but quite high in countries with weak competition in output markets and large rents. Available estimates suggest high wage premia in Ghana (21-28 percent) and South Africa (10-24 percent), but low premia in other countries, including the Republic of Korea (only 2-4 percent).

Unions tend to reduce disparities in the wage distribution, and union members tend to enjoy longer job tenure and receive more training than their counterparts. And in a number of countries, employers favor dealing with them, because highly representative unions can deliver less industrial unrest and fewer strikes. But some of these beneficial effects may come at the expense of those without jobs, especially if high union wage premia reduce job creation in the formal sector and if the poor mainly work in the informal sector.

The effects of unions on productivity are less clearcut and depend on market conditions and industrial relations. In Mexico, unions have attempted to protect low-skilled jobs at the expense of higher productivity. In Guatemala, unionization is associated with lower productivity of coffee farmers. But greater participation of workers in some aspects of company management in Brazil contributed to better productivity and profitability. The effect was greater in unionized companies because unions facilitated communication between management and workers.

Given the reductions in union membership and the size of the informal sector, unions in many developing countries have started to expand their engagement with the informal sector. A union in Argentina operates a health insurance and unemployment fund that also covers unregistered and unprotected agricultural workers. In the Philippines unions initiated loan schemes for poor areas. An agricultural workers' union in Ghana includes self-employed rural workers as members; it supports them through revolving loans, and facilitates their access to other forms of institutional credit. And an Indian union helps unorganized and self-employed workers to obtain licenses. In Sub-Saharan Africa unions have been active in dealing with the HIV/AIDS pandemic at the workplace.

Associations of informal workers have also been created, with some taking a high profile role in defending informal workers' rights. Examples include the Ghana Private Road Transport Union, the Cissin-Natanga Women's Association in Burkina Faso, and the Self Employed Women's Association in India.

Source: Aidt and Tzannatos (2002); Harrison and Leamer (1997); Maloney and Ribeiro (2001); Urizar and Lee (2003); Menezes Filho and others (2002); Ratnam (1999).

7.30 A second feature shaping the impact of unions on firms and workers is the extent of direct government intervention in influencing their behavior and representation. In several Latin American countries the state controls participation at the bargaining table and legitimizes agreements.[33] It defines what type of unions can organize and in some cases requires state authorization for a union to form. In Brazil only one union *(sindicato*) may exist in a given occupational category, and it has a monopoly in representing the workers in that category. In Mexico more than one union can exist, but only certified union leaders can engage in collective bargaining or call a strike. Certification requires that unions be registered by the state. In Egypt and Syria union activity is limited to one officially recognized union or confederation, often with some political interference. In Zambia trade union unity is imposed on an enterprise, industry, occupational or geographical basis.

7.31 A third feature is the locus of negotiation and the coordination between different employers' and workers' organizations.

- *Enterprise.* At one extreme, wages are negotiated at the enterprise level, as in many English-speaking industrial countries. Decentralized wage bargaining ensures that wages reflect firm and individual worker performances. That leads to significant aggregate and relative wage flexibility but also to a wide dispersion of earnings—and possibly some transaction costs for firms if wages are frequently renegotiated.

- *Country*. At the other extreme, wages are negotiated at the national level among representatives of employers, unions, and often the government. The experience of some continental European countries suggests that centralized bargaining may allow for the aggregate economic effects of wage agreements (employment, inflation) to be factored in the negotiation if social partners represent the large majority of workers and firms. This may ensure significant aggregate wage flexibility, but relative wage flexibility is often constrained, reducing the ability of firms to fully reward workers with firm-specific skills.

- *Sector*. Between the extremes, wages are negotiated at the sectoral level. This is common in Western Europe and in many developing and transition economies, where sectoral unions and employer associations negotiate wages for their sector or even for different occupations. Unless the different sectoral bargaining units coordinate their strategies—not frequent in developing countries—this bargaining regime may lead to limited aggregate and relative wage flexibility.[34] Why? Because each bargaining unit is strong enough to push wages above productivity but at the same time is vulnerable to other units' wage strategies without being able to influence them.

7.32 *Moving forward in promoting wage adaptability.* Policymakers can foster wage flexibility by promoting pluralism of representation in wage bargaining and by reinforcing the links between wage agreements and firms performance either through better coordination among social partners or through more decentralized negotiations.

- *Promoting coordination.* Some industrial countries with a tradition of collective bargaining have reinforced coordination among the different levels of wage negotiation (national, sectoral, firm). In some of them, such as Denmark, Italy and Portugal, nationwide agreements now fix only the basic wage increase, leaving to the firm-level negotiation further increases consistent with a firm's performance. Unions have also been part of the design and implementation of large structural changes in many countries. In Mexico and Israel, as well as in the Netherlands, Ireland, and Italy, unions have participated in the design of adjustment programs, including actions in the labor market, and agreed on social pacts that facilitated macro stabilization. And in Kenya, following the abolition of price controls in the mid-1990s, government guidelines on wages were removed giving employers and workers greater latitude in wage negotiations.

- *Reinforcing firm-level bargaining.* Following the experience of other industrial countries—such as Australia, New Zealand, and the United Kingdom—some emerging and transition economies have reinforced wage responsiveness by shifting the wage bargaining to the firm level. In the Baltic States, Czech Republic, and Hungary unionization is low in newly created private firms, especially small ones,

and wage bargaining mostly takes place at firms.[35] Along the same lines, the wage bargaining system in Peru was reformed in 1992, increasing direct negotiation by relaxing the collective negotiation process, introducing voluntary arbitration as an alternative to state administrative decision, and eliminating state approval of agreements. The reform also increased collective autonomy by protecting unions' right to registration—and union pluralism by allowing more than one union to exist in a firm.[36]

7.33 *Setting minimum wages: the effects on low technology firms and low-skilled workers.* The main objective of setting minimum wages is to promote decent jobs and reduce poverty among workers. But its effectiveness in many low and middle income countries is questionable. Minimum wages represent a higher proportion of average wages in these countries, and any further increase shifts the entire wage distribution upward. That concentrates the disemployment effects among those they intended to support—young, low-skilled, and female workers. And when enforcement is weak, a hike in the minimum wage stimulates more underreporting of wages or further incentives for firms and jobs to remain in the informal economy.

7.34 The minimum wage cuts the lower end of wage distribution and makes firms and jobs with low productivity levels unviable, at least in the formal sector. The level of the minimum wage affects firms, jobs, and income distribution.

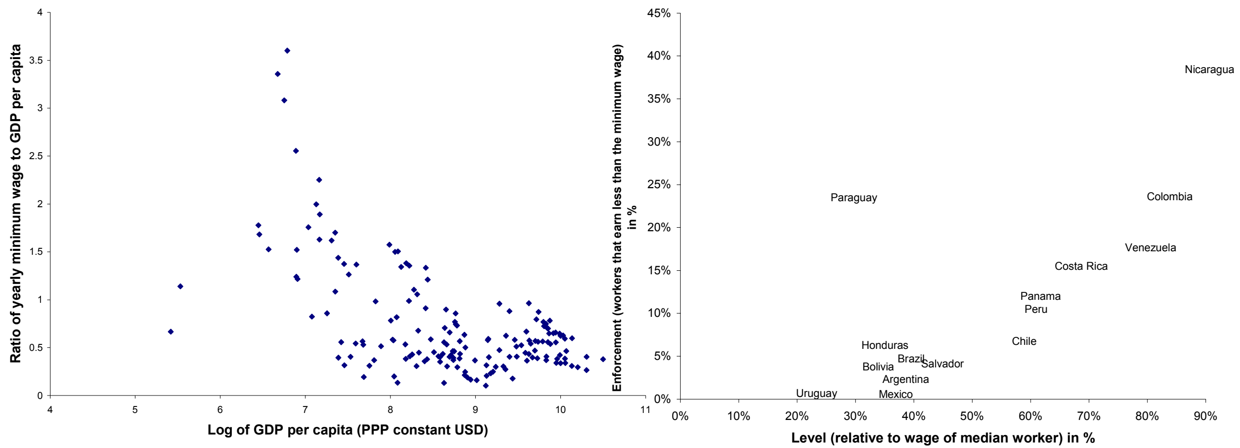
- In industrial countries minimum wages tend to be relatively low (although in some cases may approach 50 percent of the median wage) with a modest impact on low-tech firms and the employment of low-productivity workers.[37]

- In several low income countries minimum wages are close to, if not higher than, the average wage (figure 7.4).[38] At these levels, many private firms, especially those in low-tech activities, cannot afford to comply. And the poor work in informal activities for only a fraction of the mandated minimum wage.

- In middle income countries, the minimum wage is generally about half the average in the formal sector. Its coverage and enforcement tend to be low, but its impact on low-productivity firms and jobs can be large. In Latin America, for example, the largest proportions of workers who earn less than the minimum wage are found in countries where it is comparatively high (figure 7.4)—as in Paraguay, where the majority of workers earn less than two-third of the minimum wage, Nicaragua (40 percent of workers below the minimum), and Colombia (25 percent).[39]

Figure 7.4 The minimum wage is very high in many low income countries, and at high levels leads to weak enforcement

Relative minimum wage declines with income | *High levels of the minimum wages lead to high evasion in Latin America*



Note: The wage used in the right panel is the median wage for workers between 26 and 40 years old that work for more than 30 hours in the reference period of the surveys.
Source: Left panel: Rama and Artecona (2002); Right panel: *IDB based on countries official data*.

7.35 Noncompliance with the minimum wage is also concentrated among the most vulnerable workers. Youths and other workers lacking skills or work experience may have little chances to be hired at the minimum wage when the latter is set too high compared with their productivity potential. And in backward areas, the national minimum wage may be close to the underlying average wage, severely affecting labor demand for small and medium firms that rely largely on low-skilled workers.[40] Despite low compliance, the minimum wage acts as a strong pay signal for the informal sector. This implies that hikes in the minimum wage can have distributional implications that go beyond the formal sector—the income of the low paid might increase in both segments of the economy, but their employment prospects might decline.[41]

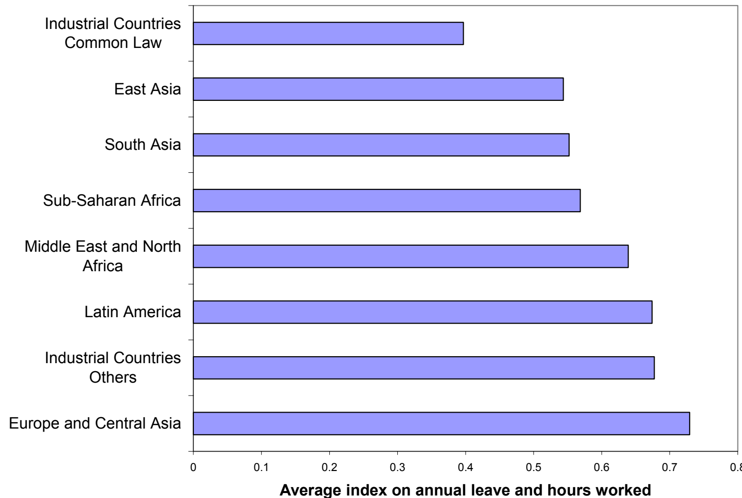
7.36 *Graduating minimum wages to promote the formalization of low-skilled activities.* Several countries have reduced the minimum wage relative to the average wage, largely by reducing its indexation and having lower sub minima for some groups (young workers) or for sub national labor markets. The effects can be marked. For example, the erosion of the minimum wage in Mexico in the 1990s is estimated to have boosted female employment. Sub minimum apprenticeship wages are available in many industrial countries (such as Belgium, Canada, New Zealand, Portugal, and Spain) and are being tested in several developing countries, including Chile and Colombia. They are estimated to have significantly increased job opportunities for young graduates in Chile.[42]

A better institutional fit for workplace regulations

7.37 Promoting better health and safety conditions in firms, regulating working time, and encouraging paid annual leave have been major achievements in all societies. As in most other areas, improvements in working conditions in industrial countries have evolved gradually, hand in hand with more general economic progress. By contrast,

many low and middle income countries have directly adopted far-reaching workplace regulations—in some cases going beyond what is stated in most industrial countries (figure 7.5).[43]

Figure 7.5 Most developing countries have stringent workplace regulations



Source: Authors' calculations from *World Bank Doing Business Database.*

7.38 But even among countries at similar stages of development, the differences in workplace regulations are staggering, with significant effects on labor costs and the ability of firms to accommodate fluctuations in demand.

- Most countries have regulations for the workweek. Botswana, Chile, Costa Rica, Ireland, Malaysia, Morocco, the United Kingdom, and Vietnam all allow 48-hour workweeks. Most western European countries have 40-hour limits, with France recently moving to a 35-hour workweek. To promote flexibility, some countries have revised regulations to allow managers to shift work time from periods of slow demand to peak periods. Belgium, Finland, France, Greece, Hungary, Poland, and Spain allow social partners to agree on the annualization of working hours.

- In cyclical or seasonal industries, firms often use overtime work to accommodate demand. In Burkina Faso, Cameroon, Hong Kong (China), Spain, and the United Kingdom, firms do not have to pay a premium for overtime, while in Bangladesh, Belarus, India, Nicaragua, Pakistan, and Uzbekistan it is up to twice the regular pay.

- The duration of paid annual leave is also subject to regulation. Many African countries have generous annual leave schemes—30 days in Burkina Faso, 33 in Ethiopia and 39 in Sierra Leone[44]—but in most other countries paid annual leave is less than 30 days. The United States leaves the decision on annual leave to individual or collective agreements.

7.39 All these regulations improve conditions for workers in the formal sector and, by promoting better working conditions and motivation, can promote their productivity. Beyond any potential productivity effect, the impact on firm performance depends on

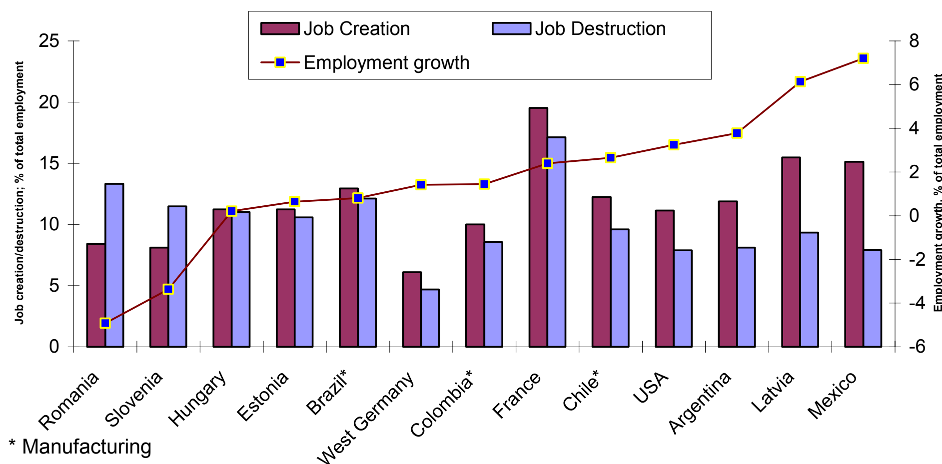
who bears the costs. As discussed above, wages do not fully adjust to compensate for the additional costs for firms in many countries, reducing firms' potential for expansion and job creation. These negative effects may not be a source of concern if they reflected the rational choice of workers to trade off not only lower earnings, but also some unemployment, for greater security at work and decent working conditions.

7.40 But a country would suffer from excessive regulation if policymakers went beyond what workers were willing to pay or contribute in order to achieve these benefits. This issue is particularly relevant in low and some middle income countries where regulations are even more generous than in industrial countries. Those regulations might reduce wages below what poor workers would be willing or able to accept—and promote unregulated and unprotected employment.

Balancing employment stability with firms' need to adjust the workforce

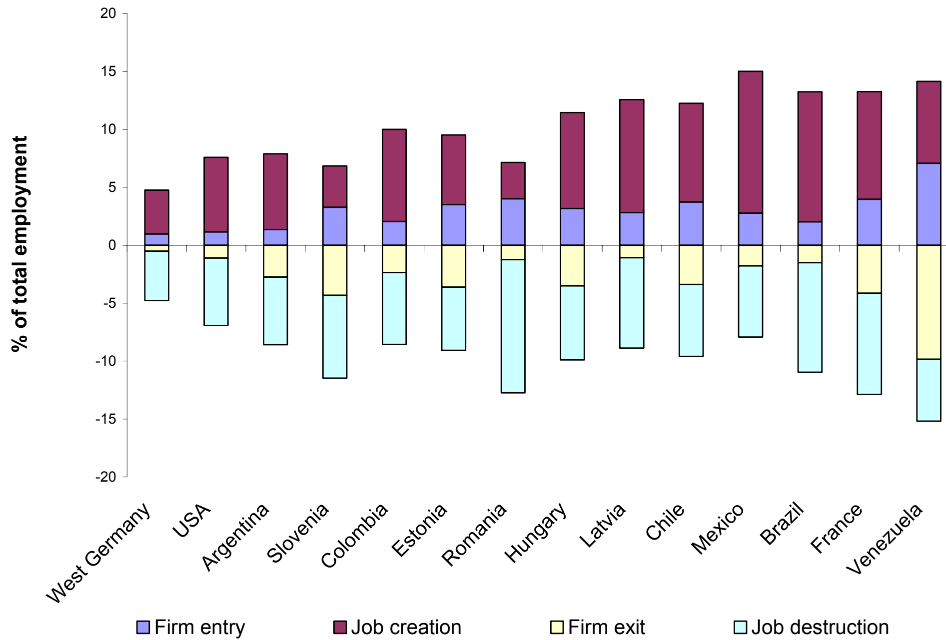
7.41 Probably the most contentious government intervention in the labor market is setting rules for hiring and firing workers. By affecting the cost of workforce reorganization, employment protection legislation strongly influences the cost of doing business, but especially the incentives and opportunities for firms to exploit new technologies and expand. Market economies require a continuous process of firms' retooling and firm turnover to channel resources to their most productive uses. In countries for which data are available, gross rates of job creation and destruction each range between 5 and 20 percent, adding up to a total job turnover of up to 40 percent (figure 7.6). A significant fraction of this job turnover (often 30-50 percent) is due to the entry and exit of firms, an important factor for output and productivity growth (figure 7.7).[45] So setting overly restrictive job protection can reduce job creation and growth, because firms will not hire more workers in anticipation of the high costs associated with adjusting production to changes in demand.

Figure 7.6 Large job turnover in industrial and developing countries in the 1990s
(Firms with 20 or more employees)



Source: Bartelsman and others, Background paper for the World Development Report 2005.

Figure 7.7 Job turnover is high because of both the entry and exit of firms and reallocation among existing firms

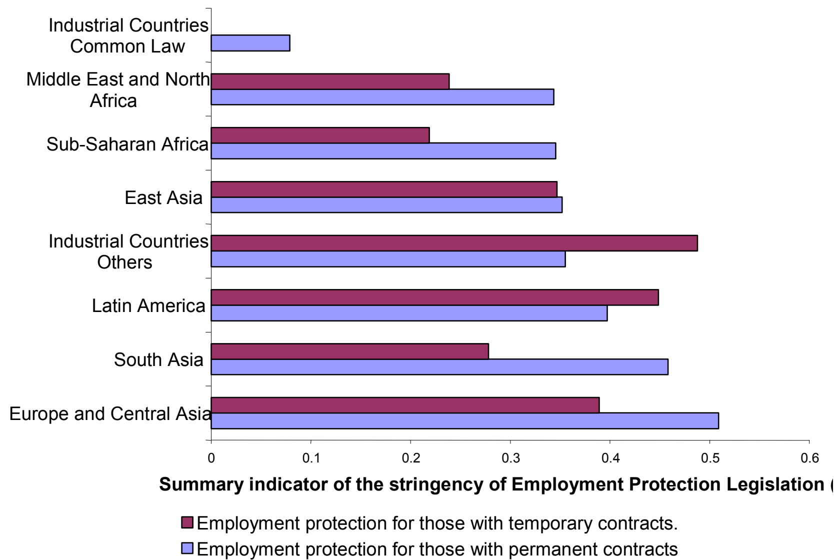


(Manufacturing sector, firms with 20 or more employees)
Source: Bartelsman and others, Background paper for the World Development Report 2005.

7.42 *Regulating hiring and firing.* The protection offered to regular workers and the conditions for temporary employment vary considerably (figure 7.8). Countries in Latin America, Eastern Europe and Central Asia tend to offer the most employment protection for regular workers.[46] "Common law" industrial countries and East Asian economies have the least statutory protection.[47] Differences within broad regions are also large. For example, most countries allow the termination of contracts under a list of "fair" causes, but the list can be very narrow, as in Bolivia where redundancy is not considered a fair cause for dismissal. Advance notice and severance payments also range from a few days and a small proportion of the wage—to several months and high compensation. In Sri Lanka dismissed workers receive 2-3 months of salary for each year of service, and severance payments in some cases exceed 25-30 months' wages.

7.43 *Procedures for dismissal are often cumbersome and opaque.* In Sri Lanka the government decides the amount of compensation for laid-off workers and has the authority to reject employer demands. The time needed for processing the request for a layoff can be highly unpredictable, taking on average six months but much more if the procedure involves hearings where employers explain their financial performance and business plans to the government to justify the layoff. In Russia, before the reform of the labor code, trade unions had veto power over dismissals for staff reductions or for employees not suited to the job.[48]

Figure 7.8 Many developing countries have more stringent regulations on hiring and firing than industrial countries



Source: Authors' calculations from *World Bank Doing Business Database.*

7.44 Before the 1999 reform, representatives of employers and workers in Brazil sat on the jury of labor courts, a practice that often led to protracted judicial procedures and difficulties in reaching compromise. Because of the complexity of the severance pay schemes, more than 6 percent of all salaried workers (about 2 million) usually filed a lawsuit every year and the average labor dispute usually took almost three years. The 1999 reform restricted the jury to professional lawyers and cut the time to resolve a dispute by half.[49]

7.45 *Labor adjustment costs and firms' performance.* Standards for hiring and firing procedures benefit both workers and firms (box 7.6). For example, by reinforcing job security, they can enhance productivity, as workers will be more willing to cooperate with employers.[50] And to the extent that job protection leads to long-lasting work relationships, it may encourage employers to provide training.

Box 7.6 Labor regulation and global integration

Differences in labor regulations and their enforcement might give a cost advantage in internationally traded goods to countries with weak regulations. And new technologies allow labor services to be directly subcontracted to workers in countries with less stringent regulation. This has led to concerns that multinational companies are taking advantage of weak labor regulations or putting pressure on governments for not enforcing existing regulations. And advocacy groups have launched boycotts and other demonstrations against this, especially against firms in apparel and footwear.

"Race to the bottom"?

Evidence of noncompliance with labor regulations abounds in low and middle income countries. But there is no clear evidence that this is related to greater integration in the world market. This is true whether greater integration is measured by export market shares, revealed comparative advantages, foreign direct investment, or trade prices. And trade sanctions have been shown to be counterproductive, potentially harming the people they aim to protect.

Even in export processing zones—which have often been seen as attempts to promote investment by local and foreign firms by offering regulation-free conditions—there is not overwhelming evidence of suppressed labor rights, at least no more than what is observed outside the zones. Of 73 zones reviewed in a recent study, in only six was there found to be any deliberate attempts by government to restrict workers' rights.

Or better contracts for workers?

A body of evidence suggests that multinational firms are providing better working conditions, paying higher wages than alternative local employment, and do not suppress workers' rights. The World Bank's Productivity and Investment Climate Surveys also suggests that foreign-owned firms tend to have a larger share of workers with permanent contracts and to provide more training opportunities to their workforce.

Multinational firms also favor countries with a stable political and social environment, in which civil liberties are well established and enforced. Such environments are typically more conducive to laws being applied evenly to foreign and domestic firms. Moreover, many multinationals are burnishing their reputations by establishing codes of conduct, in line with existing standards or codes.

From a review of 246 voluntary codes of conduct of firms, it appears that the treatment of labor issues varies across codes, from mentioning them in passing to committing to specific actions, such as creating a reasonable working environment and complying with the law. Compliance with codes is monitored by the buyers and often by the independent social auditors they hire. Poor working environment conditions are, however, the reality of many workers at the end of the supply chain. And only recently have some multinationals revised their purchasing practices and improved compliance with labor standards by local subcontractors.

Source: OECD (2000), Krumm and Kharas (2003); Basu (1999), Maskus (1997); OECD (2000); Brown, Deardorff, and Stern (2003); World Bank (2003d); OECD (2001); Raworth (2004).

7.46 But given the high protection granted to workers in the formal sectors in many developing countries, it is not surprising that managers often consider such regulations as a major obstacle for the expansion of their firm. When asked to evaluate eight areas for the burden regulations impose on the operation and growth potential of their business, they ranked labor regulations as the major or second-most important obstacle in many countries of Latin America, Central and Eastern Europe, and South Asia. There is a close correlation between managers' perceptions of employment regulations and the stringency of such regulations from an international perspective (box 7.7).

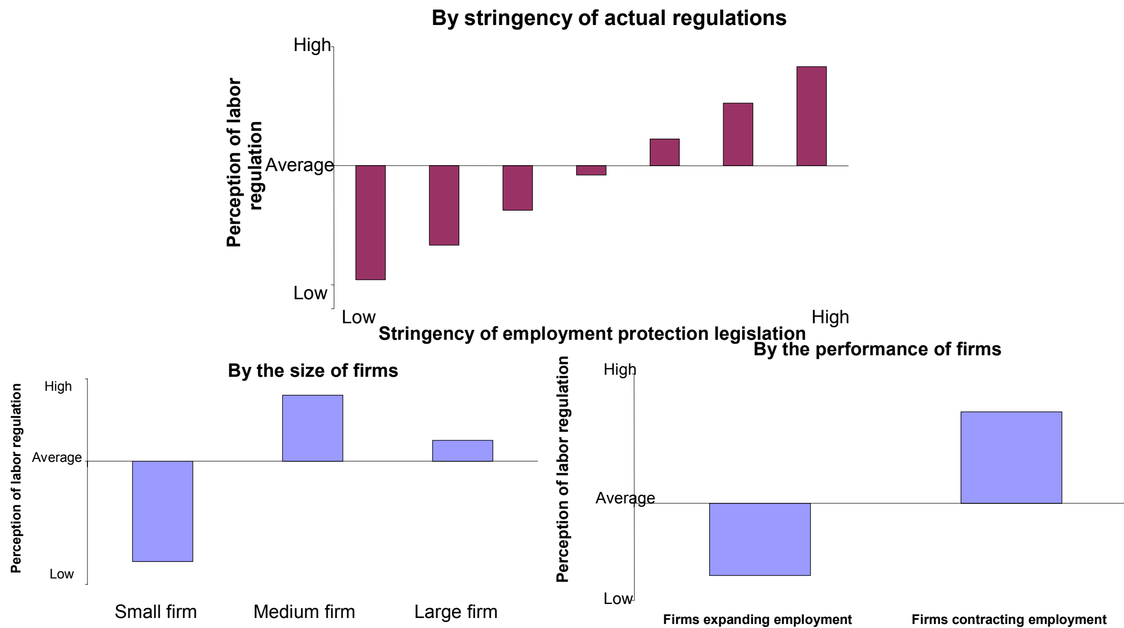
Box 7.7 Do employers' perceptions square with actual labor regulations?

Two main approaches are generally used to assess the importance of regulations in different markets. The first is based on international comparisons of formal laws and regulations. When noncompliance with regulations is high—as for labor regulations in many developing countries—international comparisons of laws and regulations may give rise to inaccurate assessments. Moreover, labor laws are often complex and interact with those in other areas. The second approach is to ask those directly affected by specific regulations: employers and workers. But perceptions are subjective and likely to depend on national and cultural factors. Cross-country comparisons therefore remain difficult on the basis of subjective evaluations.

The *World Business Environment Survey* of the World Bank ask managers how problematic they found regulations in different areas, including labor, for the operation and growth of their companies. The survey focuses on 73 industrial and developing countries. Overall, the raw data suggest that close to 70 percent of respondents reported some concern (minor, moderate, or major) about labor market regulations. Around 15 percent report that these regulations are a major obstacle to the operation and growth of their business.

These data on how employers perceive labor regulations can be combined with an indicator of the strictness of employment protection legislation. This comparison suggests that the higher the stringency of regulations, the greater the likelihood that employers will report that labor regulations are a major obstacle. In other words, strict labor regulations, even if not fully enforced, affect firms' performance by limiting the opportunities open to managers. Medium firms are most affected, while both small firms and large seem to be less concerned with labor regulations. And firms downsizing are more likely than the average to report that labor regulations are a major obstacle. This suggests that labor regulations are more problematic for employers who face a crisis and have to lay off workers. Employers whose business is expanding are on average less concerned.

Box figure The perception of the burden of labor regulations varies across countries and firms



The figures are based on a sample of 8,000 firms in 64 countries around the world. The estimations control for age and size of firms, region and public ownership.

Source: Pierre and Scarpetta, Background note for the World Development Report 2005; Bertola, Boeri, and Cazes (2000); Batra, Kaufmann, and Stone (2002).

7.47 Overly stringent regulations—those at odds with international experience and with the stage of development of the economy—affect different aspects of firms' performance, including spending on innovation, the entry of new firms, their average size, and the incidence of informality.

- *Cost of doing business and exploiting technological opportunities.* Overly strict hiring and firing rules tend to raise the cost of workforce reorganizations required by new vintages of technology—reducing incentives for firms to innovate and adopt new technologies. Evidence from industrial countries suggests that stricter rules are associated with lower R&D expenditure and tend to tilt specialization away from high-tech industries. As an illustration, an econometric cross-country study suggests that by reforming their labor rules to the OECD average, industrial countries with very strict employment regulations could reduce their productivity gap with the technological leader by about 20 percent.[51] Similar reforms in developing countries

can yield even larger productivity gains, given the greater potential for catch-up by adopting technologies available in international markets.

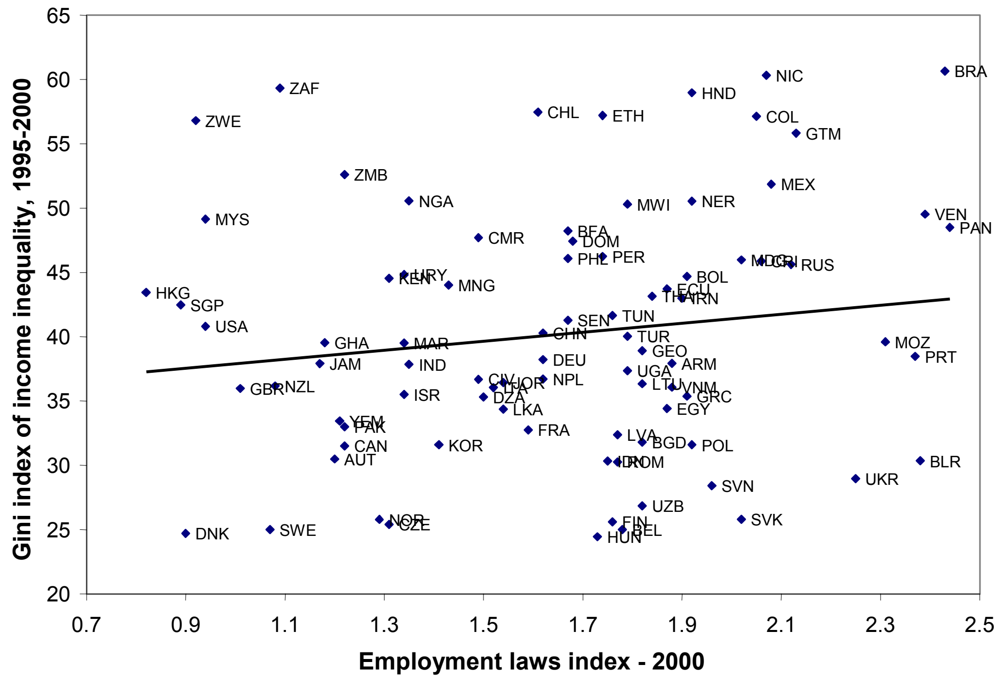
- *Creative destruction*. Stringent regulations also have repercussions on the turnover of firms in the market. Since new firms are often better at harnessing new technologies than incumbent firms, the regulations reduce the potential for productivity gains. Data for 19 industrial and developing economies suggest that countries with more flexible hiring and firing rules experience significantly higher entry rates of small firms (but not microenterprises, often exempt from such regulations or managing to avoid them). Stringent rules also tend to discourage foreign direct investment, especially in countries where rules are opaque and enforcement is uncertain.[52]

- *Self-employment and informality*. Strict labor rules are associated with larger proportions of self-employed, informal firms, and small firms.[53] Firms facing high labor adjustment constraints either remain very small—and more or less informal and thus exempt from employment regulations—or move to a higher scale or to more capital-intensive technologies, in both cases reducing the incidence of hiring and firing costs on total expected adjustment costs. The World Bank's Investment Climate Surveys also suggest greater use of training by large firms to adjust the internal workforce. These firms may also obtain special treatment from local or national authorities to circumvent rigid rules, or exploit their bargaining power. In Russia many large firms have circumvented strict regulations by pushing workers to leave the firm voluntarily, through wage arrears, prolonged administrative leaves, reduced hours, and other forms of deteriorating working conditions. With no future in the firm and no source of income, many workers eventually quit.[54]

7.48 *Vulnerable groups usually lose from overly restrictive employment protection*. To the extent overly restrictive regulations reduce the potential for firm expansion and job creation, they also impede workers' access to jobs. More job stability for some may often implies fewer job opportunities for others. So it is not surprising that stricter job protection rules do not lead to a more equal labor market. If anything, income disparities are greater in countries with stricter regulations (figure 7.9).[55]

7.49 Strict regulations in industrial countries, where enforcement is high, tend to promote job stability for prime-age males, but tend to reduce job opportunities and lengthen unemployment spells for youths, women lacking work experience, and those with low skills.[56] Not surprisingly, the incidence of long-term unemployment (more than 12 months without a job) is very low in the United States (6 percent of total unemployment) and other countries with moderate employment protection legislation. But it is more than 50 percent in Belgium, France, Italy and Spain, which have stricter labor regulations.

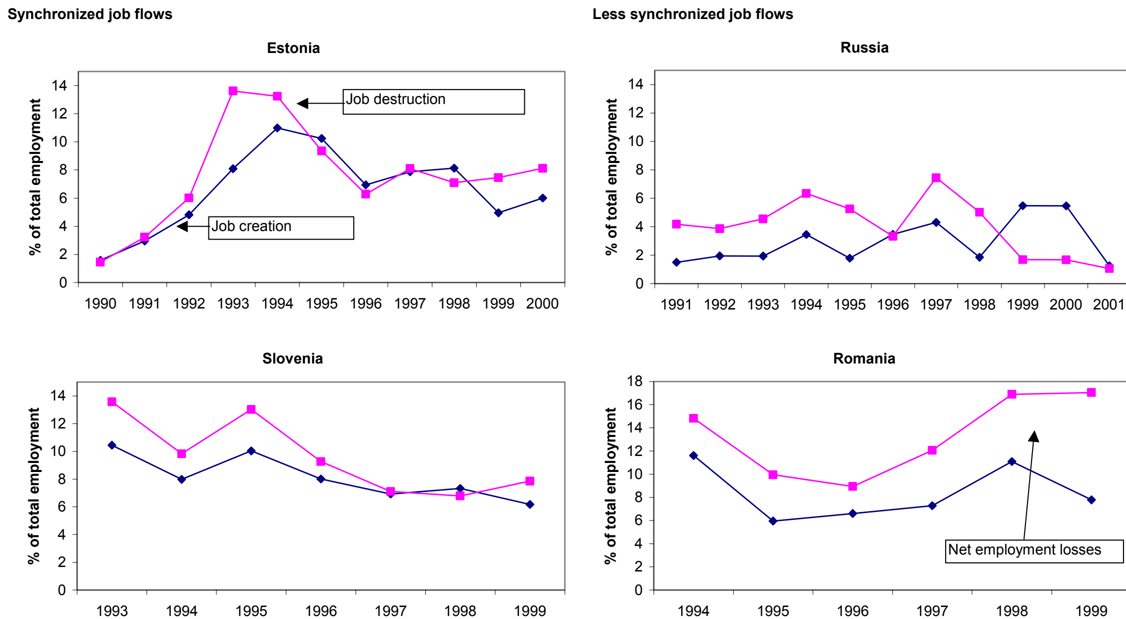
Figure 7.9 Setting stringent labor regulations does not help reduce income inequality



Note: Higher values of the employment index are associated with more stringent labor regulations, and a higher Gini coefficient indicates greater income inequality.
Source: Authors' calculations from WDI and Doing Business Database.

7.50 When enforcement is weak, as it is in many low and middle income countries, stringent regulations do not reduce the size of labor reallocation, but they do change its nature and reduce its effectiveness. In Argentina—a country with fairly rigid labor regulations—job flows had a negative contribution to aggregate productivity growth in the past decade, as many workers transited from formal jobs to lower productivity jobs in the informal sector.[57] And in some transition countries lagging behind in market-oriented reforms, stringent labor regulations have not prevented job destruction—but instead discouraged job creation in the formal economy. This has led to job destruction leading job creation (or highly unsynchronized job flows) and the buildup of a large pool of unemployed or informal workers (figure 7.10). Women, youths, and the unskilled—facing greater difficulties in obtaining a job in the formal sector—are more frequently unemployed or engaged in informal activities.

Figure 7.10 Unsynchronized job creation and destruction can give rise to unemployment or underemployment



Source: Bartelsman and others, Background paper for the World Development Report 2005, Brown and Earle (2004).

7.51 *Promoting labor reallocation and the formalization of work relations.* Evidence from countries that have recently changed job security regulations illustrates the potential benefits of reforming overly stringent labor legislation.

- *Reducing labor adjustment costs*. Colombia and Peru liberalized their employment protection in the 1990s, moving their legislation closer to the standards of the (still quite regulated) European industrial countries. The reforms led to a higher response of employment to output growth, with speedier employment adjustment (figure 7.11) but also positive employment effects. And in Colombia the reform also contributed to increased compliance with labor legislation by lowering the costs of formal production. A study in India suggests that amendments to the strict employment regulation in one state (Andra Pradesh) in the 1980s allowed 1.8 million urban poor to find a job in manufacturing and service companies in the next decade. By contrast, in West Bengal, another Indian state, about 2 million poor people would have found jobs had the state not passed stricter regulations on dismissal and work hours over the past decades.[58] Spain and Italy also experienced sizable positive effects on employment after some easing of their very restrictive firing regulations in the past decade.[59] Similarly, after more than a decade of debate, both Egypt and Morocco revised their labor codes easing contract termination for economic reason. And in Kenya since the mid-1990s employers no longer have to seek permission from the government to dismiss workers.

Figure 7.11 Since the labor reform of 1990, there has been a higher job turnover in Colombia

Source: Bartelsman and others, Background paper for the World Development Report 2005.

- *Liberalizing temporary contracts: blessing or curse?* Several countries in Western Europe, Latin America and Central and Eastern Europe have tried to increase the adaptability of the labor market by liberalizing fixed term contracts and temporary work. Surveys in many developing and transition countries show that firms facing strict regulation of permanent contracts make greater use of temporary employment to foster the adaptability of their workforce.[60] But liberalizing temporary contracts, while leaving in place strict regulations on permanent contracts, reinforces the inequality in the labor market, with negative consequences for firms' performance. Firms will have stronger incentives to hire more workers at the entry level and employ them for a limited period, without giving them a permanent position thereafter. This increases job turnover, but not necessarily overall employment or productivity, as the additional hires will be accompanied by additional layoffs at the end of the temporary contracts. And there will be little or no development of the internal human capital.[61]

7.52 *Leveraging synergies between reforms in labor and other markets.* Regulations in labor markets often interact with those in other markets to reduce incentives for firms to invest and hire workers. For example, the insider power of workers employed in firms sheltered from competitive pressures (whether by market restrictions or by public ownership) can be compounded by unduly restrictive employment protection, pushing up wage premia and lowering output and employment. Improving property right protection can also have large implications for labor supply and workers' productivity. For example, issuing property titles to urban households in Peru led to a major increase in the labor supply, with shifts away from work at home to work in the market and to the substitution of adult labor for child labor.[62]

7.53 The effects of regulatory reform are likely to differ depending on the initial combination of regimes and on the sequencing of the reforms in product and labor markets (chapter 3). Evidence suggests that high job security may lead to adverse effects of trade liberalization for the coverage of labor laws and social protection: in highly regulated labor markets, trade reforms may lead employment shifts from jobs covered by labor law to jobs not covered.[63] Colombia's trade liberalization was associated with increased informal employment in industries with the largest tariff cuts, but once labor market reforms were introduced this pattern was reversed. Similarly, Indian states with less stringent labor regulations experienced stronger growth in the formal sector than those adopting stricter labor regulations.[64]

Helping workers cope with change

7.54 Investment climate improvements facilitate the reallocation of labor across firms and sectors. While beneficial for the economy as a whole, this can be painful for some workers. Providing income support and help in finding a new job may not only be beneficial for the workers themselves—it may also promote economic efficiency insofar as it enables better matches between workers' abilities and the requirements of new jobs. It can also help to build broad public support for investment climate improvements. In many low and middle income countries, inadequate or non-existent social insurance mechanisms imply that dismissed workers cannot afford to remain without income and are forced to accept the first job that comes their way, even if it is not good or productive (figure 7.12). Improving policy performance in this area requires progress toward three interrelated objectives.

- Helping workers cope with large restructurings.
- Reinforcing insurance mechanisms that help workers cope with the income losses of job dislocation and promote their entrepreneurial capacity.
- Reaching out to the large share of workers in rural and the informal sectors who generally cope with risks after they have occurred, often resorting to unproductive strategies.

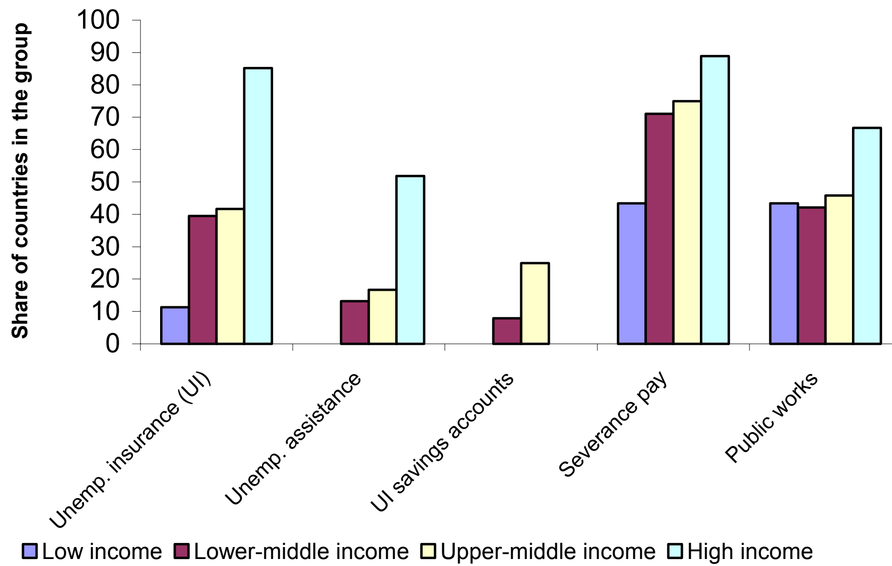
Helping workers cope with large restructurings

7.55 There is often strong pressure to compensate groups more directly threatened by structural reforms, such as workers of previously protected industries who enjoyed large rents and job security. Typically not poor, these groups are very vocal and could represent concentrated opponents to reform. Providing one-time compensation to them may be a socially efficient way to allow reforms to move ahead.

7.56 Workers affected by large dismissals can also face specific difficulties. They may be specialized in activities that may not be highly demanded in the market. And they may be concentrated in specific locations, making it more difficult for them to regain employment locally. This was the case of most transition economies, where many one-

company towns and backward rural areas experienced a collapse in labor demand and major surges in unemployment and exits from the labor market.

Figure 7.12 Developing countries, particularly low-income ones, offer much weaker and less diverse protection against unemployment risk than developed countries



Source: Vodopivec (2004).
Note: Based on the presence of the following programs: Unemployment insurance, unemployment assistance, unemployment insurance savings accounts, severance pay, and public works.

7.57 The traditional approach to dealing with large dismissals is to promote voluntary departures with generous severance pay.[65] This approach tends to reduce labor's opposition and to minimize the short-term social impact of restructuring or downsizing. The challenge is to set severance pay at a level that will be attractive to workers yet financially sustainable. Too high a level can lead to high short-term costs and the adverse selection of the best employees leaving first. High costs may also slow or even stop the process of firm restructuring. In Ghana downsizing was halted because the government could not afford the severance payments. In Pakistan strong labor resistance led the government to grant extraordinary generous severance payments to workers affected by the privatization of industrial units—including five months' salaries for each year of service. The agreement set a precedent for the later privatization of public utilities, raising the costs to unaffordable levels and delaying them.[66]

7.58 Governments can also provide specific retraining programs to help workers regain employment. But these programs often operate in a context of low labor demand that makes it difficult to identify the best training curricula and to motivate workers to participate. In many cases, a low proportion of eligible workers takes up these courses, [67] which often come too late, after the downsizing has taken place and workers have already left, as in Bangladesh for jute workers. In any event, for political and social reasons, it is likely that governments will provide such programs even if they are not highly effective. To make the most of them, their design matters, adapted to the country's circumstances.

Early preparation is thus essential, and targeted intervention helps to minimize problems. Where job demand is lacking, eliminating obstacles to private job creation through broader investment climate improvements is essential.

Reinforcing social insurance to promote labor mobility

7.59 Measures are needed to reduce the exposure of workers to external and domestic shocks or, if this cannot be avoided, to mitigate the income effects on displaced workers. Sound macroeconomic policies and investments in education are the best risk-prevention instruments. And social protection programs can mitigate the impact of risks while promoting labor reallocation and entrepreneurship. Even if public resources to finance these schemes are limited, much can be done to promote their effectiveness by reinforcing insurance principles and better targeting.

7.60 The policy mix best suited to each country depends on the factors driving economic insecurity and the cost-effectiveness of the various options.[68] But four general strategies emerge from international experience.

- *Reduce economic volatility*. Many low and middle income countries remain exposed to external shocks and, given their weak international links, have limited capacity to accommodate them. When a negative aggregate shock hits the economy, capital—often the most mobile factor of production—tends to leave the country, while labor tends to bear the brunt of the adjustment in either real wage cuts or unemployment and underemployment. Export diversification can reduce exposure to large fluctuations in external demand and deeper capital markets and stronger financial systems increase the ability to mitigate the impact. The welfare benefits from reducing macroeconomic volatility in most developing countries can be substantial.[69]

- *Move away from procyclical fiscal policy*. The exposure of workers to external shocks is also compounded by the fact that their governments often lack the fiscal discipline to promote countercyclical financing of social programs. Many governments tend to adopt an expansionary fiscal stance in good times and a contractionary stance in bad. Mounting budget deficits in recessions thus creates pressures to reduce public spending on social protection (among other things) just when the need for it is increasing. Greater fiscal discipline and a better diversification of the fiscal revenue base are also essential in guaranteeing that resources are available to cushion the required labor adjustment process (chapter 5).

- *Address market inefficiencies*. Beyond macroeconomic policies, the most effective strategy for risk prevention and mitigation is to develop a sound investment climate where firms have incentives to invest and expand. Investment climate improvements allow for stronger job creation in the formal sector and expand tax resources available for social programs. They also provide greater opportunities for firms to insure themselves against temporary shocks, without resorting to wage or employment cuts,[70] and for workers to insure themselves against income losses and promote their entrepreneurial potential.

- *Promote workers' adaptability.* Beyond much-needed improvements in the coverage and quality of education, governments can improve the ability and willingness of workers to move to more productive and rewarding jobs by supporting training, counseling, and placement services. The effectiveness of these programs has been challenged, especially in countries with limited administrative capacity. But when properly targeted, they can be a complementary strategy to skill enhancements and income support.

7.61 Ideally, these four strategies would be accompanied by social insurance programs. Beyond enhancing the welfare of the unemployed, these programs improve the investment climate by facilitating the allocation of labor to more productive uses and encouraging entrepreneurship. First, social insurance schemes can stimulate riskier but more productive jobs and industries.[71] It is estimated that lack of access to insurance amongst poor rural households pushes them to take up low-risk activities with lower returns, reducing their income potential by 25 percent in rural Tanzania and by 50 percent in a sample of rural villages in India.[72]

7.62 Second, uninsured transient shocks that reduce individual consumption below a threshold needed to retain productivity can give rise to "dynamic poverty traps." This happens when families are forced to sell productive assets needed to support their agricultural or microenterprises.[73] Third, uninsured risk reduces efficiency through costly production and portfolio choices, such as the use of outdated but less risky production technologies, or holding livestock as a form of precautionary savings. Fourth, unemployment-related benefits may provide necessary resources to increase the effectiveness of the job search or to enter self-employment.[74]

7.63 *Reinforcing self-insurance among formal workers.* In most low and middle income countries, mandatory severance pay provisions are the prevalent form of insurance against unemployment for workers in the formal sector. Generally easy to administer, the provisions exchange resources, in the event of unemployment, for an "insurance premium." As discussed earlier, whether the premium translates into lower wages affects the labor costs for firms and their incentive for hiring. But even when workers bear the costs, the schemes offer only a limited pooling of unemployment risk because they are firm-specific and because the provision generally evolves with tenure, not with the risk of unemployment.[75]

7.64 Severance pay provisions also suffer from noncompliance in many countries, increasing workers' resistance to leaving a job. Disbursements tend to increase when financial resources are lacking because the firm is experiencing difficulties—and they may simply not be available if the firm goes bankrupt. Noncompliance also creates a burden on labor courts and government budgets. It looms particularly large among small firms and among low-skilled workers who have few alternative instruments to smooth consumption.[76] To tackle these shortcomings, some countries have introduced prefunding or reduced the generosity of payments to bring them more in line with international experience. Colombia moved toward a funded system under individual savings accounts in 1990 and Chile introduced a social-insurance component to its system in 2002 (box 7.8).

Box 7.8 Reforms to severance pay: reducing labor market distortions and enhancing insurance

In 1990 **Colombia** introduced a system of fully-funded severance pay savings accounts which required employers to deposit a percentage of wages into guaranteed individual accounts available to workers in the event of job separation (limited access to funds while employed was also foreseen). The reform reduced labor market distortions and promoted job creation. Employers shifted most of the costs of severance payments onto wages, but total compensation of workers (wages plus deposits to their savings accounts) increased. In addition, because the reform removed the discretionary nature of severance payments, both separations and accessions increased.

By transforming uncertain and conditional payments to unconditional payments monitored by the third party (the government), the reform also enhanced insurance function of the severance pay. Before the reform, few firms actually provided severance pay (for example, firms about to go bankrupt could simply not pay severance or could negotiate a package substantially below what was owed in severance payments). The pre-funding requirement increased the likelihood that the legal entitlement to severance pay is actually carried out. The new severance pay savings accounts strongly reduced in-kind and monetary transfers from relatives, as well as government-mandated transfers, received by severance payments beneficiaries.

In 2002 **Chile** introduced a new unemployment insurance system that combines social insurance with self-insurance. Employers and employees both contribute to individual savings accounts but an additional contribution from employers and a small public subsidy are allocated to a Solidarity Fund. The new program is effectively a funded system, with individual accounts being managed by an administrator selected through a competitive tender.

To stimulate reemployment, benefit recipients first draw resources from their own accounts, and upon their depletion, from the solidarity account. Withdrawals from individual accounts are triggered by separation from the employer, regardless of the reason. Insufficient resources on individual accounts trigger withdrawals from the common fund if the claimant meets the criteria for unemployment insurance (such as not working and being available and searching for job), but are limited to 2 withdrawals per 5 years. Benefits are linked to past earnings, with a declining schedule. Moreover, workers can move any unused savings from their individual accounts to their old-age pension accounts on retirement.

Source: Vodopivec (2004); Kugler (2002); Acevedo and Eskenazi (2003).

7.65 To alleviate the moral hazard in traditional unemployment benefit programs, recipients in Chile first draw resources from their own account and, on depletion, from the solidarity account. This combination is likely to improve re-employment incentives, while providing a high degree of consumption smoothing—by increasing the pooling of risk through the solidarity component.[77]

7.66 *Increasing the pooling of risks across workers.* Evidence from industrial countries suggests that unemployment insurance benefits are the next natural step to pool unemployment risks and facilitate efficient labor allocation.[78] Following this model, most transition countries have introduced unemployment insurance schemes since the early 1990s. The schemes have been the main source of income for workers affected by labor reallocation during the transition.[79] The clear welfare gains for workers affected by job losses have to be weighed against the costs of these schemes and their impact on economic efficiency. Both depend largely on the ability to monitor eligibility requirements to minimize moral hazard and make sure that workers have incentives to actively search for a new job.[80] But effective enforcement is difficult in developing countries, which generally have weak public employment services or none, compounded by a large informal economy that offers many opportunities for undeclared paid work.

This is the case in Argentina where administration of unemployment benefits still applies few measures to prevent the leakage of benefits to those who have found jobs in the informal sector.[81]

7.67 Even if countries have the required administrative capacity, unemployment benefits should provide only a fraction of the previous wage—and they should be short-lived, to provide incentives for beneficiaries to seek a new job. Poland introduced a generous and open-ended unemployment insurance scheme in the early 1990s, offering it to all job-seekers irrespective of whether they had lost their job. Not surprisingly, the number of claimants soared, making the system financially unviable and contributing to the buildup of a large pool of long-term unemployed. The scheme, later reformed to reduce disincentive effects, now provides a low flat benefit for a limited duration. The Czech Republic, by contrast, opted for less generous short-lived benefits (only six months) and partly because of this had lower unemployment in the early phases of the transition.

Combining income support for the poor with improvements in local infrastructure

7.68 Most of the programs discussed so far fail to reach rural and informal workers, who typically rely on support from employers or private transfers to cope with income losses. Rural employers often pay workers a fixed wage when they are employed, regardless of seasonal and other fluctuations in demand, or provide loans to workers who face unexpected expenses.[82] Given the informality of the employment contract, these commitments give employers a lot of discretion. Poor households also rely on their own savings and private transfers to cope with shocks. In Indonesia, the Philippines, and Russia private transfers account for between 2 percent and 41 percent of income for net receivers and between 1 percent and 8 percent of income for net givers.[83] A study in Kyrgyzstan found that private transfers are provided to just 12 percent of the households but account for more than one-third of the incomes of the households who receive them.[84]

7.69 These forms of private risk-coping mechanisms are becoming less effective in sheltering poor and informal workers from risks. Market economies require significant movements of labor, including those in the informal or rural sector. This can weaken long-term relationships between employers and employees and make voluntary risk-sharing and informal insurance commitments less effective. In some countries, shocks have also become more severe, often more recurrent, and difficult to anticipate, especially for those with low skills and experience—all reducing the potential for private transfers.[85] Under these circumstances, substituting a public "safety net" for a private coping system can help individuals and their families cope with severe income losses and encourage their entrepreneurial drive. It can also break a vicious circle in which the household, to accommodate a temporary income loss, takes actions that undermine its future ability to cope with shock, such as taking children out of school or cutting health expenditures.[86]

7.70 Three forms of "conditional" income support have been used in developing countries to provide a public safety net to poor people and to help improve the local

investment conditions: workfare programs, social investment funds, and conditional cash transfers.

7.71 *Workfare programs as social protection schemes.* In South Asia workfare programs started as "food-for-work" schemes, in which workers were paid for their labor with food aid from Western countries. Workfare programs have gradually moved to "cash-for-work," operated by a variety of agencies, including local and state governments and NGOs, and they are increasingly viewed as insurance—not emergency—programs for informal and rural workers. They generally transfer income to poor households, by providing unskilled manual workers with short-term employment on projects such as road construction and maintenance, irrigation infrastructure, reforestation, and soil conservation.

7.72 Workfare programs have often smoothed consumption and kept poor people in contact with the labor market.[87] And well-designed programs build much-needed infrastructure and reduce the tradeoff between public spending on income transfers and on development. The Maharashtra Employment Guarantee Scheme in India, in operation for more than three decades, has created considerable irrigation, infrastructure, and rural roads in the state of Maharashtra.[88] Workfare programs have also helped many small private contractors emerge and grow.

7.73 A key aspect of workfare programs is the ability of participants to self-select. In Argentina, the (*Trabajar*) program wage rate was kept well below the minimum wage, encouraging the poor to self-select into the program. But in the Philippines the program wage was much higher than the agricultural market wage, and a substantial number of nonpoor were attracted into the program. Kenya, Malawi, Mali, and Senegal also paid wages above the market wage rates, undermining the self-targeting design and rationing jobs away from the very poor.[89] Self-selection of participants should be accompanied by targeting to the poorest areas to ensure that programs also promote local development. In South Africa a demand-driven approach in the allocation of funds for workfare programs has favored more developed and better connected communities at the expense of some of the neediest communities.[90]

7.74 *Social funds to improve the investment climate—and opportunities—in poor areas.* Social funds, introduced in Bolivia in the late 1980s, have become one of the main tools of community-led poverty reduction. They finance small projects in poor communities. Early programs focused on providing temporary work opportunities while also financing better access to basic services. Recent programs give greater emphasis to service delivering and connecting communities—which generally identify and partly finance projects—with local governments. Social funds now absorb close to $10 billion in foreign and domestic financing in developing and transition countries.

7.75 A recent review of social funds in Armenia, Bolivia, Honduras, Nicaragua, Peru, and Zambia offers a fairly positive assessment of their effectiveness in providing income support and promoting local development.[91] Evidence suggests that spending through social funds was highly progressive, with poor districts and poor households receiving more per capita support than wealthier districts or households.[92] Schools and health

centers that received social investment funds have enjoyed equal or stronger access to staff and inputs and greater participation by local communities compared with other institutions. The effects on poor households can also be sizable. School infrastructure investment is estimated to have increased primary enrollment rates, especially in Armenia, Nicaragua, and Zambia.

7.76 *Conditional cash transfers to preserve human capital and health.* Conditional cash transfers are another way to combine income support with local development. They belong to a family of transfer programs that combine close targeting with capital accumulation by making income support conditional on either basic needs triggers, such as utility offset payments (in some transition economies), or behavioral changes, such as the continued school enrollment of children or attendance at health clinics. They typically address chronic poverty rather than idiosyncratic risks associated with job loss. But their focus on human capital formation makes them suitable to address poverty and local development at the same time. In Mexico (*Oportunidades,* formerly *Progresa*, reached 2.3 million families in 1999), Brazil (*Bolsa Escola* and PETI) and Jamaica (PATH), conditional cash transfers are largely used to promote health and human capital of children. In some countries, these transfers are a quick response to economic crisis (Colombia) or a natural disaster (the earthquake in Turkey). In others, they meet long-term human development goals. For example, in Nicaragua, they were used to boost school enrollments.

7.77 Evaluations show that these programs can raise school enrollment and attendance rates and improve child health and nutrition.[93] The Mexican program (*Oportunidades*) increased primary school attendance by more than 2 percent and secondary enrollment by more than 8 percent, while increasing health visits by some 20 percent. And the Brazilian *bolsa escola* reduced school dropouts from 5.6 percent to 0.4 percent.[94] The programs also tend to be better targeted than general subsidies by the use of proxy means testing and geographical targeting. They are highly transparent about who receives the transfers. And the level of benefits and the number of beneficiaries is easily adjusted in times of crisis. As with any transfer program, conditional cash transfers have problems, especially when the increased demand for services is not met by increased supply (schools or clinics) or when the targeting is not sufficiently resistant to outside influence.

******

7.78 Growing economies require skilled and healthy workers who are able and willing to move to more productive and rewarding jobs. Public policies have a key role to play in promoting labor market adjustments while helping workers cope with labor mobility. Efforts to achieve these objectives not only increase the growth dividend of a better investment climate, they ensure that growth is associated with the creation of many more formal jobs. It is also important to ensure the opportunities from a better investment climate are shared widely in society.

References

The word processed describes informally reproduced works that may not be commonly available through libraries.

Abowd, J. M., J. Haltiwanger, J. Lane, and K. Sandusky. 2001. "Within and Between Changes in Human Capital, Technology, and Productivity." U.S. Census Bureau: Washington, D.C. Processed.

Acemoglu, D., and R. Shimer. 1999. "Efficient Unemployment Insurance." *The Journal of Political Economy* 107:893–28.

Acevedo, G., and P. Eskenazi. 2003. "The Chilean Unemployment Insurance: A New Model of Income Support Available of Unemployed Workers." Paper presented at the *Severance Pay Reform: Toward Unemployment Savings and Retirement Accounts (World Bank and IIASA/Ludwig Boltzmann Institute for Economic Analysis)* Conference. Laxenberg/Vienna. November 7.

Addison, J., and P. Teixeria. 2001. "The Economics of Employment Protection." Institute for the Study of Labor Discussion Paper 381. Bonn.

Aedo, C., and S. Núñez. 2001. *The Impact of Training Policies in Latin America and the Caribbean: The Case of "Programa Joven"*. Inter-American Development Bank: Washington, D.C.

Agenor, R. 1996. "The Labor Market and Economic Adjustment." International Monetary Fund Staff Papers No. 2, June. Washington, D.C.

Aghion, Philipe, Robin Burgess, and Stephen Redding. 2002. "Liberalization, Institutions, and Industrial Performance: Evidence from India." Paper presented at the *International Trade and Investment* Conference. Cambridge, Mass. August 5.

Aidt, T., and Z. Tzannatos. 2002. *Unions and collective bargaining - economic effects in a global environment*. Oxford: World Bank and the Oxford University Press.

Akerlof, G. 1984. *An Economist's Book of Tales*. Cambridge: Cambridge University Press.

Alatas, V., and L. Cameron. 2003. "The Impact of Minimum Wages on Employment in a Low Income Country: An Evaluation Using the Difference-in-Differences Approach." World Bank Policy Research Working Paper Series 2985. Washington, D.C.

Alogoskoufis, G., C. Bean, G. Bertola, D. Cohen, J. Dolado, and G. Saint-Paul. 1995. *Unemployment: Choices for Europe*. CEPR: London.

Barro, Robert J., and Jong-Wha Lee. 2000. "International Data on Educational Attainment: Updates and Implications." National Bureau of Economic Research Working Paper 7911. Cambridge, Mass.

Bartelsman, Eric, John Haltiwanger, and Stefano Scarpetta. 2004. "Microeconomic Evidence of Creative Destruction in Industrial and Developing Countries." Background paper for the WDR 2005.

Bassanini, A., and S. Scarpetta. 2002. "Does Human Capital Matter for Growth in OECD Countries? A Pooled Mean-group Approach." *Economics Letters* 74(3):399–405.

Basu. 1999. "Child labor: cause, consequence, and cure, with remarks on international labor standards." *Journal of Economic Literature* 37:1083–119.

Batra, Geeta, Daniel Kaufmann, and Andrew H. W. Stone. 2002. *Investment Climate Around the World: Voices of the Firms from the World Business Environment Survey*. Washington DC: World Bank.

Bell, C., S. Devarajan, and H. Gersbach. 2003. *The Long-Run Economic Costs of AIDS: Theory and an Application to South Africa*. World Bank: Washington, D.C.

Bertola, G. 2004. "A Pure theory of Job Security and Labor Income Risk." *Review of Economic Studies* 71:43–61.

Bertola, G., T. Boeri, and S. Cazes. 2000. "Employment Protection in Industrialized Countries: The Case for New Indicators." *International Labour Review* 139(No. 1):57–72.

Besley, T., and S. Burgess. Forthcoming. "Can Labor Regulation Hinder Economic Performance? Evidence from India." *Quarterly Journal of Economics*.

Betcherman, G., K. Olivas, and A. Dar. 2003. *Impacts of Active Labor Market Programs: New Evidence from Evaluations with Particular Attention to Developing and Transition Countries*. World Bank: Washington, D.C.

Bingsten, A., P. Collier, S. Dercon, M. Fafchamps, B. Gauthier, J. W. Gunning, A. Oduro, R. Oostendorp, C. Pattillo, M. Soderbom, F. Teil, and A. Zeufack. 2003. "Risk Sharing in Labor Markets." *World Bank Economic Review* 17(3):349–66.

Blanchard, O., and A. Landier. 2001. "The Perverse Effects of Partial Labor Market Reform: Fixed Duration Contracts in France." National Bureau of Economic Research Working Paper Series 8219. Cambridge, Mass.

Bloom, D. E., L. R. Bloom, D. Steven, and M. Weston. 2003. *Business and HIV/AIDS: Who Me?* World Economic Forum: Geneva, Switzerland.

Boeri, Tito, Agar Brugiavini, and Lars Calmfors, eds. 2001. *The Role of Unions in the Twenty-First Century.* Oxford: Oxford University Press.

Bourguignon, F., F. H. G Ferreira, and P. G. Leite. 2002. *Ex-ante Evaluation of Conditional Cash Transfer Programs: The Case of Bolsa Escola*. World Bank: Washington, D.C.

Bourguignon, F., and C. Goh. 2003. *Trade and Labor Market Vulnerability in Korea, Indonesia, and Thailand: Evaluating Vulnerability from Repeated Cross-sections*. World Bank: Washington, D.C.

Bresnahan, T. F., E. Brynjolfsson, and L. M. Hitt. 2002. "Technology, Workplace Organization and the Demand for Skilled Labor:Firm-Level Evidence." *Quarterly Journal of Economics* 117(1):339–76.

Brown, D. 2000. "International Trade and Core Labour Standards. A survey of the Recent Literature." OECD Labour Market and Social Policy Occasional Papers 43. Paris.

Brown, D., A. V. Deardorff, and R. M. Stern. 2003. "The Effects of Multinational Production on Wages and Working Conditions in Developing Countries." National Bureau of Economic Research Working Paper 9669. Cambridge, Mass.

Brown, J. David, and John S. Earle. 2004. "Economic Reforms and Productivity-Enhancing Reallocation in the Post-Soviet Transition." Upjohn Institute Staff Working Paper 04-98. Kalamazoo, MI. Available on line at http://www.upjohninst.org.

Burra, Neera. 1995. *Born to Work: Child Labour in India*. New Delhi: Oxford University Press.

Calderon-Madrid, A., and T. Belem. 2001. *The Impact of the Mexican Training Program for Unemployed Workers on Re-employment Dynamics and on Earnings*. Inter-American Bank: Washington, D.C.

Calmfors, L. 1993. "Centralization of Wage Bargaining and Macroeconomic Performance: A Survey." *OECD Economic Studies* 21:161–91.

Cavalcanti, C. B. 2003. "Argentina: Growth, Productivity and Labor Reallocation." World Bank: Washington, D.C. Processed.

Chandra, V., L. Moorty, J-P. Nganou, B. Rajaratnam, and K. Schaefer. 2001. "Constraints to Growth and Employment in South Africa: Report No.2 Evidence from the Small, Medium and Micro Enterprise Firm Survey." World Bank, Southern Africa Department, Discussion Paper 15. Washington, D.C.

Chirwa, E. W., E. K. Zgovu, and M. Mvula. 2002. "Participation and Impact of Poverty-Oriented Public Works Projects in Rural Malawi." *Development Policy Review* 20(2):159–176.

Christianson, D. 2004. "The Investment Climate in South Africa. Regulatory Issues: Some Insights from the High-growth, Export Oriented SME Sector." Background paper for the WDR 2005.

Cox, D., E. Jimenez, and J. Jordon. 1994. "Family Safety Nets and Economic transition: A Study of Private Transfers in Kyrgyzstan." World Bank Policy Research Working Paper Series 5485. Washington, D.C.

de Ferranti, David, Guillermo E. Perry, Indermit Gill, J. Luis Guasch, William F. Maloney, Carolina Sanchez-Paramo, and Norbert Schady. 2003. *Closing the Gap in Education and Technology*. World Bank: Washington, D.C.

de Ferranti, David, Guillermo E. Perry, Indermit S. Gill, and Luis Serven. 2000. *Securing Our Future in a Global Economy*. World Bank: Washington, D.C.

De La Fuente, A., and R. Doménech. 2000. "Human Capital in Growth Regressions, How Much Difference Does Data Quality Make?" OECD Economics Department Working Paper 262. Paris.

Dercon, S. 1996. "Risk, Crop Choice, and Savings: Evidence from Tanzania." *Economic Development and Cultural Change* 44:458–513.

Dewit, G., H. Gorg, and C. Montagna. 2003. "Should I Stay or Should I Go? A Note on Employment Protection, Domestic Anchorage, and FDI, IZA." Institute for the Study of Labor, Discussion Paper No. 845 845. Bonn, Germany.

Djankov, S., R. La Porta, F. López-de-Silanes, A. Shleifer, and J. Botero. 2003. "The Regulation of Labor." National Bureau of Economic Research Working Paper 9756. Cambridge, Mass.

Dolado, Juan José, Carlos García-Serrano, and Juan F. Jimeno. 2001. "Drawing Lessons from the Boom of Temporary Employment in Spain." Fundación de Estudios de Economía Aplicada 2001-11. Madrid. Available on line at http://www.fedea.es/.

Dollar, D., and A. Kraay. 2001. "Trade, Growth, and Poverty." *Finance and Development* 38(3):16–19.

Easterly, William. 2001. *The Elusive Quest for Growth: Economists' Adventures and Misadventures in the Tropics*. Cambridge, Mass.: MIT Press.

Edmonds, E. V. 2004. "Does Child Labor Decline with Improving Economic Status?" National Bureau of Economic Research Working Paper 10134. Cambridge, Mass.

Eslava, Marcela, John Haltiwanger, Adriana Kugler, and Maurice Kugler. 2003. "Have Market Reforms Changed the Evolution of Productivity and Profitability in Colombia?" Paper presented at the *IASE - National Bureau of Economic Research Conference on "Productivity Dynamics"* Conference. Santiago.

Feliciano, Z. M. 1998. "Does Minimum Wage Affect Employment in Mexico?" *Eastern Economic Journal* 24(2):165–180.

Field, E. 2002. "Entitled to Work: Urban Property Rights and Labor Supply in Peru." Princeton University: Princenton, N.J. Processed.

Forteza, A., and M. Rama. 2002. "Labor Market "Rigidity" and the Success of Economic Reforms across More Than One Hundred Countries." World Bank Policy Research Working Paper Series 2521. Washington, D.C.

Freeman, R. 1994. *A Global Labor Market? Differences in Wages Among Countries in the 1980s*. World Bank: Washington, D.C.

Gaiha, R. 2000. *Rural Public Works and the Poor: A Review of the Employment Guarantee Scheme in Maharashtra*. University of Delhi, Faculty of Management Studies: India.

Gill, Indermit S., W. Maloney, and C. Sanchez-Paramo. 2002. *Trade Liberalization and Labor Reform in Latin America and the Caribbean in the 1990s*. World Bank: Washington, D.C.

Gill, Indermit S., Claudio E. Montenegro, and Dorte Domeland. 2002. *Crafting Labor Policy: Techniques and Lessons from Latin America*. World Bank: Washington, D.C.

Goldberg, P. K., and N. Pavcnik. 2003. "The Response of the Informal Sector to Trade Liberalization." National Bureau of Economic Research Working Paper 9443. Cambridge, Mass.

Görg, H. 2002. "Fancy a Stay at the 'Hotel California'? Foreign Direct Investment, Taxation and Firing Costs." Institute for the Study of Labor, Discussion Working Paper 665. Bonn.

Gruber, J. 1997. "Consumption Smoothing Effects of Unemployment Insurance." *American Economic Review* 87:192–205.

Haddad, L., and M. Adato. 2001. "How Efficient do Public Works Programs Transfer Benefits to the Poor? Evidence from South Africa." International Food Policy Research Institute Discussion Paper 108. Washington, D.C.

Haltiwanger, J., S. Scarpetta, and M. Vodopivec. 2003. "How Institutions Affect Labor Market Outcomes: Evidence from Transition Economies." Paper presented at the *2003 World Bank Economists' Forum* Conference. Washington, D.C.

Harrison, A., and E. Leamer. 1997. "Labor Markets in Developing Countries: An Agenda for Research." *Journal of Labor Economics* 15(3):S1–S19.

Heckman, and C. Pages. 2003. "Law and Employment: Lessons from Latin America and the Caribbean." National Bureau of Economic Research Working Paper 10129. Cambridge, Mass.

Holzmann, R., and S. Jorgensen. 2001. "Social Risk Management: A New Conceptual Framework for Social Protection and Beyond." *International Tax and Public Finance* 8(4):529–56.

Hopenhayn, H. Forthcoming. "Labor Market Policies and Employment Duration: The Effects of Labor Market Reform in Argentina." In James Heckman and Carmen Pages (eds.) *Law and Employment: Lessons from the Latin America and the Caribbean*. Cambridge, Mass. and Chicago, I.L.: National Bureau of Economic Research and University of Chicago.

ILO. 2004. *Investing in Every Child - An Economic Study of the Costs and Benefits of Eliminating Child Labor*. ILO: Geneva.

Inernational Financing Corporation. 2001. *Investing in Private Education: IFC's Strategic Directions*. International Financing Corporation, Health and Education Group: Washington, D.C.

Inter-American Development Bank. 2003. *Good Jobs Wanted: Labor Market in Latin America*. Johns Hopkins University Press: Washington, D.C.

International Labor Office. 2002. "Decent Work and the Informal Economy. Report VI." Paper presented at the *International Labour Conference 90th Session* Conference. Geneva.

Jalan, J., and M. Redding. Forthcoming. "Estimating the Benefit Incidence of an Anti-Poverty Program by Propensity-Score Matching." *Journal of Business and Economic Statistics*.

Joint United Nations Programme on HIV/AIDS. 2003. *AIDS Epidemic Update 2003*. UNAIDS: New York.

Kikeri, S. 1998. "Privatization and Labor: What Happens to Workers when Governments Divest?" World Bank Technical Paper 396. Washington, D.C.

Klasen, S., and I. Woolard. 2001. "Surviving Unemployment without State Support: Unemployment and Household Formation in South Africa." Institute for the Study of Labor, Discussion Working Paper 237. Bonn, Germany.

Krueger, A. 1996. "Observations on International Labor Standards and Trade." National Bureau of Economic Research Working Paper 5632. Cambridge, Mass.

Krumm, K., and H. Kharas. 2003. "Overview." In K. Krumm and H. Kharas, eds., *East Asia Integrates: A Trade Policy Agenda for Shared Growth.* Washington, D.C.: World Bank.

Kugler, A. 2002. "From Severance Pay to Self-Insurance: Effects of Severance Payments Savings Accounts in Colombia." IZA Discussion Paper 434. Bonn.

Kugler, A., and G. Pica. 2003. "Effects of Employment Protection and Product Market Regulations on the Italian Labor Market." Institute for the Study of Labor, Discussion Paper 948. Bonn, Germany.

MacIsaac, D., and M. Rama. 1997. "Determinants of Hourly Earnings in Ecuador: The Role of Labor Market Regulations." *Journal of Labor Economics* 15(3):136–165.

--------. 2001. "Mandatory Severance Pay in Peru: An Assessment of its Coverage and Effects using Panel Data." World Bank Policy Research Working Paper Series 2626. Washington, D.C.

Maloney, W. F. 2000. *Informality Reconsidered*. World Bank: Washington, D.C.

Maloney, W. F., and J. Núñez. Forthcoming. "Measuring the Impact of Minimum Wages: Evidence from Latin America." In J. Heckman and C. Pages (eds.) *Law and Employment: Lessons from Latin America and the Caribbean*. Cambridge, Mass. and Chicago, I.L.: National Bureau of Econfomic Research and University of Chicago.

Maloney, W. F., and E. Pontual Ribeiro. 2001. "Employment and Wage Effects of Mexican Unions - A Case of Extreme Efficient Bargaining." World Bank: Washington, D.C. Processed.

Martin, J., and D. Grubb. 2001. "What Works and for Whom: a Review of OECD Countries' Experiences with Active Labour Market Policies." *Swedish Economic Policy Review* 18(2):9–56.

Martin, W., and K. Maskus. 2001. "Core labor standards and competitiveness: implications for global trade policy." *Review of International Economics* 9(2):317–328.

Maskus, K. 1997. "Should Code Labor Standards be Imposed Through International Trade Policy?" World Bank Policy Research Working Paper Series 1817. Washington, D.C.

Matusz, and Tarr. 1999. "Adjusting to Trade Policy Reform." World Bank Policy Research Working Paper 2142. Washington, D.C.

Mazza, J. 1999. "Unemployment Insurance: Case Studies and Lessons for Latin America and the Caribbean." Inter-American Development Bank, Technical Study RE2/SO2. Washington, D.C.

McArthur, J. W., and J. D. Sachs. 2001. "Institutions and Geography: Comment on Acemoglu, Johnson and Robinson (2000)." National Bureau of Economic Research Working Paper Series 8114. Cambridge, Mass.

Mead, D. C., and C. Liedholm. 1998. "The Dynamics of Micro and Small Enterprises in Developing Countries." *World Development* 26(1):61–74.

Menezes Filho, N., H. Zylberstajn, J. P. Chahad, and E. Pazello. 2002. "Unions and the Economic Performance of Brazilian Establishments." Inter-American Development Bank, Research Network Working Paper R464. Washington, D.C.

Middleton, J., A. Ziderman, and A. V. Adams. 1993. *Skills for Productivity: Vocational Education and Training in Developing Countries*. World Bank: Washington, D.C.

Miles, R. 2002. "Employment and Unemployment in Jordan: the Importance of the Gender System." *World Development* 30(3):413–427.

Mondino, Guillermo, and Silvia Montoya. Forthcoming. "The Effects of Labor Market Regulations on Employment Decisions by Firms: Empirical Evidence for Argentina." In James Heckman and Carmen Pages (eds.) *Law and Employment: Lessons from the Latin America and the Caribbean*. Cambridge, Mass. and Chicago, I.L.: National Bureau of Economic Research and University of Chicago.

Montenegro, Claudio E., and Carmen Pages. Forthcoming. "Who Benefits from Labor Market Regulations? Chile 1960-1998." In James Heckman and Carmen Pages (eds.) *Law and Employment: Lessons from the Latin America and the Caribbean*. Cambridge, Mass. and Chicago, I.L.: National Bureau of Economic Research and University of Chicago.

Morduch, J. 1999. "On Informal Insurance: Between the Market and the State." *World Bank Research Observer* 14(2):187–207.

Nestoriak, N. 2004. "Endogenous Technology and Local Labor Market Skill." University of Maryland: College Park, M.D. Processed.

Nicholls, J. 1998. "Student Financing in the Developing World: Applying Income-contingent Approaches to Cost Recovery." University of Melbourne, Department of Science and Maths Education: Melbourne, Australia. Processed.

Nickell, S., and R. Layard. 1999. "Labor Market Institutions and Economic Performance." In O. Ashenfelter and D. Card, eds., *Handbook of Labor Economics.* New York and Oxford: Elsevier Science, North-Holland.

Nicoletti, G., R. C. G. Haffner, S. Nickell, S. Scarpetta, and G. Zoega. 2001. "European Integration, Liberalization and Labor-Market Performance." In G. Bertola, T. Boeri, and G. Nicoletti, eds., *Welfare and Employment in United Europe.* Cambridge, Mass: MIT Press.

O'Connell, L. D. 1999. "Collective Bargaining Systems in 6 Latin American Countries: Degrees of Autonomy and Decentralization." Inter-American Development Bank, Office of the Chief Economist, Working paper 399. Washington, D.C.

OECD. 1997. *The Employment Outlook - 1997*. OECD: Paris.

--------. 2000. *International Trade and Core Labour Standards*. OECD: Paris.

--------. 2001. *Codes of Corporate Conduct: Expanded Review of their Contents*. OECD: Paris.

Pages, Carmen, and Claudio E. Montenegro. 1999. "Job Security and the Age Composition of Employment: Evidence from Chile." Inter-American Development Bank, Office of the Chief Economist Working Paper Series 398. Washington, D.C.

Pencavel, J. 1997. "The Legal Framework for Collective Bargaining in Developing Countries." In S. Edwards and Nora C. Lustig, eds., *Labor Markets in Latin America: Combining Social Protection with Market Flexibility.* Washington, D.C.: Brookings Institution Press.

Pierre, G., and S. Scarpetta. 2004. "Do Employers' Perceptions Square with Actual Labor Regulations?" Background note for the World Development Report 2005.

Pissarides, C. 2000. "Human Capital and Growth." OECD Development Centre, Technical Paper 168. Paris.

Pritchett, Lant. 2001. "Where Has All the Education Gone?" *World Bank Economic Review* 15(3):367–91.

Psacharopoulos, G., and H. Patrinos. 2002. "Returns to Investment in Education: A Further Update." World Bank Policy Research Working Paper Series 2881. Washington, D.C.

Rama, M. 2003. "Globalization and Workers in Developing Countries." World Bank Policy Research Working Paper Series 2958. Washington, D.C.

Rama, Martin, and Raquel Artecona. 2002. "A Database of Labor Market Indicators Across Countries." World Bank: Washington, D.C. Processed.

Ratnam, V. 1999. *Trade Unions in the Informal Sector: Finding their Bearings. Nine Country Papers*. ILO: Geneva.

Ravallion, M. 2003. "Targeted Transfers in Poor Countries: Revisiting the Trade-offs and Policy Options." World Bank, Social Protection Discussion Paper 0314. Washington, D.C.

Ravallion, M., and G. Datt. 1995. "Is Targeting through a Work Requirement Efficient?" In D. van de Walle and K. Nead, eds., *Public Spending and the Poor: Theory and Evidence.* Baltimore, M.D.: Johns Hopkins Press.

Rawlings, L., L. Sheburne-Benz, and J. Van Domelen. 2004. *Evaluation Social Funds: A Cross-country Analysis of Community Investments*. World Bank: Washington, D.C.

Rawlings, L. B., and G. M. Rubio. 2002. *Evaluating the Impact of Conditional Transfer Programs: Lessons from Latin America*. World Bank: Washington, D.C.

Raworth, Kate. 2004. *Trading Away our Rights*. Oxfam International: Oxford.

Rodrik, D. 1997. *Has Globalization Gone Too Far?* Institute for International Economics: Washington, D.C.

Rosenzweig, M. R. 1995. "Why Are There Returns to Schooling?" *American Economic Review* 85(2):153–58.

Rosenzweig, M. R., and H. P. Binswanger. 1993. "Wealth, Weather Risk and the Composition and Profitability of Agricultural Investments." *Economic Journal* 103(416):56–78.

Saavedra, J. 2003. "Labor Markets during the 1990's." In P. Kuczynski and J. Williamson, eds., *After the Washington Consensus: Restarting Growth and Reform in Latin America.* Washington, D.C.: Institute for International Economics.

Sachs, Jeffrey D. 2003. "Institutions Don't Rule: Direct Effects of Geography On Per Capita Income." National Bureau of Economic Research Working Paper 9490. Cambridge, Mass.

Scarpetta, S., P. Hemmings, T. Tressel, and J. Woo. 2002. "The Role Of Policy And Institutions For Productivity And Firm Dynamics: Evidence From Micro And Industry Data." OECD Economics Department Working Paper 329. Paris.

Scarpetta, S., and T. Tressel. 2003. "Boosting Productivity via Innovation and Adoption of New Technologies: Any Role for Labor Market Institutions?" World Bank, Policy Research Working Paper Series 3273. Washington, D.C.

Sedlacek, G., N. Ilahi, and E. Gustafsson-Wright. 2000. "Targeted Conditional Transfer Programs in Latin America: An Early Survey." World Bank Report Prepared for the Regional Study on "Securing our Future": Washington, D.C. Processed.

Spar, Deborah. 1998. "Attracting High Technology Investment: Intel's Costa Rica Plant." World Bank, Foreign Investment Advisory Service, Occasional Paper 11. Washington, D.C.

Subbarao, K. 1997. "Public works as an anti-poverty program: An overview of cross-country experience." *American Journal of Agricultural Economics* 79(May):678–683.

Subbarao, K., A. Ahmed, and T. Teklu. 1995. "Philippines: Social Safety Net Programs: Targeting, Cost-Effectiveness and Options for Reform." World Bank Discussion Paper 317. Washington, D.C.

Tabor, S. R. 2002. "Assisting the poor with cash: Design and implementation of social transfer programs." World Bank Social Protection Discussion Paper Series 0223. Washington, D.C.

Teklu, T., and S. Asefa. 1999. "Who Participates in Labor-Intensive Public Works in Sub-Saharan Africa? Evidence from Rural Botswana and Kenya." *World Development* 27(2):431–38.

Topel, Robert. 1999. "Labor Markets and Economic Growth." In O. Ashenfelter and D. Card, eds., *Handbook of Labor Economics.* Amsterdam: Elsevier Science B.V.

United Nations Economic Commission for Africa. 2000. "HIV/AIDS and Economic Development in Sub-Saharan Africa." Paper presented at the *African Development Forum 2000, AIDS: The Greatest Leadership Challenge* Conference. Addis Ababa, Ethiopia. December 3.

Urizar, H., and S. Lee. 2003. "The Effects of Unions on Productivity: Evidence from Large Coffee Producers in Guatemala." Inter-American Development Bank, Research Department Working Paper 473. Washington, D.C.

van de Walle, D. 2003. "Are Returns to Investment Lower for the Poor? Human and Physical Capital Interactions in Rural Vietnam." *Review of Development Economics* 7(4):636–53.

Vodopivec, Milan. 2004. *Income Support for the Unemployed: Issues and Option*. Washington, D.C.: World Bank.

Vodopivec, Milan, and Dhushyanth Raju. 2002. "Income Support for the Unemployed: Issues and Options." World Bank, Social Proteccion, Labor Markets, Pension and Social Assistance Discussion Paper 0214. Washington, D.C.

Winter-Ebmer, R. 2001. "Long-term Consequences of an Innovatice Redundancy-retraining Project: The Austrian Steel Foundation." World Bank Social Protection Discussion Paper 0103. Washington, D.C.

World Bank. 1995. *World Development Report 1995: Workers in an Integrating World*. Oxford University Press: New York.

--------. 2001a. *Poland Labor Market Study: The Challenge of Job Creation*. World Bank: Washington, D.C.

--------. 2001b. *Social Protection Sector Strategy: From Safety Net to Springboard*. Washington, D.C.: World Bank.

--------. 2002a. *Brazil Jobs Report*. World Bank: Washington, D.C.

--------. 2002b. *Constructing Knowledge Societies: New Challenges for Tertiary Education.* World Bank: Washington, D.C.

--------. 2002c. *Globalization, Growth, and Poverty*. Washington, D.C.: World Bank and Oxford University Press.

--------. 2003a. *Doing business in 2004 - Understanding Regulation*. World Bank: Washington, D.C.

--------. 2003b. *Lifelong Learning in the Global Knowledge Economy: Challenges for Developing Countries*. World Bank: Washington, D.C.

--------. 2003c. *MENA's employment challenge in the 21st century*. World Bank: Washington, D.C.

--------. 2003d. *Race to the Top: Attracting and Enabling Global Sustainable Business*. World Bank: Washington, D.C.

--------. 2003e. *The Russian Labor Market: Moving from Crisis to Recovery*. World Bank: Washington, D.C.

World Bank, Office of the Chief Economist LAC. 2004. "Minimum Wages in Latin America and the Caribbean: The Impact on Employment, Inequality and Poverty." World Bank: Washington, D.C. Processed.

World Commission on the Social Dimension of Globalization. 2004. *A Fair Globalization - Creating Opportunities for All*. International Labor Organization: Geneva.

Endnotes

[1] See Pritchett (2001); Easterly (2001) and Topel (1999).
[2] Empirical evidence suggests strong private returns to schooling in many countries, irrespective of their stage of development. One more year of schooling is estimated to raise wages by 7-10 per cent in many countries. See Psacharopoulos and Patrinos (2002).
[3] The quality of education is a key factor to explain why enhancement in human capital is often found to be unrelated to GDP per capita growth in cross-country regressions. Recent studies focusing on OECD countries – where differences in the quality of education are relatively smaller than across developing countries – suggest strong positive effects of enhancement of human capital on GDP per capita growth. See Bassanini and Scarpetta (2002), De La Fuente and Doménech (2000).
[4] Rosenzweig (1995) shows for India that schooling returns are high when the returns to learning are also high. In other words, schooling increases productivity only when it can be used.
[5] Pritchett (2001), Pissarides (2000).
[6] Significant differences in the availability of skilled labor, together with labor market frictions, forces firms to consider the skill mix in their local labor market before making an investment decision that involves a new technology. See Acemoglu and Shimer (1999), and for empirical evidence for the United States, see Abowd and others (2001) and Nestoriak (2004).
[7] See Bresnahan, Brynjolfsson, and Hitt (2002) for a discussion on technology adoption, skilled labor and organizational changes.
[8] van de Walle (2003).
[9] Data are from the U.S. Department of Education.
[10] All firms are levied a one percent of payroll for low wage workers (those earnings below S$1000 per month). Firms can claim partial reimbursement on certified courses.
[11] de Ferranti and others (2003).
[12] Inernational Financing Corporation (2001); World Bank (2002a), World Bank (2003b).
[13] World Bank (2002b).
[14] World Bank (2002b).
[15] These schemes include mortgage-type loans, human capital contracts, graduate taxes, income-contingent repayment schemes, entitlement schemes, asset-building schemes, and individual learning accounts. For more details see World Bank (2003b).
[16] Nicholls (1998).
[17] World Bank (2003b).
[18] Inernational Financing Corporation (2001).
[19] Inernational Financing Corporation (2001).
[20] Indeed, while one might expected a positive relation between the level of mandated labor protection and income across countries (i.e. labor protection is a normal good), the relationship is in fact negative across a large group of countries.
[21] Labor protection provisions can be justified on the grounds that workers are risk averse and that they do not have the possibility to privately insure themselves against labor market uncertainty or prefer to trade off lower earnings for better working conditions. See Bertola (2004).
[22] Heckman and Pages (2003) estimate that workers absorb between 52 and 90 per cent of the cost associated to non-wage benefits in Latin America. Along the same lines, Mondino and Montoya (forthcoming)) for Argentina and MacIsaac and Rama (1997) for Ecuador suggest that compliance with labor regulations implies an increase in labor costs with possible dis-employment effects.
[23] The informal or "micro and small-enterprise" sector is far from homogeneous. It includes *pre-entrepreneurial subsistence type of self-employment* which functions as "the employer of last resort'. This is an important source of household income supplementing farming income. This type of activities, however, is unlikely to be evolving in size and to eventually emerge in the formal sector. *Micro enterprises* are somewhat bigger operations, involving family workers and apprenticeships and using more modern technology albeit obsolete. They are more linked with markets for the provision of inputs and have some potential for growth and maturing into formal businesses. Finally, *small enterprises* with 10 to 50 workers use more advanced technologies and are often on the margin of the formal sector. They are combined with high-skilled self-employed who prefer to stay in the gray economy and avoid paying taxes. See Mead and Liedholm (1998) for evidence in six countries: Botswana, Kenya, Lesotho, Malawi, Swaziland and Zimbabwe.

[24] See International Labor Office (2002).
[25] Recent evidence points to large mobility of workers between formal and different types of informal jobs. In Mexico and Argentina, one-third and one-quarter of workers changing job, respectively, move from a formal to an informal job or from an informal to a formal job (see Inter-American Development Bank (2003). In many low-income countries, however, informality conforms more to the classical view of a residual segment of the economy: in Egypt, for example, more than 90 per cent of workers without contract of social insurance in 1990 were still in the same condition ten years later, World Bank (2003c).
[26] Evidence from Argentina, Mexico and Paraguay suggests that a large fraction of workers move to the informal sector because of more flexibility, higher wages, or simply the desire to become entrepreneurs, Maloney (2000). Moreover, if wages are flexible, the cost of employer-provided social security and health provisions is likely to be passed on to workers in the form of lower wages. And if these provisions are perceived as inefficient or if linkages between contributions and benefits are weak, workers may prefer to move to the unregulated market where remuneration is entirely monetary.
[27] See Bourguignon and Goh (2003); de Ferranti and others (2000); Gill, Maloney, and Sanchez-Paramo (2002); Dollar and Kraay (2001); Rodrik (1997); Freeman (1994); Matusz and Tarr (1999); Rama (2003) and World Bank (2002c).
[28] For a review of the role of unions see Aidt and Tzannatos (2002); Brown (2000) and Boeri, Brugiavini, and Calmfors (2001).
[29] In a number of countries, however, governments grant administrative extension of union wage agreement to non-union workers (often referred to as *excess coverage*), which raises unions' power without forcing them to fully consider the economy-wide effects of wage agreement in their bargaining strategy.
[30] See Aidt and Tzannatos (2002) and Forteza and Rama (2002) .
[31] See Calmfors (1993).
[32] The low union wage markup in most industrial countries is often due to the extension of collective agreements to non-union workers. France is the extreme case, combining the lowest unionization rate (about 9 per cent of the workforce) with one of the highest coverage rate of collective agreements (about 85 per cent of the workforce). See OECD (1997).
[33] See O'Connell (1999), Pencavel (1997).
[34] Strong coordination between unions and employers' associations in an industry or regional bargaining settings (as observed in some industrial countries, e.g. Germany and Austria and, more recently, Italy, Ireland, the Netherlands) may be an alternative, or functionally equivalent, to centralized systems, thereby mimicking their outcomes.
[35] See Haltiwanger, Scarpetta, and Vodopivec (2003).
[36] See Eslava and others (2003).
[37] Estimates suggest that in Colombia for every percentage point rise in the minimum wage, employment falls by 0.15 percentage points. See Maloney and Núñez (forthcoming). In Indonesia, the significant increases in provincial minimum wages had some dis-employment effects in small firms, but not in larger firms, although it was also associated with an increase in the number of workers below the minimum wage. See Alatas and Cameron (2003).
[38] This is possible as certain workers are exempt from minimum wage laws and due to non-compliance in the informal sector.
[39] The relationship between compliance and the level of the minimum wage is not one to one, as for most other regulations, and depends on the overall institutional climate and respect for laws, as shown in Continental European countries and Chile where high levels of the minimum wage are largely enforced.
[40] For example, in Poland the national minimum wage accounts for over 80 percent of the going market wage in backward areas, contributing to high unemployment among low skilled workers, World Bank (2001a).
[41] For more details on the role of the minimum wage as a price signal for the informal sector in Latin America see Maloney and Núñez (forthcoming) and World Bank (2004).
[42] See Feliciano (1998) for Mexico and Gill, Montenegro, and Domeland (2002) for the experience of Latin American countries that have introduced apprentice wages in the 1990s.
[43] The index of condition of employment reported in Figure 7.5 is the normalized sum of: maximum number of hours in the workweek; overtime work, night shifts, holiday, hours of work, vacation days and whether paid time off for holiday is mandatory. It refers to a worker with 20 years of work experience. The index captures what is written in laws and regulations and does not take into account possible cross-country

differences in the degree of enforcement of such laws and regulations. For more details, see Djankov and others (2003) and World Bank (2003a).

[44] The 39 days in Sierra Leone refer to a worker with 20 years of service: the basic annual leave is 30 days, but workers receive one additional day for each year of service after the 10th year.

[45] It should also be noted that in all countries, worker turnover is even larger than job turnover, because workers not only move directly from one job to another, but also between employment and unemployment and inactivity as a result of their own personal decisions. See Alogoskoufis and others (1995).

[46] Heckman and Pages (2003) provide an alternative measure of job security that takes into account the monetary transfer that by law a firm has to pay to a worker on dismissal. This indicator confirms that dismissing a worker in Latin America involves a larger mandatory transfer to the worker than it would in industrial countries.

[47] The synthetic indicator of the strictness of regulations in case of dismissal of workers with permanent contracts is the normalized sum of the following components: i) procedural inconveniences that employers face when trying to dismiss a worker; ii) notice and severance payments; iii) prevailing standards of and penalties for "unfair" dismissals; and iv) procedures that employers must follow and approval they must seek prior to collective dismissals. Indicators of the stringency of EPL for temporary contracts refer to: i) the "objective" reasons under which they could be offered; ii) the maximum number of successive renewals; iii) and the maximum cumulated duration of the contract. For information on the underlying data see Djankov and others (2003) and World Bank (2003a).

[48] See World Bank (2003e).

[49] See World Bank (2002a).

[50] See amongst others Akerlof (1984).

[51] These results are from econometric analyzes based on industry-level data and controlling for other main drivers of productivity or entry rates. In particular, see Nicoletti and others (2001) for the evidence on the relationship between R&D and labor regulations; and Scarpetta and others (2002) and Scarpetta and Tressel (2003) for evidence of the impact of employment protection on productivity and entry rates.

[52] See Görg (2002) and Dewit, Gorg, and Montagna (2003) for evidence of the effects of employment protection on FDI.

[53] See Nicoletti and others (2001) on self-employment; Nicoletti and others (2001) for the evidence on firm size; and Scarpetta and others (2002) for the evidence on size of entrant firms and post-entry expansion. See also Christianson, Background paper for the World Development Report 2005 for evidence that strict labor regulations in South Africa push small and medium size firms towards more capital-intensive technologies to reduce the burden of dealing with these regulations.

[54] According to a study, nonpayment of contractual obligations, or wage arrears, spread to nearly 60 per cent of all workers in Russia in 1998 and, despite declining, continued to affect a significant share of the workforce in the following years; see World Bank (2003e).

[55] See Pages and Montenegro (1999), and Montenegro and Pages (forthcoming) for Latin America. Djankov and others (2003), using a sample of 85 countries, suggest that an increase of 1 point in their employment laws index (from 0.76 to 2.40) is associated with an increase in the share of the unofficial economy in GDP of 6.7 percentage points and an increase in the share of unofficial employment of 13.8 percentage points.

[56] See Addison and Teixeria (2001) and Nickell and Layard (1999) for surveys of the literature for industrial countries.

[57] See Cavalcanti (2003), Mondino and Montoya (forthcoming).

[58] See Besley and Burgess (forthcoming).

[59] See Kugler and Pica (2003) for evidence in Italy.

[60] See Pierre and Scarpetta, Background note for the World Development Report 2005. In South Africa, more than 90 % of large firms report to make greater use of temporary workers in order to increase flexibility of the workforce; and 50% of them reduce, at the same time, the share of permanent workers (see Chandra and others (2001)). Interestingly, while about one-third of formal micro enterprises use temporary employment, the share is less than 10% amongst informal firms (Chandra and others (2001)).

[61] Evidence from France, Spain, Argentina, Peru and Colombia suggests that the asymmetric liberalization of contracts has led to significant shifts towards precarious jobs. In Argentina and Spain these reforms were reversed after a few years and, in the latter country, net job creation has really picked up only after the government reformed permanent contracts in the mid 1990s. In Spain temporary employment reached

almost one-third of the total workforce after the reform of temporary contracts in the mid-1980, Dolado, García-Serrano, and Jimeno (2001). In Peru, the liberalization of temporary employment in the early 1990s led to an increase in temporary employment from 20 percent in 1990 to 55 percent in 2000. In Colombia there was a similar large increase, Saavedra (2003). See also Blanchard and Landier (2001) for France and Hopenhayn (forthcoming) for Argentina.

[62] See Field (2002).

[63] In this context, Agenor (1996) argues that the effectiveness of structural adjustment programs in developing countries is affected by the specific characteristics of their labor markets.

[64] See Goldberg and Pavcnik (2003) for Colombia and Aghion, Burgess, and Redding (2002) for India.

[65] It is useful to note that some shocks are transitory, i.e. the prospects of workers to find a similar job in the near future are perceived as high. This transitory surplus of labor can be addressed directly by firms, within the premise of labor regulations, through temporary layoffs, cuts in working hours with partial compensation or pay cuts, Winter-Ebmer (2001). The discussion in this sub-section considers cases where structural changes lead to permanent layoffs and often necessitate government intervention.

[66] See Kikeri (1998).

[67] See Winter-Ebmer (2001) and Kikeri (1998).

[68] For more details see Holzmann and Jorgensen (2001) and World Bank (2001b). See also World Commission on the Social Dimension of Globalization (2004).

[69] Estimates suggest that had Latin America and the Caribbean been able to diversify their *idiosyncratic* aggregate volatility in the 1990s they would have enjoyed a 7 per cent higher consumption, a figure that is six times as high as the expected gain for the OECD countries, de Ferranti and others (2000).

[70] Bingsten and others (2003) suggests that in African countries with underdeveloped credit and insurance markets, firms cannot insure against temporary demand shocks and have to adjust wages and employment. Workers provide *de facto* insurance to employers by accepting changes in employment or wages. In this context, promoting credit and insurance markets would not only promote investment by firms but also reduce fluctuations in wages and employment.

[71] Acemoglu and Shimer (1999) suggest that moderate levels of unemployment benefits help improving job matches with positive effects on productivity and output growth.

[72] The results for Tanzania are drawn from a comparison of households with limited liquid asset (livestock) compared with wealthier ones. The former tend to grow proportionally more sweet potatoes, a low return and low risk crop than the latter, see Dercon (1996). The evidence from India is based on data on the portfolio of activities and investment in the Indian ICRISAT villages; reducing rainfall timing variability (via some mechanism of insurance) is estimated to have a large effect on farm profits of the poor households, Rosenzweig and Binswanger (1993).

[73] See, e.g. Ravallion (2003) and World Bank (2002c).

[74] According to Klasen and Woolard (2001), the absence of unemployment benefits in South Africa affects household formation and residential choices in ways that are detrimental to job finding. The system forces the unemployed to base their location decisions on the availability of economic support – generally available in rural areas, often in parental households – rather than on the availability of job openings. They conclude that the absence of unemployment benefits may not only lower welfare of the unemployed and their dependents, but it may also not reduce unemployment duration – and may actually increase it.

[75] de Ferranti and others (2000) argue that, when Latin American countries had little exposure to foreign competition, the effective pooling of unemployment risk offered by severance pays was spread over a greater population, as consumers often times subsidize potentially bankrupt firms through higher prices. However, this possibility has declined rapidly as countries have embarked on trade liberalization and reforms aimed at fostering domestic competition.

[76] For example, in Slovenia unpaid claims amount to more than one-third of total severance pay provisions, Vodopivec (2004). In Peru, not only are poor workers less likely to be entitled to severance pay, but they are less likely to receive it in case of dismissal, MacIsaac and Rama (2001). See also Gill, Montenegro, and Domeland (2002) for a discussion of severance payment in other Latin American countries.

[77] Withdrawals from individual accounts are triggered by separation from the employer, regardless of the reason. Withdrawals from the common fund are triggered by insufficient resources on individual accounts, if the claimant satisfies the usual conditions of continuing eligibility under unemployment insurance (such as not working and being available and searching for job), but are limited to two withdrawals per 5 years, Acevedo and Eskenazi (2003).

---

[78] Gruber (1997) finds that in the absence of unemployment insurance, average consumption expenditures would fall by 22 percent.
[79] For instance, more than two-third of the households with at least one unemployed worker received such benefits in Hungary and Poland in the mid-1990s, Vodopivec and Raju (2002).
[80] See Martin and Grubb (2001) for a review of the experience of unemployment insurance schemes in industrial countries.
[81] The introduction of a common personal identification numbers has allowed to cross-check whether unemployment insurance recipients are also on social security payment rolls, reducing the number of benefit recipients actually working in the formal sector. However, a far greater number of recipients are likely to be working in the informal sector, with no measures being taken to detect them and to take the benefit away. See Mazza (1999).
[82] See World Bank (1995).
[83] See Tabor (2002).
[84] See Cox, Jimenez, and Jordon (1994). The authors estimate that poverty incidence would be 25 percent higher among those receiving transfers had they not received them.
[85] For example informal transfers are estimated to offer little protection during shocks or periods of covariate risk: they are estimated to account for less than 10 per cent of the size of typical income shocks in bad periods in India; and in the Sahel region, following the 1984 drought, transfers comprised less than 3 percent of the losses of the poorest household, Morduch (1999).
[86] For example, the financial crisis of the second half of the 1990s in the Philippines and in Indonesia triggered the entry of secondary income-earners into the labor markets – particularly of youths, resulting in significant declines in high school enrollment rates.
[87] See Ravallion (2003) for a survey; Ravallion and Datt (1995); Subbarao (1997); Teklu and Asefa (1999); Jalan and Redding (forthcoming); Chirwa, Zgovu, and Mvula (2002).
[88] See Gaiha (2000).
[89] See Subbarao, Ahmed, and Teklu (1995) for the Philippines and World Bank (2002c) for the African countries.
[90] Haddad and Adato (2001) suggest little relationship between the district level share of public works activity and the district level share of poverty, unemployment and infrastructure need in a sample of 101 public works projects in the Western Cape of South Africa over the period 1995-97.
[91] See Rawlings, Sheburne-Benz, and Van Domelen (2004).
[92] The percentage of beneficiaries beneath the national poverty line ranged from 71 percent in Zambia to 55 percent in Nicaragua. In the latter country, however, social fund spending on health and education was more progressive than general health and education spending.
[93] See Rawlings and Rubio (2002).
[94] See Sedlacek, Ilahi, and Gustafsson-Wright (2000). Bourguignon, Ferreira, and Leite (2002) also estimate a significant impact of the *Bolsa escola* on school enrollment, especially amongst the poor but, given the amount of the transfer, a little impact on the poverty incidence.