Strengthening Domestic Institutions and Policies

OOD POLICY IS ABOUT IDENTIFYING AND supporting the driving forces for poverty reduction, while at the same time identifying and meeting the risks. Those developing countries that are successfully integrating with the global economy are doing so not just because of

relatively open trade and investment policies, but also because of effective policies and institutions in other areas. Whether closed or open, developing economies need such policies and institutions. In this chapter we consider the investment climate for firms, and labor market and social protection policies for workers. These will affect the extent to which a developing economy integrates with the world and the benefits it receives from this integration.

The next section looks at micro evidence about how openness to foreign trade and investment affects firms. Better collection of data from firms in developing countries has given rise to a burgeoning literature that studies these firm-level effects of openness. In particular, we document four stylized facts about economies that are relatively open to foreign trade and investment. First, open economies tend to have more competition and firm turnover ("churning"). Liberalization leads to the exit of many firms, and to higher entry rates as well. Second, the presence of imports leads to a more competitive market and lower price-cost mark-ups. Third, there is some evidence of technology spillovers from foreign trade and investment raising productivity of domestic firms. Fourth, there can be learning and threshold effects of exporting that create a better environment for productivity growth.

Individual cases and firm-level studies reveal that developing country firms can be competitive. However, firms are often hampered by a poor investment climate—inefficient regulation, corruption, infrastructure weaknesses, and poor financial services. In the second section we look at the investment climate. A recent study of India concludes that it is possible to measure the quality of the investment climate through firm surveys. With the same trade and macro policies (which are set at the national level), Indian states are getting widely different results from liberalization. "Good climate" states have more efficient regulation and better infrastructure, while "poor climate" states lag behind. Not surprisingly, the good climate states are getting more foreign investment and more domestic investment. If effective institutions are needed to get strong benefits from openness, should countries wait until they have such institutions to open up? Not necessarily. One of the reasons why liberalization of trade in services is so important is that developing countries can use this market to improve the investment climate: allowing foreign firms to provide financial services, telecommunications, and power can be a good strategy for strengthening the investment climate. A final issue we take up is targeted efforts to attract foreign investment. In the context of a good investment climate targeted efforts can work by overcoming the coordination problem—getting many investors to come to the same place at the same time. However, governments often try to attract investment through subsidies and tax holidays to compensate for defects in the investment climate. Such an approach is usually unsuccessful and also discriminates against domestic firms. Deficiencies are better remedied than offset by subsidies. The really successful cases—Taiwan, China is a good example have created an environment of good governance and good infrastructure in which both foreign and domestic firms can be competitive.

Together with greater "churning" of firms comes higher labor market turnover, one of the most controversial aspects of global economic integration and the topic of the following section. In the long run integrating with the world economy benefits workers. The growth of wages in the more globalized developing countries identified in Chapter 1 has been far higher than in the rich countries or in the less globalized countries. But that average result disguises the fact that some workers are likely to lose rents that they were sharing from import protection and may suffer permanent income loss. Further, the short-run effects of opening can be quite different from the longer-run effects. In the short run the real wages of formal sector workers are reduced by trade openness and increased by direct foreign investment. Thus, in an economy that liberalizes trade and gets little foreign investment (either because the investment climate is weak or simply because there is a lagged response from investors), opening up can lead to temporary

declines in formal sector wages. Also, openness seems to increase the skill premium (the higher wage that educated workers receive). Finally, there can be a mismatch in the timing of job destruction and job creation so that unemployment remains high for some period after the initiation of reform. These findings lead to the conclusion that globalization brings winners and losers in the labor market.

For workers to prosper in the more open economy requires different types of social protection, and this is the topic of the final section. Onetime compensation programs can address the needs of those workers who lose badly. The fact that skill premiums seem to be on the rise everywhere highlights the importance of a good education system that provides opportunities for all. As for the insurance needs of workers, unemployment insurance and severance pay schemes can be effective for formal sector workers. However, the poorest people cannot be reached by such schemes because they are in the informal sector or self-employed in agriculture. They are better reached by public works programs that provide pay or food for work. The nature of social protection will have a large effect on the benefits of opening up. Countries with rigid labor markets and large public employment have benefited less from economic reform, including trade liberalization. Finally, we emphasize that countries have taken a variety of approaches to providing social protection, raising doubts as to whether there are any advantages to imposing a standard set of labor regulations through WTO sanctions, as some have proposed. We agree with developing countries that this approach is most likely to turn into a new form of protectionism that restricts opportunities for low-income countries and hence tends to keep wages in the developing world low and labor conditions there poor.

Open economies have more competition and firm turnover

and investment, their firms have been exposed to more competition from around the globe. For many developing countries, imports relative to national income have increased significantly. Furthermore, FDI is a large share of total investment in many economies. This is especially true for the big emerging market economies that receive the bulk of foreign investment. For the 10 emerging market economies that were the top recipients of FDI, FDI as a share of total investment

increased from about 2 percent in 1970 to 17 percent in 1997 (figure 3.1). For other low- and middle-income countries FDI has also increased significantly, to about 10 percent of total investment. What is the effect of this growing competition on domestic firms? Chapter 1 presented evidence of dynamic benefits from openness that increase the growth rate of the economy. In this section we go down to a more micro level and look at the evidence concerning how openness affects firms in four significant ways.

Firm turnover. Developing countries often have large productivity dispersion across firms making similar things: high productivity and low productivity firms co-exist. A consistent finding of firm-level studies is that openness leads to lower productivity dispersion (Haddad 1993; Haddad and Harrison 1993; Harrison 1994). High-cost producers exit the market as prices fall; if these firms were less productive, or were experiencing falling productivity, then their exits represent productivity improvements for the industry. While the destruction and creation of new firms is a normal part of a well-functioning economy, attention is too often simply paid to the destruction of firms, missing half the picture. The increase in exits is only part of the adjustment—albeit the most painful part. However, unless there are significant barriers, the other side is that there are new firms entering the market. The exits are often front loaded, but the net gains over time can be substantial.

Wacziarg (1998) uses 11 episodes of trade liberalization in the 1980s to look at the issue of competition and entry. Using data on the number

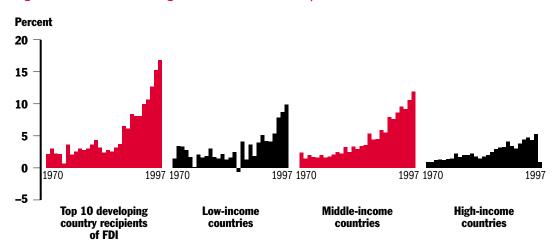


Figure 3.1 FDI as share of gross domestic investment, 1970–97

Source: World Development Indicators in Hallward-Driemeier (2001).

of establishments in each sector, he calculates that entry rates were 20 percent higher among countries that liberalized compared to ones that did not. This estimate may reflect other policies that accompanied trade liberalization such as privatization and deregulation, so this is likely to be an upper bound of the impact of trade liberalization. However, it is a sizeable effect and indicates that there is plenty of potential for new firms to respond to the new incentives.

Second, the evidence indicates that while exit rates may be significant, *net* turnover rates are usually very low. Thus, entry rates are usually of a comparable magnitude to the exit rates. Using plant level data from Morocco, Chile, and Colombia spanning several years in the 1980s, when these countries initiated trade reforms, indicates that exit rates range from 6 to 11 percent a year, and entry rates from 6 to 13 percent. Over time, the cumulative turnover is quite high, with a quarter to a third of firms having turned over in four years (Roberts and Tybout 1996). While the turnover rates are high, they are comparable to those of rich countries. Dunne, Roberts, and Samuelson (1989) report that in the United States, during any five-year period, about 35 percent of manufacturing plants will close. The phenomenon is more common among new and small firms, but even among firms with more than 250 employees, 16 percent will close (Bernard and Jensen 2001).

Third, overall exit and entry rate fluctuations are dominated by changes in the business cycle rather than by changes in trade and industrial policies. While the adjustments coming from liberalization are real, the costs should be put in context. The evidence from six semi-industrialized countries shows that the effect of fluctuations in macroeconomic conditions are more significant than the effects of trade liberalization on entry and exit rates (Roberts and Tybout 1996).

The higher turnover of firms is an important source of the dynamic benefit of openness. In general, dying firms have falling productivity and new firms tend to increase their productivity over time (Liu and Tybout 1996; Aw, Chung, and Roberts 2000; Roberts and Tybout 1996). In Taiwan, China, Aw, Chung, and Roberts find that within a five-year period, the replacement of low-productivity firms with new, higher-productivity entrants accounted for half or more of the technological advance in many Taiwanese industries.

Market structure and prices. Barriers to entry—including explicit restrictions on foreign ownership or trade barriers—can foster conditions where domestic firms retain monopoly power. The opening of the domestic market to FDI or imports can thus help to break local abuses of market

power. This can have three related effects. One is that the market structure can change, with more firms producing goods if local monopolies are broken up. Second, if barriers to entry are lower, resources tend to move to the most productive areas and greater innovation is encouraged. Third, prices will likely come down as competition increases.

The effects of foreign investment on market structure are complex. Blomstrom and Kokko (1996) conclude that the balance of the evidence indicates that multinational corporations (MNCs) are more likely to crowd out local firms in developing countries, leading to higher concentration ratios on the production side. But they go on to point out that some increase in concentration ratios on the production side may not be a bad thing—particularly if it means there is better exploitation of scale economies. Provided a significant number of competitors remain, a decrease in the total number of producers may not be detrimental. If imports are produced more cost effectively than the domestic producers, some domestic products will be driven out of that range of goods. Thus, it is possible that concentration of domestic production increases, while the range of goods increases and the price of goods declines. In this case greater concentration is consistent with greater productivity and lower prices.

Increased concentration as a result of foreign investment is more of a worry if protectionist trade policies are in place. Tariffs give MNCs an incentive to "jump" the tariffs and produce locally. However, once behind the protective barriers, they can use them to shore up their own monopoly position. Thus, the best means of ensuring that such a MNC faces competition is the same as if it were a locally owned monopoly: expose it to pressures from rivals abroad. Liberalized trade can be one of the most effective means of ensuring against market power. Such a solution is most effective for traded goods. But even in areas such as non-traded services, openness to foreign bids can be a disciplining force.

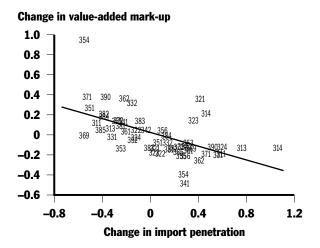
The evidence is clearer for the effect of trade liberalization on market structure and prices. Many authors find that greater openness to trade leads to lower mark-ups. Some studies focus on the relationship of price mark-up and import penetration or tariff levels, looking across industries at a point in time. More convincing studies have tested the "imports as discipline" hypothesis by looking at changes in mark-ups as countries liberalize trade (Levinsohn 1993; Roberts and Tybout 1996). Both types of studies find a negative relationship between openness and mark-ups.

Data from Mexico show that with the liberalization of the late 1980s, mark-ups fell dramatically, particularly in industries with greater market concentration and a high proportion of large firms. Grether (1996) finds that a reduction in tariffs of 1 percent would lower mark-ups by up to 1.5 percent for large firms in more concentrated industries. In Chile, sectors with the greatest import penetration had the lowest price-cost mark-ups (figure 3.2).

Technology transfer and spillovers. FDI is distinct from the simple movement of capital across borders, a point industrial economists highlighted 30 years ago. Faced with options of servicing the foreign market through exports or by investing more passively with equity instruments, the question is why some firms decide to establish production facilities abroad, and why it is so important to maintain control of these affiliates. The insight is that such firms possess some intangible asset—design, technology, managerial skills, or brand image—that not only makes a foreign affiliate profitable, but that warrants maintaining control of such an entity for fear of losing the intangible asset. It is precisely the existence of this intangible asset that makes FDI attractive to host countries. It is the potential for spillovers from the assets or for the diffusion of such an asset to local producers that has made many policymakers eager to seek out foreign investors.

It is understandable why so much emphasis is placed on the potential for FDI to provide a mechanism for technology transfer when one looks

Figure 3.2 Evidence of imports-as-discipline: Chilean industries, 1980s-90s



Note: Numbers of data points reflect ISIC. *Source:* Hoekman, Kee, and Olarreaga (2001).

at the dominant role multinationals play in research and development and in generating new technologies. More than 80 percent of FDI originates from six countries—the United States, the United Kingdom, Japan, Germany, Switzerland, and the Netherlands. These countries are also the ones that dominate technology production. From 1970 to 1998, between 90 and 98 percent of all technology licensing and royalty payments were made to these six countries. From 1970 to 1985, more than 80 percent of payments on royalties, licenses, and patent rights to the United States were made by foreign affiliates of U.S. firms. For Germany, more than 90 percent of the payments from developing countries came from its own affiliates, while the figure for Japan was 60 percent (UNCTC 1988). These numbers underscore both the importance of MNCs as a source of research and development, and that an important part of all formal technology transfers are closely tied to FDI.

Studies in Uruguay, Mexico, and Morocco have shown that firms in sectors with a large multinational presence tend to be more productive (Kokko 1996; Haddad and Harrison 1993). However, in Venezuela, domestically owned firms did worse as MNC presence rose. This could be attributed to MNCs' initial lower local content of inputs, their siphoning off domestic demand, and their ability to hire away higher-quality labor through higher wages (Aitken and Harrison 1999). It should also be noted that as local content tends to increase over time, the potential for positive effects grows (McAcleese and McDonald 1978).

It is not likely that mere foreign presence is sufficient for spillovers. It is even possible that a large foreign presence is itself a sign of weak domestic firms, that local firms were not able to compete or absorb spillovers and so surrendered significant market share to foreign firms. What seems to be crucial is the nature of the interactions between foreign and local firms. Thus, the potential for spillovers will be greater if an affiliate of a MNC actively engages with and competes with local firms.

Kokko (1994) tests the hypothesis that spillovers should not be expected in all industries. For industries where MNCs produce in "enclaves," where neither products nor technologies bear much resemblance to local competition, there would be little spillover. However, if the competition is more direct, there are more opportunities for learning. Using Mexican data, he finds evidence of spillovers for non-enclave industries. Thus, high local competence and a competitive environment are both likely to raise the capacity of local firms to absorb technology spillovers from a greater foreign presence in the domestic market.

Studies also show a positive correlation between access to imported inputs and productivity (Handoussa 1986; Tybout and Westbrook 1995; Hallward-Driemeier, Iarossi, and Sokoloff 2000) Using data on 3,000 firms from Indonesia, Korea, the Philippines, and Thailand, Hallward-Driemeier and others find that foreign exposure significantly raises productivity. The use of foreign inputs is one such measure. It is also striking that the degree of benefits is greatest where the economy is the least developed.

Trade can be a way of importing the research and development carried out by the exporting country. Several papers examine the theoretical and empirical implications of a model where countries of the North conduct R&D and export to the South (for example, Coe, Helpman, and Hoffmiaster 1995). They estimate that spillovers of R&D from the North through trade are substantial: increasing the R&D stock in the North by \$100 can raise output in the South by \$25. Other papers using OECD data also find R&D spillovers through direct bilateral trade flows and through indirect channels of trade passing through third countries (Lumenga-Neso, Olarreaga, and Schiff 2001).

Attracting a multinational can also be a means of improving the quality of inputs. Their local suppliers can improve their productivity as discussed above. But, in addition, evidence shows that MNCs often encourage suppliers to relocate with them. The corollary of MNCs' local content rising over time is that their suppliers also diversify, providing high-quality inputs for the broader local market (Hallward-Driemeier 1997).

As the importance of intra-industry trade continues to grow, the ability to acquire imported inputs will be key to attracting new foreign firms interested in establishing an export platform. But allowing greater access to high-quality inputs can raise the productivity of all firms, not just the narrower set of exporting firms. For the benefits to be widely realized, it is important not to restrict the ability to import to a subset of firms such as those in export processing zones. Particularly for more backward countries, reform in this area holds some of the best promise for productivity improvements.

Learning and threshold effects of exporting. Of all the means of increasing competition with foreign firms, removing barriers to exports is most clearly beneficial for domestic firms. By selling abroad, firms can better exploit economies of scale as their market increases. They are also more exposed to new technologies and innovative means of production and face steeper competition, forcing them to be as efficient as possible. It is well accepted that firms that export are more productive on average

than firms that serve only domestic markets. However, there has been a debate about whether it is the experience of exporting itself that contributes to this greater productivity or whether it is simply that more efficient firms self-select to become exporters. There have been some studies testing whether there is "learning by exporting." Bernard and Jensen (1999) find that while the level of productivity is higher for exporters, exporters' productivity growth is not significantly different from non-exporters'. While they find little evidence of "learning by exporting" for U.S. firms, they do find fixed costs of exporting so that there is a role for a firm's past export history affecting today's export decision.

Clerides, Lach, and Tybout (1998) look at Colombia, Chile, and Morocco. Other than the apparel and leather industries in Morocco, they argue that the evidence supports the self-selection hypothesis rather than that of learning by exports. However, they provide evidence that exports do provide an alternative source of spillovers. They find that if many firms in a region are exporting, all firms in the region tend to enjoy lower average costs. Bigsten and others (2000) point out that the strongest test would be to look at the evidence from small, technologically backward, and more closed economies. Firms in these environments would be those most likely to benefit from greater exporting opportunities. They would be able to realize greater scale economies and be exposed to new technologies and product types, and the effect would be greatest for firms as they first entered export markets. Using data from four African countries (on average 11 times smaller than those in the study by Clerides and others), they do find evidence of both self-selection and as well as significant learning effects. Kraay (1999) also finds significant learning effects among Chinese enterprises. However, he finds that the effect is stronger among more established exporters relative to new entrants. This is consistent with there being a number of fixed costs associated with entering export markets so that it takes time to realize the benefits of exporting.

Hallward-Driemeier, Iarossi, and Sokoloff (2000), using data from five East Asian countries, also modify the self-selection interpretation. Firms that export are indeed more productive. Rather than gaining further productivity benefits once they have already entered export markets, the benefit comes as firms try to pass the threshold and enter such markets. They find evidence that it is in aiming for export markets that firms undertake steps necessary to improve their productivity. They document the differences between firms that export and those that do not on a number of behaviors that are consistent with raising productivity, including training, using foreign technology, imported inputs, and capital

intensity. As much of the productivity gains may be realized before actual entry into export markets, the measured learning effects are lower. They also find that the productivity differential between exporters and non-exporters is wider, the lower the country's per capita income, reinforcing the point that the greatest benefits of encouraging exports will be realized among the less developed countries.

The investment climate affects the benefits of openness

IRM-LEVEL STUDIES DOCUMENT THE *POTENTIAL* FOR OPENNESS to support productivity growth at the micro level. Entrepreneurs with good ideas can exploit them over a large market. They can get access to the best machinery and inputs and be exposed to a competitive environment that encourages efficiency. We emphasize the word "potential," because reaping these benefits fully will depend very much on what we call the "investment climate." By investment climate, we mean the regulatory framework for starting up firms and expanding production, the quality of supporting infrastructure (including financial services, power, transport, and communications), and the overall economic governance (such as contract enforcement, fair taxation, and control of corruption). A location with a very poor investment climate that liberalizes foreign trade and investment is likely to get imports but not much investment and exporting. The evidence cited above shows that openness can support innovation and productivity growth, but clearly there are other important ingredients as well. There are numerous examples of the regulatory burdens facing firms in developing countries. One widely cited example was provided by the attempt of the Institute for Liberty and Democracy in Peru to register a fictitious garment plant in the 1980s. It took 289 days to register the factory and the equivalent of 23 months of minimum wages to complete the task (De Soto 1989). In this section we look at some of the factors that make up a good investment climate, how locations can improve their investment climates, and other ways in which governments try to support their firms to be more productive and competitive.

Some insight into the important elements of the investment climate comes from a recent Confederation of Indian Industries–World Bank survey covering 1,000 private firms in 10 Indian states. India is a particularly interesting case study as it committed itself to substantial trade

and investment liberalization in the early 1990s. Many policies are controlled at the state level, however, so there is substantial variation in the investment climate across the country. Since India is home to the largest number of people subsisting on \$1 a day or less, the potential for improving the competitive environment as an effective poverty reduction tool is enormous.

Entrepreneurs in the survey were asked to identify the best and worst climate states, and to give an estimate of the cost savings of operating in different locations. The first finding of interest was that there were consistent views Maharashtra was widely recognized as providing the "best" investment climate, while West Bengal and Uttar Pradesh were seen as offering poor investment climates. Three relatively low-income states were seen as having quite good investment climates: Andhra Pradesh, Tamil Nadu, and Karnataka. The entrepreneurs perceived an overall cost saving of 30 percent between the best and worst states, a large competitive disadvantage for firms to overcome.

Quantitative information from the survey shows that the cost estimate of the entrepreneurs is quite accurate, indicating that investors are well informed about the investment climate. Controlling for sector and size, value added per worker is about 30 percent higher in the good investment climate states compared to those with a poor investment climate. Much of the difference in value added is accounted for by differences in total factor productivity. It is instructive to relate these differences in productivity to various measures of the investment climate. We will highlight three areas. The first is the relative supply and cost of infrastructure services. Electricity costs are a prime example. In Uttar Pradesh 98 percent of firms have their own generator, while less than half do in Maharashtra. Particularly for small and medium firms, this represents a large burden. Reliance on the public grid is much lower in low investment climate states owing to frequent power interruptions. As self-generation is more expensive especially for smaller-scale enterprises—there are enormous variations in the share of electricity in total costs.

Another source of bottlenecks is the regulatory environment. There are important health and safety regulations that must be observed and a certain number of factory inspections on these grounds is desirable. However, the number of regulations and visits can become excessive. They not only represent opportunity costs for managers for the time spent with the officials, but can also be a source of corruption. The survey found that firms in poor climate states on average received twice as many visits as those in

good climate states. Another important area of regulation concerns labor relations. India has had particularly stringent rules designed to protect workers, so that firms with more than 100 employees must be granted state government permission before laying off any workers. The extent to which these regulations hamper firms varies across states, with extreme lack of flexibility leading to lower productivity.

Because India has macro and trade policies set at the national level, it is a good case to highlight the effect of the investment climate at the micro level. Some states within India have better regulatory and infrastructure environments and these states are getting more foreign investment, more domestic investment (figure 3.3), and more growth. We should emphasize that an effective investment climate at the micro level is important, whether or not a country is open to foreign trade and investment. But a location that is open to the global economy, yet hampered by a poor investment climate, will not benefit much from globalization.

If effective institutions are needed to get strong benefits from openness, should countries wait until they have such institutions to open up? Not necessarily. One of the reasons why liberalization of trade in services is so important is that developing countries can use these markets to improve the investment climate. Allowing foreign firms to provide financial services, telecommunications, and power can be a good strategy for

Investment rate (percent) 10 8 6 4 2 -2 Uttar West Kerala Karnataka Andhra **Guiarat** Maharashtra Pradesh Bengal Weak◀ Strong State investment climate

Figure 3.3 Interstate variation in mean rate of net fixed investment

Source: Dollar and others (2001).

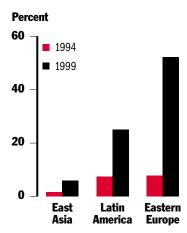
strengthening the investment climate. Also, openness to trade and investment can reduce corruption, and controlling corruption is a key part of building a good investment climate.

Services account for almost two-thirds of global GDP and only 20 percent of global trade. Many services, by their nature, are non-traded goods. They either require extensive contact with the provider, are intangible, cannot be stored, or require immediate use. Much of the foreign participation would thus be through foreign direct investment. FDI in services had lagged far behind that of manufacturing, although the increase in privatization, particularly in Eastern Europe and in Latin America, has led to substantial increases in FDI in services. The composition of the service investments is also encouraging: the vast majority are indeed in areas that are inputs to other businesses. In the late 1990s financial services, telecommunications, and infrastructure were among the top sectors attracting foreign investors, and dominated the inflows through mergers and acquisitions in developing countries.

Mishkin (2001) argues that foreign banks enhance financial development for at least three reasons. First, foreign banks have more diversified portfolios as they have access to sources of funds from all over the world, which means that they are exposed to less risk and are less affected by negative shocks to the home country economy. Second, foreign entry can lead to the adoption of best practices in the banking industry, particularly in risk management but also in management techniques, which leads to a more efficient banking sector. Third, if foreign banks are important in the banking sector, governments are less likely to bail out banks when they have solvency problems. A lower likelihood of bailouts encourages a more prudent behavior by banking institutions, an increased discipline, and a reduction in moral hazard.

Regarding foreign bank entry, Claessens, Demirgüç-Kunt, and Huizinga (1998) show that the competitive pressures created by foreign banks lead to improvements in banking system efficiency in terms of lower operating costs and smaller margins between lending and deposit interest rates. Demirgüç-Kunt, Levine, and Min (1998) contend that foreign bank entry tends to strengthen emerging markets' financial systems and lower the probability that a banking crisis will occur. The internationalization of financial services has grown rapidly in developing countries. In East Asia, Latin America, and Eastern Europe the share of total bank assets controlled by foreign banks increased several-fold during the short period from 1994 to 1999 (figure 3.4). In Eastern Europe the proportion of assets held by foreign banks passed 50 percent in 1999.

Figure 3.4 Share of total assets controlled by foreign banks in selected countries



Source: Schmukler and Zoido-Lobatón (2001).

Examples show that foreign participation can contribute substantially to lower prices and improved delivery of other business services as well. Hoekman and Primo Braga (1997) document how increased competition in the provision of port services in Veracruz, Mexico, reduced costs by 30 percent and increased container turnover by 50 percent within one year. Privatization and foreign participation in Aeromexico and Mexicana raised labor productivity by 50 to 100 percent. Argentina also saw marked improvements in telecommunication services in the 1990s with FDI in the privatized market (World Bank 1997).

However, greater openness on service provision also raises special challenges. Many service areas are natural monopolies, and because they are non-traded it is less clear how to bring foreign competition to discipline behavior. One route is through negotiations on license renewals. However, if too much uncertainty revolves around the terms of agreements, investors will be unwilling to undertake the substantial fixed costs involved with establishing their operations.

If governments have decided to privatize, they still must determine whether to allow foreigners as bidders. Another decision is whether to structure the industry as a monopoly or with competition. It is thought that competition among service provides will foster greater investment than under monopoly providers, leading to faster, cheaper- and higher-quality provision. However, the potential costs include a loss of scale economies and reduced potential for cross-subsidies across locations or groups. There is also the potential that the proposal to introduce competition will lower government revenue from the sale as bidders see less opportunity for profit and so will offer a lower price to compensate for the risk. Bidders may also ask for a "temporary" exclusive license—an arrangement that may be politically difficult to change and may later be seen as no longer efficient, depending on the investment pattern of the incumbent in the intervening time.

In their analysis of privatization of telecommunications in Africa, Haggarty and Shirley (2000) show that countries are more likely to choose competition if historically service has been poor, access has been limited relative to other countries in the region, and profitability has been low. Poor service will help push governments to consider more drastic changes, and public opinion is less likely to favor the incumbent with a poor track record. If prior access has been limited, there is also more scope for a rival to enter and challenge a dominant position. Foreign bidders offer additional expertise and often higher-quality services. However, they are also more likely to ask for exclusive contracts. In assessing the trade-offs,

officials must determine their ability to regulate the foreign firm to ensure that quality does improve and mark-ups are not excessive.

One area of government services that has received particularly wide-spread criticism is customs administration. This has long been seen as one of the agencies most likely to be corrupt. In recent years private companies have offered contracts to do pre-shipment inspections to provide an independent verification of the value of imports. While such contracts have the potential to reduce corrupt behavior, they are not foolproof. Aside from the obvious danger that private sector employees themselves could be open to bribes, exporters still know that there are odds of not being caught, or that import officials would be open to bribes when reconciling reports. Again, the quality of domestic institutions still matters in the likely success of these contracts (Johnson 2001). If indeed other agencies are less corrupt, such contracts with a private firm could provide a useful means of bringing customs administration more into line.

Given the concerns regarding market power in non-traded service sectors, government regulation and oversight will be important to ensure that quality services continue to be offered at reasonable prices. Privatization itself is not a sufficient guarantor of improvements; the nature of the regulatory framework will be important to ensure that benefits are indeed realized. But there is substantial evidence showing the potential for reliance on the international market itself to bolster weak institutions, thereby strengthening the very framework needed to maximize the benefits of wider liberalization.

Finally, many governments support individual firms or industries to try to help them compete. Protection against imports has been tried as a way to help firms become competitive: the "infant-industry argument." The fact that most developing countries have chosen to reduce import barriers suggests that they have concluded that this strategy never worked very well or at best has outlived its usefulness. To this we would add that another stylized fact about removing protection is that typically the long-protected firms have not become efficient and do not in fact survive in the more competitive environment. The experience of the Indian machine tool industry provides a case in point. It was long protected with 100 percent tariffs on imports—an "infant-industry" strategy designed to give firms time to "grow up" and become competitive. However, when import tariffs were slashed in the early 1990s as part of the overall liberalization, Indian firms were not competitive. Taiwanese producers quickly

came in and took a third of the market. Since then the Indian industry has been adjusting. It has largely won back most of the lost domestic market and is now struggling to export. A recent benchmarking study of the industry shows how: productivity of Indian firms making computer-numerically controlled (CNC) lathes varies enormously (figure 3.5). The best firms have productivity close to the level of Taiwanese firms in making a standard lathe (7.5 kW)—but Indian wages for the skilled labor used in this industry are one-sixth of Taiwanese wages. So, the best Indian firms are highly cost competitive in the 7.5 kW machines and close to competitive for the larger 11 kW machines. Who are the competitive Indian firms? New entrants—not the old, protected firms. As discussed earlier, opening up this sector is likely to lead to a reduction in productivity dispersion among Indian firms, with the low-productivity firms closing or merging with more successful ones.

As protection has declined as a means of support, many governments have adopted support for exporters by means of EPZs. The number of such zones has mushroomed, from only a handful in the 1970s to more than 500 in 73 countries by 1995. Potentially, these zones can help to overcome the coordination problem—getting many firms to invest in the same place at the same time. They also provide a source of foreign exchange and employment and offer the possibility of technology

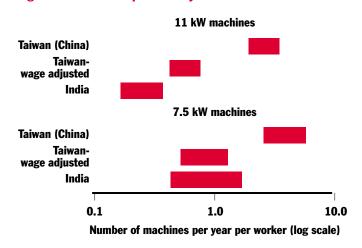


Figure 3.5 Relative productivity in machine tools

Source: Sutton (2000).

spillovers, training, and demonstration effects. Most EPZs require extensive infrastructure investments, and many firms producing there receive tax holidays as well as subsidized land or utilities. Domestic firms not located in a zone are denied the benefits those in the EPZ receive and are thus at a competitive disadvantage. There is a wide range of experience among countries, and some, such as Mauritius, have made the system work well. Sometimes they are costly and ineffective. Their potential for coordination is a useful supplement to an effective investment climate, but they do not work well as a compensation for major deficiencies in the investment climate.

The technological spillovers appear to be the most difficult benefits to achieve. The extent of such spillovers depends heavily on the links that the EPZ has with local firms. Backward linkages can develop if there is sufficient reliance on local suppliers. Many firms in EPZs are motivated largely by the prospect of cheap labor, and production processes are thus labor intensive and often require low skills, reducing the potential for significant training or opportunities for learning by doing. Unless carefully designed to encourage linkages between firms inside and outside the EPZ, the potential for spillovers is limited, and reforms designed to remove barriers to exporting more generally are likely to have greater beneficial results. A further justification is sometimes put forward: that an export zone is the "best feasible option." Policymakers may recognize the benefits of dismantling various protectionist policies, but because of political pressures feel that broad liberalization is not feasible. Creating an EPZ at least allows for some firms to benefit from the relaxation of import tariffs or other restrictions. Each country is different, and in some cases EPZs may be the best option for integrating with the world market.

A related question is whether countries should be actively trying to recruit foreign firms to locate in their countries. Small, low-income countries are insufficiently noticed by large MNCs. Private foreign investment is related to perceptions of country risk, but these perceptions are often inaccurate. The published ratings such as those by *Institutional Investor*, which are based on polls of investor opinion, are systematically less favorable to Africa than is justified by the fundamentals (Ul Haque, Mark, and Mathieson 2000). Consistent with this bias in opinion, Jaspersen, Aylward, and Knox (2000) find that FDI to Africa is systematically lower than would be predicted by the fundamentals. A new element of corporate responsibility for MNCs is to look beyond

China and other emerging markets. Major companies could make a substantial difference if they located in small economies, without reducing their profitability.

In response to this problem many governments grant tax breaks or provide subsidized industrial estates to foreign firms. As with EPZs, such methods can address the coordination problem and thus be a useful supplement to an effective investment climate. Particularly if there are agglomeration effects, such that attracting an initial foreign firm brings additional foreign firms, the rationale for such a policy could be sound. However, as with EPZs, it is not clear how much countries should engage in this process. There is a real danger of suffering the "winners' curse" if the host offers too generous a package to prospective FDI firms. In their bid to attract a foreign firm the costs incurred may far outweigh any spillover benefits the multinational's domestic presence will generate. Using subsidies to compensate for a difficult investment climate can be very expensive. Argentina in the 1980s offers one extreme example. A special production zone was created in Tierra del Fuego to assemble electronic goods. Firms were given generous tax breaks and tariff subsidies. As the domestic market was highly protected, firms were able to charge prices that exceeded international ones by 150 to 400 percent. The business was so profitable that firms (both foreign and domestic) established plants in the zone, imported finished goods from Japan to Panama where they were disassembled, and imported these parts to Argentina where they were reassembled. By 1990, this program was estimated to have cost the treasury 0.5–1.0 percent of GDP (Newfarmer 2001). More generally, Lall and Streeten (1977) studied 90 foreign investments and found that more than a third reduced national income, and Encarnation and Wells (1986) had similar findings in their study of 50 projects. Until the extent of externalities is better known, our recommendation is to avoid courting foreign firms too vigorously.

Overall, there are examples of successful targeted promotions that have led to broader spillovers to the larger economy. However, too often the costs outweigh the benefits. Additionally, the danger of introducing new distortions and rent-seeking opportunities will fuel interest groups, making the political decision to reverse course that much harder. Policies that emphasize improving infrastructure and the investment climate more generally offer benefits that are open to all firms. This will promote greater efficiency and encourage more entry—of both local firms and foreign investors.

Integration with the world economy affects employment and wages

HE DISCUSSION OF FIRMS SETS THE STAGE FOR OUR NEXT issue: the welfare of workers and the need for good labor market and education policies. If much of the productivity benefit of greater global integration comes through more competitive product markets and "churning" of firms—this raises obvious concerns about workers. What is the effect of external liberalization on wages, skill premiums, unemployment, job security, and gender differentials? And what policies and programs are necessary to ensure that workers benefit from openness?

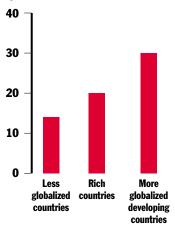
In the long run integrating with the world economy raises wages. Freeman, Oostendorp, and Rama (2001) find that the growth rate of wages has been twice as rapid in the globalizing developing countries identified in Chapter 1, as in the less globalized countries, and faster than in the rich countries as well (figure 3.6). The data used in this study, originally collected by the International Labor Office through its October Survey, have rarely been used for research purposes because of comparability problems. Freeman and Oostendorp (2000) standardized the data in a comparable format (monthly wages of men in U.S. dollars). The occupations considered by the October Survey are quite narrowly defined (for example, bricklayer), so this is a unique source for examining the effect of integration on wages properly measured. Figure 3.6 reports the average change in wages for a large number of specific occupations. This evidence shows that workers benefit strongly from the faster growth that accompanies integration.

Freeman, Oostendorp, and Rama (2001) also examine the timing of wage effects and the differential impact of trade and investment. They find that trade openness reduces wages in the short run, while direct foreign investment increases them. They estimate that the effect of greater trade on wages is negative for the first three years (figure 3.7). Thus, in an economy that liberalizes trade and gets little foreign investment (either because the investment climate is weak or simply because there is a lagged response of investors), opening up can lead to temporary declines in formal sector wages.

Several studies find that openness—especially to FDI—increases the return to education and raises the skill premium (the extra pay that skilled

Figure 3.6 Wage growth by country group

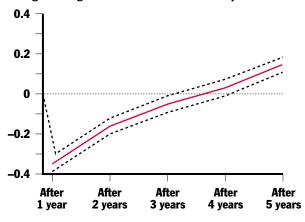
Growth between 1980s and 1990s (percent)



Source: Freeman, Oostendorp, and Rama (2001).

Figure 3.7 Wages and openness to trade





Source: Freeman, Oostendorp, and Rama (2001).

workers get relative to unskilled workers). The skill premium is usually measured as the increase in labor earnings associated with an additional year of formal education, for the average worker. This increase is also known as the return to education. Several case studies have found that the skill premium has increased in specific developing countries during periods of trade liberalization. Robbins (1997) examined wages in Colombia's seven principal cities between 1976 and 1994. He found that growth in the supply of skills lowered, and trade liberalization and real devaluation raised, wage dispersion. Robbins and Gindling (1999) present evidence that trade liberalization in Costa Rica led to an increase in the relative demand for more-skilled workers. Green, Dickerson, and Arbache (2000) examined the level and dispersion of wages, the skilled wage premium, and employment composition before and after trade liberalization in Brazil. They found a rise in the returns to college education and a decrease in the returns to intermediate levels of education. Beyer, Rojas, and Vergara (1999) showed that a positive relationship existed between returns to education and openness in Chile during 1960-96. They found that the earnings gap between college graduates and workers with primary education decreases with the share of the labor force that has college education, increases with openness, and decreases with the relative price of tradable goods (more specifically, textiles).

So, we take it as a stylized fact that the skill premium has risen in many developing countries. At first glance this may seem surprising. If unskilled labor is taken as the most abundant factor in developing countries, then one might think that trade liberalization would reduce the skill premium in these countries. There are a number of reasons why that might not be the case. First, the studies we are talking about deal with formal sector wages. If workers in protected industries are sharing in the rents from protection, then their wages are not typical of what an unskilled worker can earn. Liberalization may easily result in the loss of wages for workers in protected sectors.

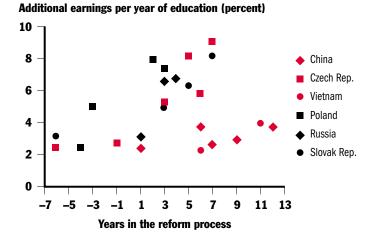
Second, a common difficulty in many of these studies is to disentangle the effects of globalization from those of other shocks and policy reforms. We have emphasized that the globalizing developing countries are typically pursuing a range of reforms at once. Behrman, Birdsall, and Székely (2000) address this difficulty by considering a variety of policy reform indicators across 18 Latin American countries over the period 1980–98. These indicators are also combined in a composite reform index. Behrman, Birdsall, and Székely find that reform overall has had a short-run disequalizing effect of expanding wage differentials, although this effect tends to fade away over time. This disequalizing effect is due to the strong effect of domestic financial market reform, capital account liberalization, and tax reform. On the other hand, privatization contributed to narrowing wage differentials, and trade openness had no effect.

A third reason why the movement of the skill premium may be counter-intuitive is that, while there is evidence that countries do in fact export through trade their abundant factors, there are many factors of production and many countries, so the effect of this trade is complicated. Suppose, plausibly, that the technology embodied in direct foreign investment and skilled labor are complements. Then one important effect of trade and investment liberalization together could be to significantly raise demand for selected skilled workers—such as engineers, accountants, and finance specialists. Some evidence for this view is found in Feenstra and Hanson (1997). They analyze a panel of nine industries across Mexican states and conclude that outsourcing, under the form of *maquiladoras*, is associated with an increase in the relative earnings of non-production workers compared to production workers.

A quasi-experiment on the effect of the overall liberalization-cumglobalization package is the dramatic transition experienced by formerly planned economies in recent years. Countries in Eastern Europe and the FSU, as well as China and Vietnam, were suddenly confronted with the unleashing of market forces, openness to trade, and FDI. The result was a dramatic increase in the returns to education (figure 3.8). The observations in this figure are drawn from a variety of studies, using data sets with different coverage and relying on a variety of econometric techniques. As a result, the estimated returns may not be strictly comparable, not even within the same country. However, there is an upward trend in all the countries considered. In some, the implicit effect of the transition on wage inequality is remarkably large. For instance, if the estimates for the Czech Republic are taken literally, the wage gap between a college-educated person and a worker with primary education increased by roughly 60 percentage points in less than one decade.

The experience of the transition economies should be seen as an upper bound, however. Their initial returns to education were abnormally low as a result of the deliberate earnings compression pursued by socialist regimes. For most developing countries confronting globalization, the initial wage inequality by skill is much higher and its probable increase much lower. More important, the increase in the returns to education is likely to be offset over time by an increase in the relative supply of educated workers. Average schooling is increasing in developing countries, and the high wage premium for college-educated workers provides an incentive to seek additional education. As a result,

Figure 3.8 Returns to education in transition economies



Source: Rama (2001b).

the relationship between globalization and increased returns to skill should become weaker, or even vanish, in the longer run.

The extent to which a higher skill premium does or does not persist will depend, among other things, on tax, expenditure, and education policies. Progressive taxation plus significant cost recovery in universities can reduce any incipient rise in inequality associated with opening up. Public funding of universities, especially in the absence of progressive taxation, will tend to exacerbate inequalities. It is beyond the scope of this report to go into detail about education policies, but a rise in the return to education is not necessarily a bad thing, provided that there are good educational opportunities for all levels of society. If not, globalization may lock in new inequalities. An issue we will emphasize in the next chapter is that countries and communities have plenty of freedom to design tax, expenditure, and education policies that promote equality.

Some evidence that in the long run most countries see an adjustment of the supply of skilled workers in response to the higher returns comes from the cross-sectional evidence on the returns to education and openness of the economy. Again, the estimated returns are not strictly comparable across studies, as they use different data sets, consider different control variables, and rely on different econometric techniques. But as long as the study-specific biases are independent from the openness of the economy, the pattern discerned in these studies should be basically right. Rama (2001b) finds that, cross-sectionally, returns to education do not rise with openness. If anything, they fall. Also, the dispersion of the returns seems to be smaller in more open economies, where the average wage premium is less than 10 percent per additional year of education. Much higher returns can be found in selected closed economies. Taken together, all this evidence suggests that opening up to foreign trade and investment may well lead to a higher skill premium and greater wage dispersion in the short run, but these effects are not likely to persist in the long run and, most importantly, can be addressed through other policies.

Another important point about wage inequality is that exposure to market forces can reduce the gender gap in earnings that is found in all countries. This gap can be measured as the difference in earnings between men and women that cannot be explained by differences in educational attainment or work experience. In Vietnam, at the beginning of the reform process, this gap was close to 39 percent in the private sector and 29 percent in state-owned enterprises. Five years later, in 1997–98, it had shrunk to 26 percent and 19 percent, respectively (Rama 2001a). A similar change was found in Mexico, in the context

of trade liberalization. Artecona and Cunningham (2001) showed that the gender gap in earnings declined more in sectors that were more exposed to foreign competition. This evidence is admittedly scattered, but it is consistent with a non-competitive model of the labor market, where employers have some bargaining power to set wages and can therefore discriminate against women. Globalization, and the reform efforts associated with it, increase competition in product markets. This additional competitive pressure could reduce the scope for employers to set wages and discriminate against women.

Aside from effects on wages, the effects of globalization on employment are also obviously important. A series of case studies on the effects of trade liberalization shows a considerable dispersion of the net impact on employment. In Morocco, for example, employment in the average private sector manufacturing firm was basically unaffected by trade liberalization (Currie and Harrison 1997). The shift in labor demand was modest in Mexico as well (Revenga 1997). But in Uruguay, in a period when trade union activities were banned, the decline was substantial. During that period, reducing the protection rate within a sector by 1 percent led to an employment reduction of between 0.4 and 0.5 percent within the same year. The employment effect became much smaller when trade union activities were allowed (Rama 1994).

Small declines in employment may hide substantial job churning, however. The contrast between studies at the industry level and at the firm level is revealing in this respect. Seddon and Wacziarg (2001) used industry-level data to examine the impact of trade liberalization episodes on movements of labor across sectors. Their study found some labor reallocation between narrowly defined manufacturing activities. But the estimated effects were statistically insignificant and small in magnitude. On the other hand, Levinsohn (1996) used firm-level data to examine the pattern of job creation and job destruction in Chile during trade liberalization. While net employment in manufacturing fell by about 8 percent, in all years in this period about a quarter of all workers changed jobs. However, the effects of trade liberalization itself appear to be modest compared to those due to macroeconomic shocks.

Globalization also affected the nature of jobs in formerly protected sectors. In Morocco there were significant employment losses in specific groups of firms, which started to rely more on low-pay, temporary workers. The share of temporary employment in manufacturing rose by nearly 20 percentage points between 1984 and 1990. In Mexico trade reform reduced the rents available to be captured by firms and workers. As a result, an

average tariff reduction of 20 percentage points led to an implied wage reduction of more than 5 percent. In Uruguay trade liberalization was associated with lower wages in the period when trade unions were not active, despite the considerable reduction in employment. In the period with active unions, the membership rate was strongly correlated with tariff barriers and concentration at the industry level. This correlation suggests that workers in protected sectors enjoy higher wages than their counterparts in sectors exposed to foreign competition.

Overall, these studies show that there was pervasive rent sharing between the protected enterprises and their workers. The removal of trade barriers makes workers lose those rents, either because they lose their jobs altogether, or because the rent attached to their jobs becomes smaller. This interpretation is consistent with the one offered for the effect of globalization on the gender gap in earnings. In both cases increased competition in product markets appears to reduce the size of labor market rents enjoyed by either employers or employees.

While globalization results in some workers losing their jobs, it leads to substantial job creation as well. The most visible part of this creation is associated with FDI—in some cases in export processing zones. EPZs have been a powerful engine for generating employment in a number of countries. The case of Mauritius is outstanding: EPZs account for 17 percent of employment. But the share is considerable in several other countries as well, especially when taking into account that agricultural activities and the informal sector still employ a considerable share of the labor force. EPZ employment shares in the mid-1990s were 5 percent in the Dominican Republic and 2–4 percent in Mexico, Honduras, and Costa Rica.

Most of the jobs in EPZs are held by women. In the Caribbean zones approximately 80 percent of the workforce is female, and the percentage is almost as high in the Philippines. This female bias is especially strong in garment production. The pattern is similar in countries that have not relied massively on EPZs, but where exporting firms have tapped local labor markets, attracting workers from surrounding villages. Industries such as textiles and electronics have massively hired young, literate, largely single women, who frequently ended up earning more than in traditional sectors like agriculture and cottage industries (World Bank 2001b). This female bias has been observed even out of the wage sector. Evidence from Ghana and Uganda reveals that women had substantial economic mobility in response to economic reforms. In these two countries rural women became increasingly engaged in non-farm employment

activities, moving into the non-farm sector at faster rates than men (World Bank 2001b).

To the extent that globalization does translate into significant job creation in developing countries, the potential impact on poverty can be dramatic. But this impact depends significantly on where job creation occurs. In China much of the impetus for the rapid economic growth during the 1980s came from a tremendous expansion of rural township and village enterprise activities. These firms often emerged out of the communitylevel structures that had been in place before the introduction of the household responsibility system in agriculture in the late 1970s and typically became involved in labor-intensive, export-oriented manufacturing activities (Byrd and Lin 1990). The inroads into rural poverty that were achieved in China during this period were nothing short of remarkable (World Bank 2000c). In other parts of the developing world a similarly strong negative relationship between poverty and growth of the rural, nonfarm sector has been observed. Even where non-farm employment opportunities accrue primarily to the relatively educated and skilled (and thus non-poor), benefits to the poor are often still discernable. This is due to the relationship between the wage rates earned by agricultural laborers in rural areas, who are generally highly represented among the poor, and the tightening of rural labor markets, which generally accompanies an expanding non-farm sector (Lanjouw and Lanjouw forthcoming).

While globalization prompts both job destruction and job creation, the timing of these two processes might not be synchronized. In such diverse countries as Chile, Mauritius, Poland, and Sri Lanka unemployment remained stubbornly high for several years after the launching of economic reforms. In the long run open economies do not appear to have higher unemployment rates. In Latin America, during two decades of increased exposure to foreign trade and international capital movements, there was only a mild upward trend in unemployment rates. The increase was dramatic in a few countries, such as Argentina, Colombia, and Paraguay. But the median rate grew by only one percentage point (World Bank 2000a). This relative stability stands in contrast to the popular perception, as reflected in opinion polls. Risk of unemployment ranks as one of the main concerns voiced by those surveyed, in most of the region.

The overall picture is that globalization leads to higher wages in developing countries, indicating that workers share in the benefits of higher productivity, but some people do lose out, especially in the short run. We emphasized in Chapter 1 that opening up does not systematically

lead to higher household income inequality, indicating that the losers do not come disproportionately from the poor. Some of the losers will be formal sector workers who are relatively high up in the income distribution. Conversely, some of the winners will be poor people who get new jobs created by globalization. But some of the winners will also be highly educated engineers and accountants, and some of the losers are bound to come from the ranks of the poor. The diffuse nature of the potential losers highlights the need for extensive systems of social protection.

Social protection in globalizing economies

S GLOBALIZATION CAN CREATE LOSERS AS WELL AS WINNERS, it is important to identify what can be done to reduce and mitigate the adverse impact of reforms aimed at integrating the economy more closely with the rest of the world. A large array of government interventions has been tried in the developing world, and the lessons learned in one country could prove useful in others. Some of these interventions are intended to help workers cope with losing their jobs. Others could be used to limit the negative effects of globalization on specific groups of workers and households.

First, a major reform program may have some identifiable big losers—workers earning large rents from protection. Even though these groups are not typically poor, it can be socially efficient to provide significant one-time compensation in order to make reforms move more smoothly. Otherwise, big losers will be vocal and concentrated opponents of reform.

Second, permanent programs to help workers cope with job loss may be established—the most obvious example being unemployment insurance. A growing number of voices advocate setting up of this kind of program in middle-income developing countries. This contrasts with the widespread criticisms of unemployment insurance in some industrial societies, where several studies have shown that long-lasting unemployment benefits encourage the unemployed to stay out of a job. Analysts who extrapolate from this developed country evidence to the situation of the new globalizers suggest that governments should introduce a mandatory savings account program instead of bringing in unemployment insurance. Such savings plans can be part of the old-age pension system, with pension benefits dependent on past contributions. Workers are able to add any unused savings to their old-age pension account and to run down

their old-age pension entitlement in the event of job loss. However, extrapolation from rich country experience may not be justified. Both the adverse incentive effects of unemployment insurance and the merits of individual savings accounts might be much less than anticipated in low-income societies. When the informal sector is large, as in nearly all poor countries, it is very difficult to monitor that the beneficiaries are really unemployed. Therefore, unemployment benefits at worst create an incentive to stay out of the formal sector, not to stay out of a job. As regards mandatory savings accounts, they do not involve any risk pooling, only a spreading of the earnings loss from unemployment over the life cycle. If workers become unemployed while they are still young and exhaust their pension account, they might not have enough resources to cope with losing a job. If they are allowed to run their pension account into debt, they face an incentive to become unemployed, take on as much debt as possible, and withdraw from the formal sector to avoid repaying their debt.

Neither unemployment insurance nor mandatory savings accounts programs reach the poorest workers. Table 3.1 summarizes the findings of a comparative study on income support programs for the unemployed in Latin America (World Bank 2000a). This region has experience with a variety of programs, and can be seen as a laboratory by other middle-income countries. Table 3.1 shows that, among the workers covered by unemployment insurance in Brazil and by mandatory savings accounts

Table 3.1 Income support programs for the unemployed

Program and country	Workers legally covered by the program	Spending per beneficiary (US\$)	Cost of the program falls on	Share of beneficiaries by earnings or consumption quintile (%)				
				Poorest	2 nd poorest	Middle	2nd richest	Richest
Public works in								
Argentina	In principle, all	3,100	Taxpayers	78.6	15.3	3.5	2.1	0.4
Training in Mexico	Eligible on age, education	393	Taxpayers	69.9	15.5	8.1	5.0	1.5
Severance pay in Peru	Salaried, with given seniority	760	Workers and employers	4.7	9.5	28.6	33.3	23.8
Unemployment insurance in Brazil	Salaried in social security	664	Workers and employers	10.6	24.6	19.1	25.1	13.6
Individual accounts in Colombia	Salaried in social security	_	Workers	0.0	4.3	n.a.	19.1	76.6

[—] Not available.

n.a. Not applicable.

Source: World Bank (2000a).

in Colombia, very few belong to the population group with the lowest earnings or consumption. However, both these income support programs are well suited for workers in protected industries, who are usually enrolled in a social security program.

A third type of social protection is income support programs tailored to reach the poorest workers. Public works, like the Maharashtra employment guarantee scheme in India and the *Trabajar* program in Argentina, are among them (Ravallion, Datt, and Chaudhuri 1993; Datt and Ravallion 1994; Jalan and Ravallion 1999). Some training programs for the unemployed, like *Probecat* in Mexico, also fall in this category (Wodon and Minowa 2001). One common feature of these programs is that participants do not need to be enrolled in any social security program. Another important feature is the self-selection of their participants. Well-designed public works programs pay less than the average labor earnings of those unskilled workers who do have a job. As a result, only those really in need are willing to take them.

The main difference between these programs is the nature of the activities the beneficiaries must undertake. In one case they are requested to do physically demanding, full-time work. In the other they have to take full-time training. The actual productivity of these activities is subject to debate, and the non-labor component of their cost can differ substantially. But both kinds of programs seem well geared to help informal sector workers cope with job loss. As table 3.1 shows, most of their beneficiaries belong to the poorest population groups.

In between these two extremes mandatory severance pay is the most common income support program available to the unemployed in developing countries. In this program an employer is liable to pay a certain amount of money to a worker dismissed due to no fault of his or her own. The amount is usually related to the last salary of the worker and his or her seniority in the job by a formula typically involving a minimum seniority and a maximum payment. This program does not require the involvement of a social security agency. Compliance is complaint driven, which often overburdens labor inspectors but is probably cheaper than running a full-blown unemployment insurance program. Mandatory severance pay makes the employer assume the role of an insurer. If that the firm goes bankrupt, workers usually have priority over other creditors.

One potential problem with mandatory severance pay is that it may discourage hiring. This program raises separation costs in bad times, which can make employers reluctant to recruit in good times. In its extreme form, mandatory severance pay becomes equivalent to lifetime

job security. In the cases of India and Zimbabwe it has been shown that lifetime job security reduces labor demand in the formal sector (Fallon and Lucas 1991). In a similar vein a cross-country study by Heckman and Pagés (2000) shows a link between high separation costs and low employment-to-population ratios, at least for young workers. However, a study focusing on the change in earnings experienced by Peruvian workers as they move from jobs covered by severance pay to non-covered jobs, or vice-versa, suggests that workers may "pay" for coverage through lower wages (MacIsaac and Rama 2001). If part of the burden falls on workers, the adverse employment effect could be alleviated or even offset. Table 3.1 shows that mandatory severance pay, much the same as unemployment insurance, benefits mainly higher-income workers.

Finally, active labor market programs are often set up to help unemployed workers find new jobs. Training, counseling, placement services, and assistance in job search are among the most common examples. While active labor market programs of this sort are quite popular with governments, trade unions, and the general public, their effectiveness seems limited. For instance, Mexico's *Probecat* appears to be effective at providing income support to the unemployed, but not at improving their earnings ability (Wodon and Minowa 2001). The effectiveness of these programs is difficult to assess, as participants are self-selected. Workers who are more eager to succeed, or more able to learn, are more likely to participate. It is therefore difficult to disentangle the effects of the program from those of the ability of its participants. In any event the effects uncovered appear to be generally modest, and concentrated in relatively narrow subsets of participants (Fretwell, Benus, and O'Leary 1999; Gill, Fluitman, and Dar 2000).

For some workers, the negative effect of globalization takes the form of a drop in earnings, rather than a job loss. The minimum wage is a potential way to circumscribe this drop. However, the actual impact of this intervention is often exaggerated. To begin with, minimum wages are not directly relevant for the self-employed and those working in household industries. In many developing countries this group represents a majority of the labor force, and it includes most of the poor. As regards salaried workers, many among those who may suffer from trade liberalization and deregulation earn substantially more than the minimum wage. The latter might thus be ineffective in their case.

Another important shortcoming of minimum wages as effective means of social protection in developing countries is the limited ability of governments to enforce them. Several case studies show that compliance is partial at best, even in countries with a relatively high administrative capacity (Gindling and Terrell 1995; Maloney and Fajnzylber 2000). As a result, attempts to raise labor earnings through minimum wage hikes, as in Indonesia during the early 1990s, have been quite ineffective (Rama 2001c). The flip side of weak enforcement is that the disemployment effects of minimum wages have been modest, too. In Mexico the minimum wage is so low compared to the average wage of formal sector workers that its variation has no noticeable impact on employment. Even in Colombia, where minimum wages are much higher, the estimated disemployment effects are only about one-tenth of those found in industrial countries (Bell 1997).

Rodrik (1998) finds that bigger governments, and especially bigger public sector employment, can be used as a substitute for insurance or other forms of social protection. He shows that a positive correlation exists between an economy's exposure to international trade and the size of its government. This correlation holds for most measures of government spending, in low- as well as high-income samples, and is robust to the inclusion of a wide range of controls. His explanation is that government spending plays a risk-reducing role in economies exposed to a significant amount of external risk. One piece of evidence in favor of this interpretation is that the relationship between openness and government size is strongest when terms-of-trade risk is highest.

A similar correlation exists between government employment and openness (Rodrik 1998). "Secure" jobs in the public sector could thus be seen as a form of insurance against the external risk faced by the economy, especially when those who hold those jobs transfer resources to their extended families. But this interpretation is to some extent problematic. While some public sector jobs might have been created with the deliberate goal of providing income security, other explanations are equally plausible. Preliminary work with an expanded version of the database used by Rodrik suggests that the political regime, income inequality, and the degree of ethno-linguistic fractionalization are good predictors of the share of the labor force employed by the public sector (Chong and Rama 2001). An inflated public sector can have large detrimental effects on economic performance, as discussed below.

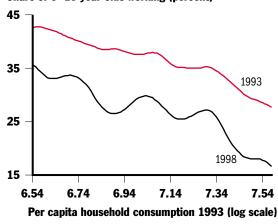
How a government goes about providing social protection will have a large effect on how its economy performs and how much its people benefit from global integration. A cross-country study of economic

growth during periods of economic reform found that some of the government interventions discussed in the previous section can lead to poor performance, while others are relatively benign (Forteza and Rama 2001). Countries with large public sector employment got poor results from reform, while the level of minimum wages or the generosity of social security benefits did not appear to have any adverse effect. These results are consistent with a "political" interpretation of the role of public sector employment in the reform process. In developing countries a large portion of the formal sector is often made up of public sector employees. Workers in protected industries also tend to be unionized. These two groups stand to lose from reforms such as trade liberalization, market deregulation, or privatization of state-owned enterprises. The more powerful they are, the more likely that reforms will be first delayed, and once they are adopted, implemented only half-heartedly. This political interpretation suggests that the payoffs to the compensation of those who stand to lose from globalization can be large. It also implies that using public sector employment as an insurance mechanism against increased economic volatility carries the risk of entrenching the forces that oppose reform. On the other hand, minimum wages and generous social security benefits do not appear to be costly.

The last labor issue that we take up concerns core labor standards. All 175 members of the International Labour Organisation have endorsed core labor standards, as a result of their acceptance of the "Declaration on Fundamental Principles and Rights at Work." These standards include a ban on abusive child labor. Obviously, this ban is not successfully enforced in very poor countries. Why? There is pervasive evidence that poverty is the primary cause of child labor. Household surveys show that, within developing countries, child labor declines sharply with family income. In Vietnam, for example, the extent of work by children aged 6 to 15 had a clear relationship to household income in a 1993 survey (figure 3.9). (Most of this work is on the family farm.) The figure also shows the 1998 extent of child labor for the same households. During the period that Vietnam was opening up to the global economy there was a sharp drop in child labor. Why? The change can be explained almost completely by the increase in household income. Over this relatively short period of time the income of the poorest 10 percent of the population increased more than 50 percent in real terms, which led to a sharp decline in child labor (and a corresponding increase in school enrollment rates).

Figure 3.9 Child labor and household consumption levels in Vietnam

Share of 6-15-year-olds working (percent)



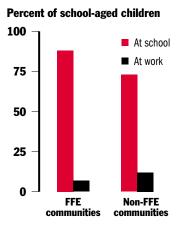
Source: Edmonds (2001).

This finding sheds important light on the current debate about core labor standards. Developing countries fear that trying to enforce labor or other standards through WTO sanctions will become a new form of protectionism that will limit their trade. With fewer trading opportunities the income of poor families will fall, increasing child labor. Thus, an apparently well-intentioned policy, such as trade sanctions against poor countries that have child labor, could easily backfire and result in more child labor.

Another important point is that developing countries are addressing problems of child labor in their own ways, with positive programs. For example, Bangladesh's Food-for-Education (FFE) program, which provides poor families with food as long as they send their young children to school, has resulted in a drop in child labor (figure 3.10). There is also evidence that the quality of schooling is important, so that improved schools lead to less child labor. Thus, there are positive programs to address this important problem, and we do not just have to wait for incomes to rise to abolish abusive child labor. These programs, however, do require resources.

This evidence raises serious concerns about the proposal to regulate child labor or other labor issues through WTO sanctions—in other words, to allow rich countries to bring unfair trade practice suits against poor countries if there is evidence of child labor. It is very unlikely that such

Figure 3.10 Bangladesh's Food-for-Education (FFE) program and child labor



Source: Ravallion and Wodon (2000).

sanctions would reduce child labor as long as the underlying problem of poverty is not addressed. However, were the ban to be enforced on poor families, they would be worse off if no other assistance were provided. Developing countries have a good argument that there is a danger that labor standards could become a new form of protectionism against poor countries—with the ironic effect of increasing poverty and hence child labor. We emphasized in Chapter 2 that poor countries have difficulty defending their interests in the WTO, so that there is potential for these standards to be used against them to restrict their trade. If first world citizens care about child labor, it would be more constructive if they contributed money to support programs to improve schools and help poor families send their children to those schools.

More generally, there are two complementary strategies to raising labor standards. The first is to support the fundamental processes of growth that will raise labor productivity. This raises wages, not just in the firms that happen to export, but across the economy. The second is to support specific measures of social protection that benefit workers both directly and by strengthening their bargaining power. For example, health and safety standards should be set at a level where they can be enforced across the economy, not just in export enclaves. The imposition of sanctions and penalties by rich countries on the exports of poor countries would be a form of taxation, threatening these strategies rather than supporting them.

Summary of recommendations

O STRENGTHEN THE POTENTIAL BENEFITS OF OPENNESS, developing countries need a good investment climate in which firms can start up and prosper. A good investment climate is particularly important for small and medium enterprises that will create the bulk of new jobs. Elements of a sound investment climate include efficient but streamlined regulations for entry and exit, a healthy financial system, good infrastructure, and good economic governance (contract enforcement, tax administration, safeguards against corruption). Many successfully globalizing developing countries are using the international market for services to strengthen the investment climate. Foreign trade and/or investment can help develop financial services, accounting, telecommunications, power, ports, customs administration, and other critical areas of infrastructure.

Integration with the global economy increases the return to education. This can be a good thing, provided that that there is a sound education system providing services to all. The rapid growth in new globalizing economies generates resources that can be used to strengthen the delivery of education and health services, so that the poor can participate in this growth and benefit from it. A good education system that provides opportunities for all is critical for success in this globalizing world.

The more dynamic environment calls for new types of social protection. To get reforms underway may require one-time compensation schemes for workers who would otherwise lose in a big way. Well-designed unemployment insurance and severance pay systems can provide protection to formal sector workers in an environment that will now have more entry and exit of firms. But the poorest people are better reached through self-targeting programs such as food-for-work schemes. Social protection is important not just to help individual families that lose in the more dynamic economy, but also to create a solid social foundation from which people—especially poor people—feel comfortable taking risks and pursuing entrepreneurship.

Note

1. This study provides a wealth of information of firm characteristics and the impact of government policies and the business environment on firm performance. It is a blueprint for studies that the World Bank will be supporting in additional countries in the coming years.

Such databanks will provide for international comparisons, allowing for quantitative measures to complement existing qualitative rankings. For more information and access to the data, please visit the webpage: http://www.worldbank.org/research/facs/.