Chapter 5 Regulation and taxation

5.1 The way governments regulate and tax firms and transactions—behind and at the border—does much to shape the investment climate. Sound approaches to regulation address market failures that inhibit productive investment and reconcile the interests of firms with those of society. Sound approaches to taxation generate the revenues to finance public services that improve the investment climate and meet other social goals. The challenge all governments struggle with is how to meet these objectives without undermining opportunities and incentives for firms to invest productively, create jobs, and so contribute to growth and reduce poverty.

5.2 There is huge scope in most countries for improving regulation and taxation without compromising broader social interests. Too often, however governments pursue approaches that fail to meet the intended social objective, yet harm the investment climate. How? By imposing unnecessary costs. By increasing uncertainty and risks. By erecting unjustified barriers to competition.

5.3 Examples of regulatory problems abound. Regulations to promote social goals are often enforced only partially—as evident in the huge informal sectors in many developing countries. Yet they can impose significant burdens on firms that do comply—whether through the extraordinary requirements to set up a new business or the long delays in getting goods through customs. They can create monopolies or cartels for favored groups—imposing costs on consumers and other firms, and stifling incentives for the protected firms to innovate and improve their productivity. Their interpretation and application can be unpredictable—creating uncertainty for firms and inviting corruption.

5.4 Tax systems are plagued by similar problems. They often benefit favored groups, distorting competition and foisting higher taxes on others. And tax administration can be burdensome and unevenly enforced, increasing compliance costs, reducing revenues, and opening the way for corruption.

5.5 That such problems exist is hardly news. But new sources of evidence underline the extent of the problems and their impact on firm productivity and growth. And while the underlying problems do not always have simple solutions, a growing body of international experience points to some practical steps that governments can take to improve these areas of their investment climates. This chapter takes a broad view and considers regulation and taxation behind and at a country's borders. It shows that there is great scope for improving performance. Later chapters look at specific challenges in regulating the financial system and infrastructure (chapter 6) and labor markets (chapter 7), as well as issues associated with selective interventions (chapter 8) and the use of international rules and standards (chapter 9).

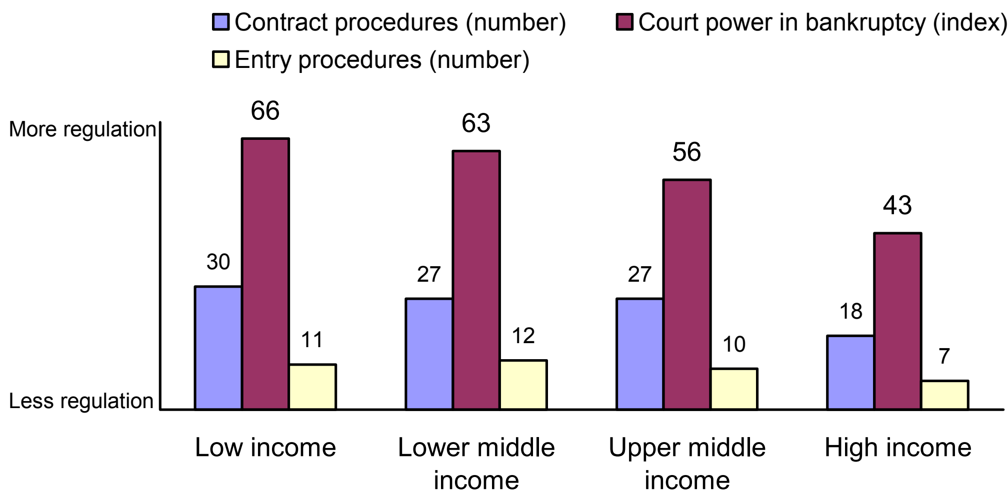
Regulating firms

5.6 Governments regulate firms in many ways—for many reasons. They regulate to restrict who may participate in a market. Where firms may locate. The production process used. The quality or other parameters of the goods and services produced. The way products are marketed and distributed. Indeed, it is hard to find any aspect of a firm’s business and investment

decisions that is not affected in some way by regulation. Recent work suggests that while it is difficult to find a single indicator that captures the many dimensions of regulation and the variations in its intensity, developing countries tend to regulate more than richer countries in many areas (figure 5.1). How then, to move forward on the basics?

- Balancing market and government failures and achieving a good institutional fit.
- Addressing regulatory costs and informality.
- Reducing regulatory uncertainty and risk.
- Tackling the barriers to competition.

Figure 5.1 Low income countries tend to regulate more



Source: World Bank Doing Business database.

Balancing market and government failures and achieving a good "institutional fit"

5.7 Regulation improves social welfare—and the investment climate—when it responds to a market failure cost-effectively. This involves an assessment of market failures and government failures, and the extent to which the proposed regulatory strategy reflects local conditions, priorities, and capacities.

5.8 *Market failures.* The usual rationale for regulation is market failure, the three most common of which are externalities, information problems, and monopoly.

- *Externalities* arise when producing or consuming a product imposes costs (negative externalities) or confers benefits (positive externalities) on others. Pollution is a classic negative externality: a firm that releases pollution into a river can impose costs on its neighbors farther downstream. If the firm fails to take account of the effect of its pollution on others, it will generate more than is socially optimal. Government can reconcile the firm's incentives with those of the wider community by restricting pollution. They may do this

through traditional command-and-control regulation, such as prohibiting certain activities or establishing standards for acceptable effluent levels. Or they might fully assign property rights or tax the product that causes the negative externality.[1]

- *Information problems* arise when market participants lack the information to make well-informed choices. For example, consumers may lack reliable information about the quality or safety of a product, or the qualifications of a service provider. Regulation may address these concerns in many ways. Over and above prohibiting fraudulent conduct, governments may require firms to disclose certain information about their products (as through product labeling), require the safety of products to be independently verified (as with drugs in many countries), or simply ban the sale of hazardous products.

- *Monopoly* arises when a firm (or group of firms acting in concert) has enough market power to raise prices above the competitive level and thereby extract higher profits at the expense of consumers and economic efficiency. In assessing market power, competitive pressure is not limited to direct head-to-head competition between existing firms offering identical products. It can also come from the threat of entry by new firms, as well as from products that may be effective substitutes (rice might compete with beans for some uses). Governments can address monopoly by removing unjustified regulatory barriers to competition, by dealing with anti-competitive behavior through competition law, or in extreme cases by regulating the prices and quality of the goods or services provided. Some countries have also used public ownership as a form of regulation, typically with poor results (box 5.1).

Box 5.1 Public ownership, regulation, and the investment climate

Modern notions of regulation involve an entity that operates at arm's length from regulated firms applying a set of explicit rules that define acceptable conduct and imposing sanctions for non-compliance with those rules. But some governments have also experimented with public ownership as a form of regulation.

Combining production and regulatory roles involves an inherent conflict of interest. Experience shows that this conflict—coupled with political interference, protection from competition, and weak accountability—often leads to public enterprises having dismal productivity. The dramatic improvements unleashed through privatization have highlighted how significant the costs can be.[2]

No less important, public enterprises in developing countries have a poor record in meeting regulatory requirements. For example, state-owned enterprises in Indonesia were found to emit over five times as much pollution as similar private enterprises (World Bank (1995)). State-owned pulp and paper plants in Bangladesh, India, Indonesia and Thailand controlled pollution less well than similar private enterprises (Hettige and others (1995)). And public enterprises in China have far higher pollution abatement costs than private firms (Wheeler (2001a)).

Several factors seem to be at work. First, diffuse objectives, political interference, and weak accountability can conspire against good performance. Second, even when regulation is entrusted to a separate regulatory body, public enterprises have weaker incentives to comply than private firms do. While the threat of being fined can motivate private enterprises, governments have only weak incentives to prosecute enterprises that they own for both political and fiscal reasons. And third, public enterprises that depend on budget support or whose prices are regulated with political criteria in mind often lack the resources to meet environmental or other standards.

Overall, public ownership has the potential to harm the investment climate in three main ways:

- When public enterprises are responsible for providing inputs relied on by private firms (such as power, telecommunications, or finance), weaknesses in their productivity and incentives can contribute to higher costs and less reliable service to the detriment of firms' performance (chapter 6).

- Public ownership can increase demands for corrupt payments, because managers have weaker incentives to reduce leakages and graft. For example, firms in transition economies are more likely to have to pay bribes to get telecommunications and electricity services when they are provided by public enterprises.[3] Employees of state-owned power companies in South Asia have developed a highly organized system to extract bribe payments from customers.[4] The result can be higher costs for firms and reduced revenues for the public enterprise, reducing public investment or increasing the burden on taxpayers.

- When public enterprises are granted a monopoly, opportunities are denied to other firms. But even when competition is permitted between public enterprises and private firms, it is notoriously difficult to create a level playing field. The problems are especially acute when the public enterprise has a regulatory role, because it will face incentives to use that role to advance its own interests over that of competitors—a phenomenon common in telecommunications. Even when such obvious conflicts of interest have been addressed by moving regulatory responsibility to a more independent body, pressures to favor the interests of public enterprises can continue. And public enterprises often enjoy a range of (de jure or de facto) exemptions from taxes and other regulations that can also distort competition.

5.9 *Government failure*. Regulation that addresses a market failure can benefit society. But even when a market failure does exist, it makes sense to intervene only when the expected benefits exceed the likely costs. This involves balancing market failures with potential government failures. Common sources of government failure include:

- *Information and capacity problems*. In designing and implementing interventions, governments often face severe information problems. They will never have as much information as firms about the impact on their costs or incentives. This is a particular challenge in utility regulation, but can arise in other areas. And the implementation of some kinds of regulation demands a reasonable level of technical expertise, the absence of which can lead to unintended consequences.

- *Rent-seeking.* Regulation may be distorted by rent-seeking in its many forms (chapter 2). Firms or other groups may seek regulation to protect them from competition. Officials may use regulation to extract bribes in return for favorable interpretations, quick decisions, or selective enforcement. And regulated firms have incentives to try to "capture" their regulators through a range of strategies.

- *Rigidity.* Regulation tends to be rigid, making it hard to keep up with changes in technology or the way business is conducted. Indeed, many regulations in developing countries have not been reviewed for many decades or longer. Part of the problem lies in inertia. But firms, officials, or other interest groups that benefit from particular regulations can have strong incentives to resist reform, no matter how beneficial it may be to society.

5.10 *The challenge of "institutional fit."* As discussed in chapter 2, interventions that work well in industrial countries may lead to very different results elsewhere. This means the costs and benefits of intervention, and the optimal form and level of any intervention, need to take account of local conditions, priorities, and capacities. Too often regulatory systems have been

transplanted uncritically to developing countries from elsewhere—with little regard to institutional fit. Many developing countries inherited their regulatory systems from former colonial powers. Particularly when the colonizing power had little interest in establishing long-term settlements, there was little incentive to adapt approaches to the needs of the broader community.[5] Being largely irrelevant to conditions in the host society, they were often ignored, or used mainly as a lever for officials to extract rents. And firms or officials benefiting from those regulations have incentives to resist reform, no matter how dysfunctional the regulations may be for the investment climate. So, the same laws and regulations often remain on the books today—many decades later (chapter 2).

5.11 The tendency to transplant laws and regulatory systems from other countries continues to this day.[6] Laws and regulatory systems in rich countries may appear to offer a convenient way to modernize regulation by adopting a proven system that is familiar to foreign investors. Or foreign consultants advising on these matters may simply be more familiar with the approach in their home country. But without adaptation to local circumstances, the results can backfire—as Jamaica found (box 5.2). The key point is not to ignore experience in other countries, but to draw from the best of that experience and adapt it to local conditions, priorities, and capacities.

Box 5.2 Regulating in Jamaica—from transplants to better institutional fits

Regulatory systems for utilities need to reconcile the investor's need to receive a reasonable rate of return on an investment with concern that a firm with monopoly power can misuse it to the detriment of consumers. A variety of approaches to reconcile these interests have developed around the world. In the United States the system involves conferring substantial discretion to an independent regulatory agency, with legislative guidance on tariffs often defined only as "fair" or "just." Discretion of this breadth on an issue as politically sensitive as tariffs is a source of considerable risk to investors in capital-intensive and immobile assets. But those risks have been mitigated in the United States by a series of Supreme Court decisions, dating from the 1890s, that have interpreted the Constitution in ways that create effective safeguards for investors in regulated industries.

In 1965 Jamaica adopted a regulatory system modeled closely on those in the United States. The Jamaica Public Utilities Commission was authorized to determine a "fair" rate of return but lacked the complementary institutional safeguards that developed over decades in the United States. The Commission became politicized and, despite increased inflation and the need to expand services, the private phone company was not granted a single rate increase between 1962 and 1971. The company's profits fell and after 1970 failed to cover the real depreciation of its assets. Service deteriorated and disputes developed leading to the company's nationalization in 1974.

With poor service and a shortage of funds for investment under public ownership, the government was forced to reintroduce private participation in the telephone company in 1985. This time, to compensate for the lack of broader institutional safeguards, the discretion of the regulatory agency was reduced considerably. The license guaranteed the private operator a fixed rate of return based on shareholder equity and allowed for arbitration when the government and the investor could not agree on rates. In 1995 Jamaica undertook more wide-ranging changes to its regulatory system for utilities, replacing the Public Utilities Commission with a new Office of Utility Regulation. While the new agency has some discretion, the new law retains a mechanism for the independent regulator to provide specific pricing and other commitments to investors through contracts, thus helping to mitigate the risks of a traditional U.S. style agency operating in a country with less developed institutional safeguards.

Sources: Spiller and Sampson (1996); Phillips (1993); Jamaica Office of Utility Regulation Act.

5.12 Government failures and poor institutional fits combine to lead to many distortions in regulatory approaches that harm the investment climate in developing countries. There are three main challenges. Ensuring that costs are justified and do not contribute unnecessarily to

informality. Reducing concerns about regulatory risk. And removing unjustified barriers to competition.

Addressing regulatory costs and informality

5.13 All regulations can impose costs on firms, whether in the need to adapt business processes to meet regulatory standards, pay licensing fees, await delays in obtaining regulatory approval, or divert management time to deal with officials. A good investment climate does not seek to eliminate those costs—instead, it seeks to ensure they are no higher than necessary to meet social interests. The goal is thus *better* regulation, not *less* regulation (box 5.3). Too often the costs are unnecessarily high due to a poor institutional fit, rent-seeking, or inefficient administration. Regulation that imposes costs beyond the expected social benefits is usually regarded as "red tape."

Box 5.3 Is there a "race to the bottom" in environmental regulation?

As it became easier for goods and investments to flow across borders in the 1990s, concern arose that a “race to the bottom” in environmental regulation might follow. For goods that can be transported between countries, firms might choose to produce in locations with weak environmental standards and then export to countries with higher standards. The concern was that countries with high environmental standards would find themselves at a disadvantage and, as capital left their economy, would feel under pressure to relax their own standards to stem the outflow. Countries with already weak standards might then cut their own standards, vying for footloose investment by relaxing, and eventually eliminating, environmental regulation.

So far, there is little evidence to support such concerns. There seem to be three main explanations.

Only one part of the investment decision

The cost of complying with environmental regulation can influence firms' investment decisions, but it is only one of many factors, and the weight given to it will vary by firm, by industry, and by location. Polluting industries tend to be capital intensive, which means investors tend to place a high premium on the broader policy environment, and in particular concerns over political and regulatory risk. Costs associated with environmental regulation might carry more weight on investment decisions between two locations that are otherwise highly comparable, such as states in the United States or countries in Europe.

But developing countries tend to face disadvantages relative to industrial countries on this broader set of criteria, so differences in environmental regulation tend to carry less weight. Indeed, a recent study of FDI in developing countries found no evidence that investment decisions were significantly affected by environmental standards. And environmental quality appears to have improved, rather than deteriorated, in many countries over the past decade. For example, air pollution in industrial areas fell in the 1990s in China, Brazil, and Mexico—three developing countries that have received significant amounts of foreign investment.

Society’s preferences for higher standards rise with income

Society’s preferences for environmental protection tend to increase with income. As countries move beyond basic subsistence needs and begin to prosper, the weight they place on higher environmental standards tends to increase, as reflected in Brazil, China, and Mexico, as well as in other countries. So, as countries improve their broader investment climates and experience faster economic growth, the pressure is likely to be for more environmental regulation, not less. The preferences of citizens in high income countries for high standards of environmental protection also show no signs of abating, further reducing the risk of a collapse in standards. Indeed, the race, if there is one, may be to the top rather than the bottom as countries become richer.

Incentives to comply with higher standards already strong

Multinational enterprises often have stronger incentives to comply with higher environmental standards than local regulations require, both because of advantages in adopting common technologies and standards across the countries in which they operate, and also due to concerns to protect their corporate reputations. Indeed, the evidence suggests that multinational enterprises tend to exceed local standards in many areas.

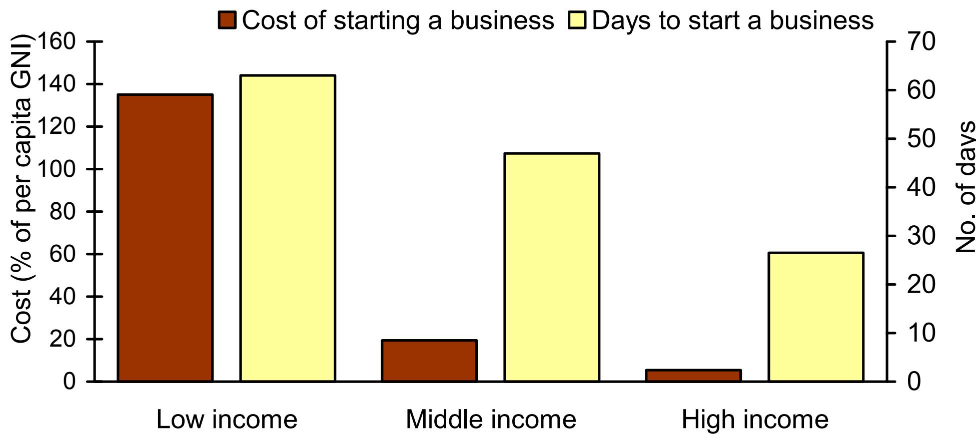
Concerns about a race to the bottom need to be distinguished from the possibility of low environmental standards in one country reducing the environmental quality of neighboring countries or even the world—say, by producing effluents that flow across national boundaries. The international community has been addressing these concerns in recent decades, including a raft of new international rules and standards (chapter 9).

Sources: Copeland and Taylor (forthcoming); Wheeler (2001b). Becker and Henderson (2000); Dowell, Hart, and Yeung (2000); Frenkel (2003);Greenstone (2002); Jaffe and others (1995); Keller and Levinson (2002); Klein and Hadjimichael (2003); List and others (2003).

5.14 A growing body of evidence highlights the toll of ill-considered or outdated regulations on the investment climate. Recent studies looking at the effect of regulation in OECD economies show that both investment and the productivity of that investment are lower in countries where the regulatory burden is greater.[7] The effect can be large. It has been estimated that reducing the level of regulation in Italian transportation between 1994 and 1998 to the level in the United States could increase the investment rate in that sector by 2.6 percentage points.[8]

5.15 Recent work focusing on objective measures of the compliance costs associated with particular regulations show wide variations across countries. For example, the time to set up a new business ranges from 11 days in Latvia to 203 days in Haiti. The overall pattern is that delays are greater and costs higher in low income countries (figure 5.2).

Figure 5.2 Starting a new business takes longer and is more costly in developing countries

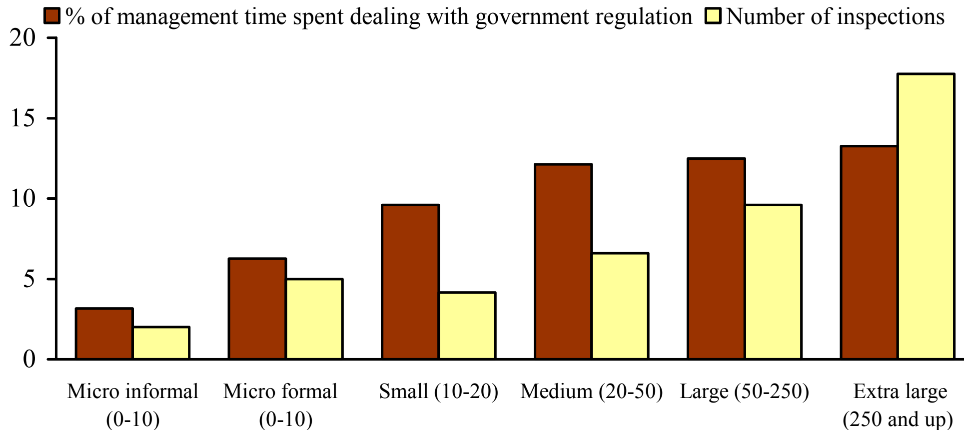


Note: Based on median cost as percent of Gross National Income (GNI) and median days.
Source: World Bank Doing Business database.

5.16 When compliance costs are the same for firms of different sizes, they impose a disproportionate burden on smaller firms. In Tanzania small formal firms, on average, pay an amount equal to about 0.4 percent of their sales for an operating license—large enterprises pay only about 0.01 percent.[9] Other regulations can also be a greater burden for small firms because it is (relatively) more costly for them to hire professionals to help them complete bureaucratic

procedures. Large firms in Peru are almost three times as likely as small firms to hire lawyers to help them complete procedures related to applying for licenses and permits.[10] Other costs however are greater for large firms: managers of large firms spend more time dealing with government regulations, and large firms are also more likely to be inspected than small firms (figure 5.3).

Figure 5.3 Larger firms spend more time dealing with government regulations and are inspected more often.



Note: Based on Investment Climate Assessments and informal firm surveys from firms in Bangladesh (2002), Brazil (2003), Cambodia (2003), Guatemala (2003), Indonesia (2003), Pakistan (2002) and Tanzania (2003). All informal surveys are for 2003.
Source: Investment Climate and Informal Firm Surveys.

5.17 When it is costly to comply with regulation, firms have an incentive to evade these costs through informality. By remaining in the informal sector, small firms can reduce—although not completely eliminate—compliance costs (figure 5.4). Informality is common in many developing countries. Indeed, the informal sector produces more than half of GDP in many developing economies—and an estimated 76 percent of GDP in Nigeria (chapter 1). The fact that most of the economy is not fully complying with regulations raises fundamental questions about their effectiveness. But the answer is not simply to apply greater efforts to enforce all existing regulations. Unless the regulations themselves are well-considered, this may just put a disproportionate burden on poor entrepreneurs in the informal economy and lead to perverse results. Efforts are required to first see if the regulation is required to meet an important social objective, and if appropriate to adjust the content of the regulation and the compliance strategy to ensure they reflect local realities. Reflecting this, a growing number of countries are focusing on reducing onerous registration requirements that discourage firms from entering the formal economy (box 5.4).

Box 5. 4 Improving business registration in Vietnam and Uganda

Vietnam

Before January 2000, when the Enterprise Law was enacted in Vietnam, business registration and licensing requirements were extremely burdensome. Entrepreneurs were required to submit detailed business plans, curriculum vitae, character references, medical certificates, and other documents along with their applications for registration. On average, registering an enterprise took about three months, and required visits to 10 different agencies and submission of about 20 different documents with official seals.

After their registration, enterprises often had to acquire additional licenses (to import or export or for food safety) before they could start operating. Some of these licenses did not appear to serve vital public interests (such as those to operate photocopying machines or to provide dance lessons). It took 6-12 months to fulfill the legal requirements required to establish a private enterprise at a cost of $700-1,400.

One of the goals of the new law was to reduce the costs of establishing a new business. The time to establish a new business came down to about two months—with business registration taking only 15 days—and total start-up costs were reduced to about $350. Vietnamese entrepreneurs responded. Only 5,782 new businesses had registered in 1999, but the number shot up to 14,413 in 2000, 21,040 in 2001, and 21,535 in 2002.

Uganda

Uganda recently piloted a program in Entebbe to reduce the time and monetary costs associated with business registration. By streamlining licensing processes and reducing the number of previously required approvals and assessments, the time taken to register a business was reduced from two days to about 30 minutes. This reduced the cost of registering a business by 75 percent. Although business registration is only one of several steps to start a new business in Uganda (businesses have to register for tax purposes and most need additional licenses), the cost can be significant because registration needs to be repeated annually for most businesses.

The pilot program increased business registrations, with an estimated four times as many businesses registering in Entebbe the year after the pilot. Despite the lower fees, the higher number of registrations meant that revenue collections increased by 40 percent. With administrative savings of 25 percent in staff time and 10 percent in financial resources, the program also benefited the municipal authority.

Sources: Vietnam: Mallon (2004); Uganda: Sander (2003).

5.18 Governments are also taking efforts to streamline regulatory approval processes. This may involve use information technology that allows on-line processing of regulatory approvals (see Singapore in chapter 2) or the creation of "one stop shops" (box 5.5).

Box 5.5 One stop shops—or full stop shops?

In many countries, firms have to receive approvals from a range of different agencies before they can start operating: one to register the business, another to register for taxes, another to get environmental approvals, and another for health and safety clearances, and so on. To reduce the burden on firms, some governments have established “one stop shops” where firms can find all the information and complete all the regulatory procedures that they need to start operating a business in a given jurisdiction.

One approach is to give the agency the power to grant all licenses, permits, approvals, and clearances necessary for a new firm to start operating. In practice, this is often difficult. First, existing ministries and agencies usually resist giving a new agency powers that were previously their responsibility. These problems can be particularly pronounced when different levels of government (local, state, and national) are responsible for approval. Second, to the extent that approvals are a response to a valid policy concern (immigration, environmental concerns, health and safety, or tax evasion), the one-stop shop would need to duplicate expertise and facilities elsewhere in the government. Of course, if the existing approvals do not meet valid policy objectives, the procedures could be eliminated.

Because of these problems, most one stop shops have narrower mandates, awarding some licenses and approvals and providing advice and assistance on others. For approvals that remain the responsibility of other agencies, the one-stop shops may house staff from the relevant agencies or simply pass the applications onto them.

After being set up in 1987, the One Stop Action Center (OSAC) in the Philippines housed representatives from seven agencies. These representatives were responsible for providing information to applicants and could act on some applications. When more detailed evaluation was needed, the representatives were responsible for monitoring

the status of applications after passing them onto to the relevant agencies. Due to the lack of effective agency representative—and the nonreporting of some representatives to OSAC—the process was unsuccessful and investors continued to complain about the difficulties associated with completing necessary procedures. So the government reorganized OSAC in the late 1990s.

A common problem is that it is easy for the one-stop shop to simply add to the burden when it does not have the authority to give all necessary approvals. Although the Investment Services Center in Thailand could issue establishment licenses for non-polluting activities, factories still had to get permission from the Ministry of Industry before production could actually start-up. So, to avoid delays at later stages in the process many firms preferred to obtain the necessary licenses directly from the ministry from the outset.

One stop shops have sometimes managed to accelerate the process of gaining specific approvals, particularly when they have had limited mandates related to some aspects of the approval process. For example, by shifting from a pre-auditing to a post-verification system the One Stop Service Center for Visas and Work Permits in Thailand managed to reduce the time it took foreign enterprises to get visas for foreign workers from about 45 days to 3 hours. Similarly, the Oficina Nacional de Inversiones in El Salvador reduced the time it took to complete business registration procedures. But these limited agencies have not played the role of broad one stop shops.

Source: Brannock Consulting (2001); Brimble (2002); Miralles (2002); Sader (2003).

Reducing regulatory uncertainty and risk

5.19 Regulations can increase the risks firms face when they change frequently, are vaguely drafted, or are interpreted or enforced inconsistently (chapter 2). The result in each case is greater uncertainty, which makes it hard for firms to make long-term decisions about entering markets, choosing production technologies, or hiring and training workers. Uncertainty can also reduce the response to otherwise beneficial reforms. For example, it has been argued that one of the reasons for the relatively modest supply response to liberalization of the cashew sector in Mozambique was that farmers believed that the reforms might be reversed.[11] Since it takes three to five years for the trees to bear fruit and the trees have a productive life of up to 40 years, unless farmers believe that the new regulatory policy will be sustained, they will be reluctant to invest.

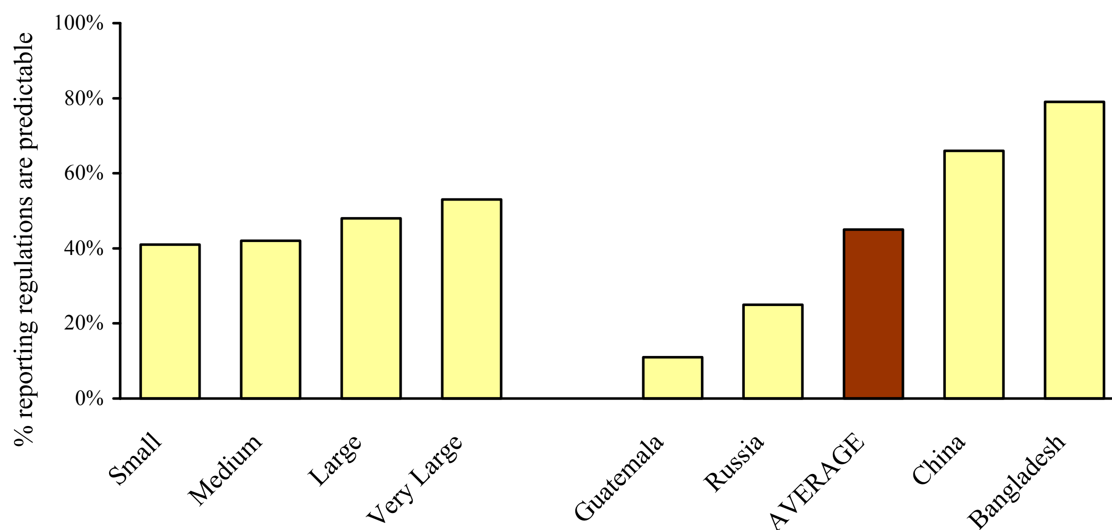
5.20 This does not mean that regulations should never be changed. Indeed, there is a huge agenda for change in many countries. The key is to minimize the adverse impact of uncertainty on firms. In 2002 firms in Poland rated uncertainty about economic policy as the second largest constraint on their operations and growth.[12] This was a big increase from 1998, when it ranked behind access and cost of financing, tax rates and tax administration. The increase seems to be explained in part by the 322 new laws adopted in this period, generating considerable uncertainty for firms.[13] Governments can reduce the impact of uncertainty on the investment climate by consulting firms and other stakeholders on proposed changes and when appropriate providing a transition period. For example, major investments under a previous regulatory regime may be "grand-fathered" from the application of new rules, or be given a period to adjust to new requirements.

5.21 Uncertainty about how existing rules will be interpreted or applied can also be a significant source of risk. It is a manifestation of broader concerns about policy predictability and stability (chapter 4) and it is more burdensome for firms in capital-intensive and regulated industries. Fewer than 45 percent of firms in developing countries—and fewer than 25 percent in such countries as Guatemala and Russia—reported that officials' interpretations of regulations

were at least fairly consistent and predictable (figure 5.4). On average, small and medium enterprises were less likely to report that interpretations were consistent or predictable than larger enterprises were. In the eight countries where informal surveys were completed for this Report, microenterprises were even more likely to report that interpretations of regulations were inconsistent than were small and medium-enterprises (chapter 2).

5.22 Some uncertainty is inherent in any new law or regulation. But governments can reduce uncertainty by striving for greater clarity and quickly promulgating more detailed regulations or implementation guidelines. Improving the transparency of regulatory decisionmaking can do much to promote consistency—and reduce concerns that discretion will be misused to extract bribes. But governments face tradeoffs between discretion and specificity in the design of regulatory rules (box 5.6).

Figure 5.4 Small enterprises are less likely find officials' interpretations of regulations predictable



Note: Averages by enterprise size are averages for 42 countries for which data are available.
Source: Investment Climate Surveys.

Box 5.6 Balancing the tradeoffs between specificity and discretion in regulation

Firms have a strong interest in regulatory certainty. Without such certainty—both for the stability and interpretation of rules—there can be concerns about the extent of their regulatory obligations and thus the potential returns from an investment opportunity.

Providing firms with appropriate assurances on the stability of the regulatory regime can reduce their risks and so can encourage investment. Reducing discretion can also reduce concerns about corruption. But there can be tradeoffs. Highly specified regulatory regimes reduce the flexibility to fine-tune applications to particular cases, and to accommodate unforeseen circumstances.

The optimal balance between specificity and discretion will vary according to the issue, sector, and country. For example, highly discretionary regimes can have a chilling effect on private investment in infrastructure—where investments are large, long-lived, and immobile, regulation has a significant impact on the returns from the investment, and political economy problems can create incentives for governments to renege on commitments (chapter 6). Regulatory discretion may have a less deleterious

effect on investments that are more easily reversed, where regulation plays a minor role in influencing expected returns, and there are no special sensitivities about regulation.

Concerns about regulatory discretion can also vary by country. For example, in the United States legislative guidance on the regulation of infrastructure involves considerable discretion—but broader institutional safeguards help to provide assurance to investors. Countries that have not yet established credible safeguards of investors' interests need to provide more specific regulatory assurances—or expect reduced investment at higher cost to reflect the risks (box 5.2).

Tackling barriers to competition

5.23 Another way regulation affects the investment climate is though its impact on competition. Individual firms typically prefer less competition than more—but welcome competition among their suppliers and customers and welcome the opportunity to compete in other markets. And competition provides incentives for firms to innovate and improve their productivity (chapter 1).

5.24 Much early evidence on the benefits of competition was from the experience in OECD countries. For example, a study of the impact of pro-competitive regulatory reform in several industries in the United States found that annual welfare gains in the part of GDP affected by reform were more than 7 percent, with 90 percent of the benefits flowing to consumers.[14] But new work shows significant gains in developing countries as well.[15] For example, the benefits of greater competition from trade reform has been documented in Brazil, Chile, Colombia, and India.[16] Firm surveys show that competition plays a much larger role in encouraging firms to be efficient than customers, shareholders and regulation. They also show that firms reporting strong competitive pressure in Eastern Europe and Central Asia are up to 23 percent more likely to innovate than those feeling no such pressure (chapter 1).

5.25 Governments create barriers to competition by restricting market entry and exit. And they use regulation to address anti-competitive behavior by private firms.

5.26 *Barriers to market entry*. Regulatory barriers to entry can take many forms, including legislated monopolies, market reservations, licensing regimes, and requirements to set up a business. Reducing barriers can have a big impact not only on competition but also on opportunities for individual entrepreneurs. For example, reducing regulatory barriers to competition in telecommunications has created opportunities for microentrepreneurs to enter the market and provide services in rural areas, helping their communities while improving their own livelihoods. When Bangladesh introduced competition in cellular services, one of the new entrants encouraged female entrepreneurs to set up and run phone shops in rural areas. By 2004 these shops provided service to about 5,000 villages and an estimated 12.5 million people who previously had no access to this service.[17] Barriers have been lifted even more in Uganda, by opening new opportunities for small entrepreneurs across the country and expanding services in rural areas (chapter 6).

5.27 Barriers can do more than protect public enterprises or large firms. In India the manufacture of certain products is reserved for small firms, reducing opportunities for other firms to participate—and reducing incentives for small firms to grow (chapter 8). And agricultural markets in many countries have been heavily regulated, with parastatals granted

monopolies over marketing or processing of export crops and traders that purchase goods from farmers have often had to be licensed. Recent efforts to liberalize agricultural markets have for the most part benefited poor rural producers of export crops by increasing producer prices relative to border prices.[18] While supply responses have sometimes been slower than expected, this may reflect continuing impediments in other parts of the investment climate (including insecure property rights and poor physical infrastructure)[19] or concerns about the credibility about the government's commitment to liberalization.[20]

5.28 When the costs of complying with any regulation are high enough, they can become an effective barrier to entry. Consider the costs of registering a new business mentioned above. Estimates for a group of countries—none of them the worst offenders—suggest that reducing the cost of registration procedures to the level in the United States (0.6 percent of per capita income) could increase the number of new entrants by between 4 and 28 percent in the middle income countries for which data were available (table 5.1).

Table 5.1 Reducing registration costs would increase new business entry rates

Country	Cost of registering a business as % of per capita GNI	Change in entry rate	Increase as % of actual entry rate
Hungary	86%	3.5%	28%
Mexico	57%	2.3%	18%
Brazil	20%	0.8%	12%
Chile	13%	0.5%	8%
Latvia	42%	1.7%	7%
Slovenia	21%	0.8%	5%
Romania	15%	0.6%	4%

Source: Bartelsman, Haltiwanger, and Scarpetta (2004).

5.29 *Barriers to market exit*. Competition is also affected by barriers to market exit—including bankruptcy procedures. When those procedures are long and costly, distressed firms and their creditors are less willing to use them, and markets become cluttered with failed firms that block opportunities for new entrants. Firms will also be less likely to risk entering new markets, and lenders will be less willing to lend to firms they do not already have a relationship with, further reducing competition.[21] Long and costly bankruptcy procedures have a negative impact on productivity—between 25 and 50 percent of productivity gains can be attributed to the least productive firms exiting (chapter 1).

5.30 Bankruptcy procedures in developing countries tend to be longer and more expensive than procedures in developed economies.[22] A standard bankruptcy procedure takes an extraordinarily long time in some countries—for example, a procedure that takes only three months in the fastest country (Ireland) would take over 11 years in India and 10 years in Brazil and Chad. The costs can also consume a large share of the estate—while taking only about 1 percent of the estate value in several developed and developing countries (Colombia, the Netherlands, Norway, and Singapore), they take up to 38 percent in Chad and Thailand. Bankruptcy procedures also appear less likely to result in efficient outcomes (rehabilitating viable businesses and liquidating unviable businesses) in developing countries.

5.31 *Anticompetitive behavior by private firms.* Firms may also curb competition in several ways. They may collude or form cartels to restrict competition. They may enter agreements with suppliers or customers aimed at restricting competition. Firms with substantial market power may misuse that power to restrict competition. Or firms may merge in ways that lead to the formation of substantial market power.

5.32 Around 100 countries now have competition (or antitrust) laws to address behavior of this kind—38 of them, including 27 developing countries, enacted for the first time or significantly strengthened existing competition legislation in the 1990s.[23] Most competition laws include provisions to:[24]

- Prevent firms from colluding or forming cartels to limit competition. Prohibited actions typically include agreements to fix prices, restrict output, allocate markets and customers, and rig bids or tenders.

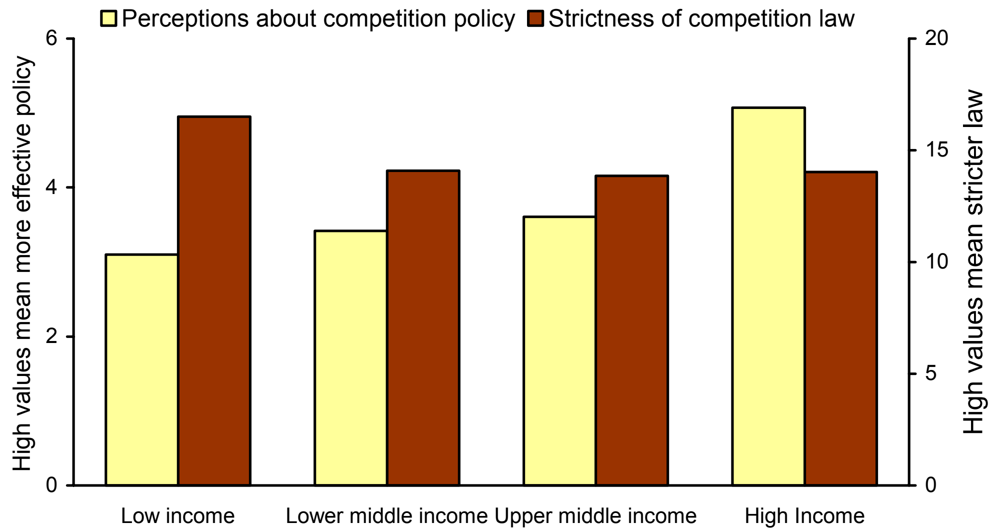
- Prevent dominant firms from abusing their market positions by engaging in predatory pricing, forcing firms that buy particular goods or services to also buy other goods or services, foreclosing markets for inputs or distribution, or setting discriminatory prices or terms of service.

- Require proposed mergers to be reviewed by a specialist agency to ensure that any resulting reduction in competition has offsetting public benefits.

5.33 These laws are usually enforced by specialist bodies. In addition to their roles in enforcing competition law, they often act as advocates for competition by commenting on policy proposals by other government agencies and performing studies to make policy recommendations on competition-related issues. According to a recent survey, 65 percent of the 43 responding agencies participate early in the regulatory review-decision process, while 28 percent were consulted throughout the process or at any stage.[25] Indeed, some argue that "competition advocacy" should be the first priority of competition agencies, particularly in developing and transition economies with a legacy of heavy-handed government interventions.[26]

5.34 The track record of competition laws and agencies in developing economies remains mixed. A recent study that looked at price markups in a number of developed and developing countries found that markups were no different in countries with and without competition laws.[27] And while agencies in countries such as Brazil, Chile, Korea, and Mexico have achieved some standing, implementation in other countries is often less impressive. Recent work suggests that while laws in developing countries tend to be no weaker than in developed countries, competition policy is perceived to be much less effective (figure 5.5). Why? Limited resources and slow and inefficient courts are probably part of the story. But probably more important are other policies that reduce competition (e.g., barriers to entry and exit) and the politics of prosecuting firms that have close ties to the government, such as state-owned enterprises and firms owned by influential people (box 5.7).

Figure 5.5 Despite strong competition laws in low-income countries, competition policy is not seen to be effective.



Source: World Economic Forum (2002) and Nicholson (2003).

Box 5.7 When do competition laws make sense for developing countries?

Given the importance of competition to a sound investment climate, competition laws and agencies could be expected to play a key role. But experience in developing countries remains mixed.

First, competition laws do not usually address barriers to competition flowing from government policy in other areas—including trade barriers, mandated monopolies, licensing regimes, and other regulatory barriers to entry and exit. When those barriers are pervasive—still the case in many countries—competition laws and agencies will not be enough to unleash a competitive and productive economy. The primary lever for governments is to address the policy barriers directly.

Second, competition laws are not always enforced vigorously in developing countries. Although agencies in some countries appear to be quite active, others appear to be less so (box table). Why is enforcement often weak? One reason might be constrained resources. For example, the competition agency in Tanzania had only two economists and no lawyers in 2000, while the authority in Zambia had four economists and one lawyer. A second reason is that effective enforcement often depends on effective courts. Unless the competition agency can rely upon the judiciary to support its decisions and protect it from political interventions, the agency will find it difficult to enforce its rulings.

Box table In some developing countries competition agencies deal with very few cases

	India 1999	Kenya 1996-2000	Pakistan 1996-2000	South Africa 1999	Sri Lanka 1996-2000	Zambia 1998-2000
Total cases disposed of annually:	206	30	166	273	6	50
Mergers and acquisitions	0	22	16	236	1	22
Anticompetitive practices	206	8	149	37	6	28
Cases per professional	9.0	1.3	33	7.4	0.9	24.8

Source: CUTS Center for Competition (2003).

A third explanation is that it can be difficult to prosecute politically connected firms, even when the competition agency is independent, unless the law and the agency command a high level of support from consumers and voters. For example, when the independent Monopoly Control Authority in Pakistan tried to take actions to reduce cartelization in the cement market in 1998-99, the government intervened, fixing prices at a 'mutually acceptable' level. Similarly, when the competition agency forbade Tanzania Breweries from barring independent agents and mini-wholesalers from stocking competitors' products, the company, with support of some government officials, contravened the agency's orders. When officials intervene against agency decisions on behalf of politically connected firms, competition agencies will be hesitant to move against them in the first place.

The main message? Well-designed competition laws can be a useful tool to improve the investment climate. But they need to be seen as part of a broader strategy that includes reducing regulatory barriers to competition, and helping to promote a more "pro-competition" culture.

Sources: CUTS Center for Competition (2003); Economic and Social Research Foundation (ESRF) (2002).

Toward better regulation for the investment climate

5.35 The challenge of regulatory improvement is large and ongoing. It requires continuing efforts to review and fine-tune approaches in line with changes in the way business is conducted, and doing so in a way that provides as much predictability for firms as possible. This is true in all countries. But it is especially important in developing countries where the existing body of regulation too often bears little relationship to contemporary circumstances, is only partially enforced, and if enforced more vigorously may lead to even more perverse results. Governments can take three steps to improve regulation. They can systematically review existing regulations. They can assess new regulatory proposals more carefully. And they can strengthen the skills and expertise of regulators and those on the frontline of government-firm relations (chapter 3).

Taxing firms

5.36 Governments need revenue to cover the costs of providing public services—including those that improve the investment climate—and meeting other social goals. Yet taxes represent a cost to firms and so dull their incentives to invest and innovate. All societies struggle with how best to strike the balance in an efficient, equitable, and sustainable way. This section identifies some promising areas for improvement.

The perennial struggle

5.37 Throughout history governments have raised revenues in many ways. They have seized the assets of their enemies—and their subjects. They have created monopolies to sell to the highest bidder. They have taxed land, production, transactions, income, and consumption—and in most cases still do. Indeed, income taxes are fairly recent. The first income tax, levied by the Dutch Batavian Republic, dates from 1797,[28] but the United States did not have a corporate income tax until 1909 and an individual income tax until 1913.[29] The value added tax (VAT) is even more recent—the first was levied in France in 1948, and it did not become common until the 1970s and 1980s.[30]

5.38 For as long as governments have levied taxes, those who pay them have complained. Enterprise managers are no exception, and in many countries they cite tax rates as a major constraint on their operations (table 5.2). While it is true that taxes are a significant cost for

many firms, the combined cost of crime, poor infrastructure, corruption and other investment climate constraints is often 3–4 times higher than the cost of taxes (chapter 1).

Table 5.2 Firms rate taxes as a major constraint on their operations

	Percent of countries in 1999/2000 (unweighted) (of 18 total obstacles)		
	Biggest obstacle	**Among top three obstacles**	**Among top five obstacles**
All countries	18%	56%	82%
Upper middle income	40%	90%	100%
Lower middle income	12%	35%	71%
Lower income	11%	56%	83%
Eastern Europe and Central Asia	14%	62%	86%
Sub-Saharan Africa	33%	67%	83%
Asia	14%	29%	71%
Latin America	50%	50%	50%

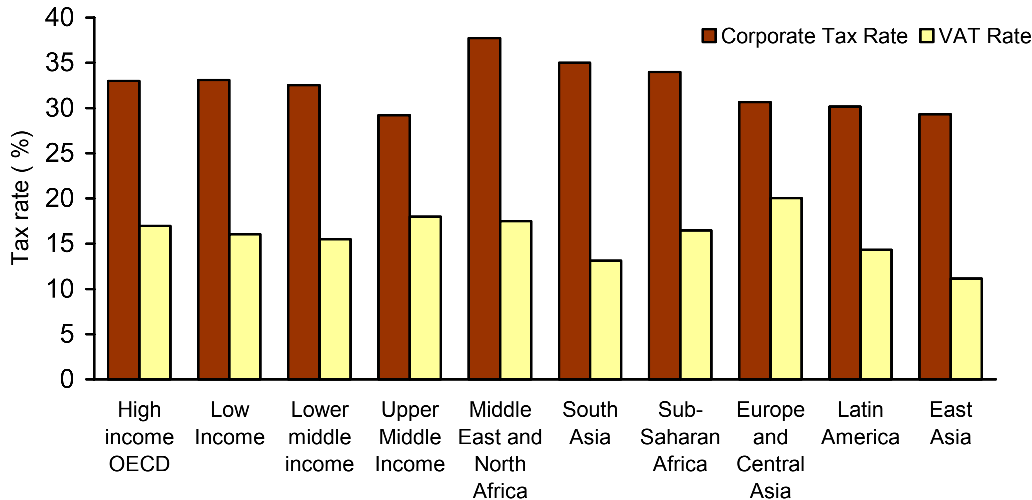
Source: World Bank Investment Climate Assessments.

5.39 Efforts to improve the taxation dimensions of the investment climate center on three related strategies: reducing the direct burden of taxation, reducing compliance costs, and reducing competitive distortions.

5.40 There is no objective yardstick for determining how high taxes on firms should be, and the appropriate level of taxation—and how the burden is distributed—will differ across countries. Views on the optimal size of government vary, and different groups in society enjoy the fruits of public spending to different degrees. Governments also differ in their efficiency in spending public money—though wasteful expenditures are common everywhere. The *World Development Report 2004* highlights the huge potential to leverage public funding better in the delivery of basic services. Although there are differences in tax rates between countries and regions, they do not appear to be consistently higher or lower in developing countries: corporate tax rates, and VAT rates are similar in industrial and developing countries (figure 5.6).

5.41 Just as it is difficult to judge how high taxes should be in aggregate, it is also difficult to answer how the burden of taxation should be distributed. The “optimal tax” literature provides some guidance on how to minimize deadweight losses due to taxation—for example, by favoring taxes that do not distort firms' decisions on investment and hiring. But there are often tradeoffs between efficiency and equity.[31] Assessing the tradeoff is made more difficult by the fact that the actual incidence of a tax is not necessarily the same as the statutory incidence (box 5.8).

Figure 5.6 Corporate and VAT rates are similar in high-income and developing economies, 1999-2000



Source: World Bank (2003f), Ebrill and others (2001).

Box 5.8 Who pays taxes levied on firms?

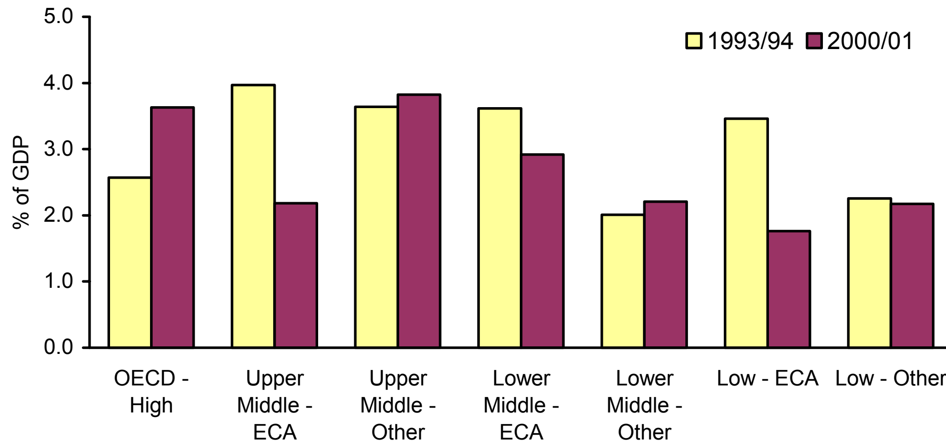
When governments levy taxes upon firms, firms will often pass the costs of the tax onto others. For example, if government levies a payroll tax on firms, increasing the cost of hiring workers, firms will hire fewer workers. As unemployment increases, real wages will fall (or increase slower than they would have otherwise), passing the cost of the tax on to workers. So workers ultimately bear some of the tax burden in the form of lower wages, even though the tax is levied on the firm. Part of the burden might also be passed on to consumers through higher prices.

Incidence has been especially controversial for corporate taxes. Although the corporate income tax is often seen as a tax on capital—and the popular press often suggests that raising corporate taxes is necessary to make companies "pay their fair share"—labor bears a big part of the burden of corporate tax in the United States.[32] Because labor's share of the corporate tax burden is higher when capital is more mobile, labor may bear a greater part of the burden in developing countries than it does in the United States. And as capital becomes more mobile—and multinational firms become more sophisticated in their tax minimization strategies—the share of the corporate income tax falling on labor will likely increase.

Source: Rosen (1995), Fuchs, Krueger, and Poterba (1998), Mulligan (2002).

5.42 While corporate tax *rates* are similar in developing and developed economies, corporate tax *revenues* are mostly lower as a share of GDP in low income countries (figure 5.7). Other than in the transition economies of Europe and Central Asia, where corporate tax revenues fell significantly due to privatization and a general contraction of the state, they have either increased slightly or have remained relatively stable in the 1990s (box 5.9).[33]

Figure 5.7 Corporate tax revenues are lower in low income countries



Source: IMF (2003), OECD (2002), Dobrinsky (2002).

Box 5.9 Taxation and global integration: A race to the bottom?

Concern is often expressed about whether competition for investment between countries is leading to a race to the bottom in corporate tax rates. Competition might pressure governments to cut corporate taxes to attract new investment or retain existing investment. The concern is greatest for investment by firms that are the most footloose, such as multinationals producing tradable goods.

Do tax rates affect where firms invest?

The answer seems to be yes, but like other aspects of the investment climate, the weight will likely vary between firms, industries, and locations. A meta-analysis of 25 studies that looked at the effect of tax rates on FDI (mostly using data on FDI into the United States or FDI by U.S. firms) concluded that a one-percentage-point change in tax rates reduces FDI by about 3.3 percent.[34] Other surveys and evidence support a similar conclusion.[35]

Is tax competition harmful?

Because corporate taxes affect the decisions of foreign investors, it is possible that countries might try to use taxes rates to compete for foreign investment. International tax competition can have both positive and negative effects on welfare and efficiency, and it is not immediately clear that it will make countries worse off.[36] Allowing countries or regions to set taxes and expenditures based on local preferences for and costs of providing local public goods (ones that affect people only in that jurisdiction) is generally more efficient than requiring that governments mandate uniform taxes and expenditures across regions.[37] Many commentators also argue that a degree of competition between governments on taxes and other policies can be a good thing, since it disciplines governments and prevents them from wasting public resources or becoming overly intrusive.[38]

Other theoretical models suggest that tax competition might have some adverse consequences. One concern is fiscal externalities.[39] When a government cuts its tax rates on capital—and does not cut expenditures that capital owners care about (if it cuts only expenditures that benefit immobile workers)—it might attract capital from neighboring jurisdictions. If it does not take into account the effect of this on taxes (and thus expenditures) in the neighboring jurisdictions, it can set tax rates lower than are globally optimal. A second concern is that tax competition might have an undesirable impact on the distribution of taxes. In particular, if capital is mobile but workers are not, a greater part of the burden of corporate taxes will fall on workers rather than on capital.[40]

A host of other factors—such as other tax instruments available to the government—also affect whether tax competition improves, or reduces, public welfare in theoretical models of the economy.[41] The broader point, however, is that tax competition is not necessarily harmful.

Have corporate taxes fallen as international economic integration increased?

If tax competition was resulting in significant fiscal externalities and thus a race to the bottom, corporate taxes should have fallen during the 1990s as trade and investment increased. Although marginal corporate tax rates have fallen over the past decade, bases have often been broadened. As a result, corporate tax revenues appear to have increased or remained steady on average, except in the European transition economies where the decrease in revenues was more from privatization than economic integration.[42] Further, whether the decrease in marginal rates is a result of tax competition or other factors is not clear—governments might reduce rates in an attempt to stimulate private investment by local firms.[43]

The dire predictions of some commentators may not be bearing out for two reasons.

- Tax rates are not the only factor influencing investment decisions. Infrastructure, law and order, and the education of the workforce can be even more influential, and it is hard for governments to sustain those services with a shrinking tax base. Location decisions are also influenced by agglomeration economies.[44] Together, these factors mean that investment is not as responsive to changing tax rates as some fear.

- Corporate tax rates also affect the taxes paid by domestic firms and firms producing non-tradable goods, and investment by these firms is likely to be far less responsive to differences in tax rates than investment by foreign firms, especially those producing traded goods. This means that across-the-board cuts in corporate tax rates would be a costly way to attract foreign investment. Rather than cutting taxes across-the-board, governments tend to offer tax incentives—or other advantages—targeted specifically to firms thought to be the most responsive (chapter 8).

Source: De Mooij and Ederveen (2001), De Mooij and Ederveen (2002), Hines (1999), Gordon and Hines (2002), Haufler (2001), Oates (2001), Wilson (1999), Tiebout (1956), Brennan and Buchanan (1980), Wilson (1999), Glaeser (2001), Wunder (2001), Devereux, Griffith, and Klemm (2002), Mitra and Stern (2003), Rodrik (1997), Baldwin and Krugman (forthcoming).

Taxes and the investment climate

5.43 Taxes affect the opportunities and incentives for firms to invest productively through their affect on the cost of doing business and thus on the potential profitability of particular ventures. Tax rates and compliance costs both matter. When levied or applied unevenly, taxes can also act also distort competition.

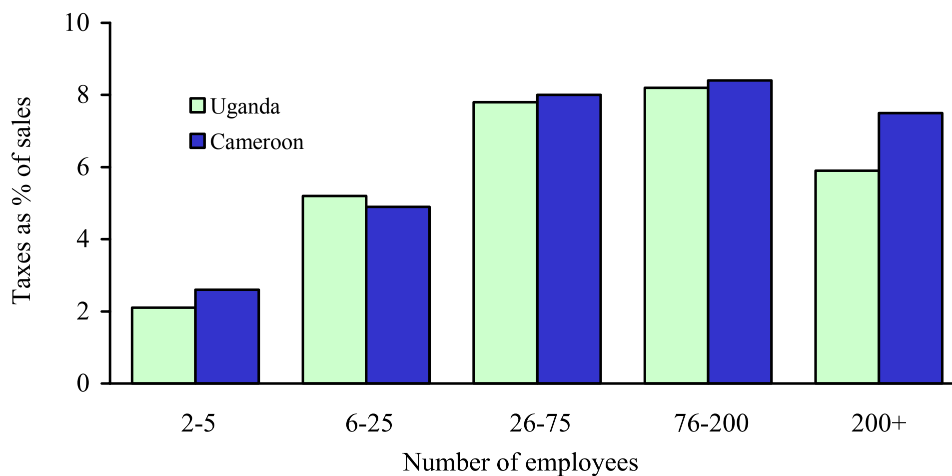
5.44 *Taxes and costs*. Taxes affect costs through the direct effect of the tax and through compliance costs. While firms in developing countries often rank taxes as one of their main constraints, in practice the costs of coping with infrastructure disruptions, corruption, crime and poor contract enforcement are often 3–4 times those for taxes (chapter 1).

5.45 The burden of taxes on firms can vary along several dimensions. First, because firms can partially pass the costs of taxation onto consumers or workers, the actual burden can be quite different from the statutory burden. Second, many firms and activities benefit from special tax exemptions or privileges, whether as a result of government deliberately trying to promote some kinds of activity—as is often the case with foreign investment and research and development (chapter 8)—or as a reward to favored constituencies. Third, many firms in many developing countries are in the informal sector, where they typically do not pay taxes. This includes

microentrepreneurs, but weak enforcement capacity means that even larger firms evade at least some taxes. Corruption in tax administration contributes to informality, resulting in less revenue for government and a higher burden on those that do pay.

5.46 Small firms can often reduce their tax burden through informality and evasion. Large firms can also reduce taxes because of their ability to negotiate various tax privileges and to avoid taxes through sophisticated legal means (hiring accountants to search for existing loopholes in the tax system). This can lead to a disproportionate burden for medium firms. For example, they pay a greater share of their revenues in taxes than either small or large firms in Cameroon and Uganda (figure 5.8).[45]

Figure 5.8 Caught in the middle: taxing firms in Uganda and Cameroon

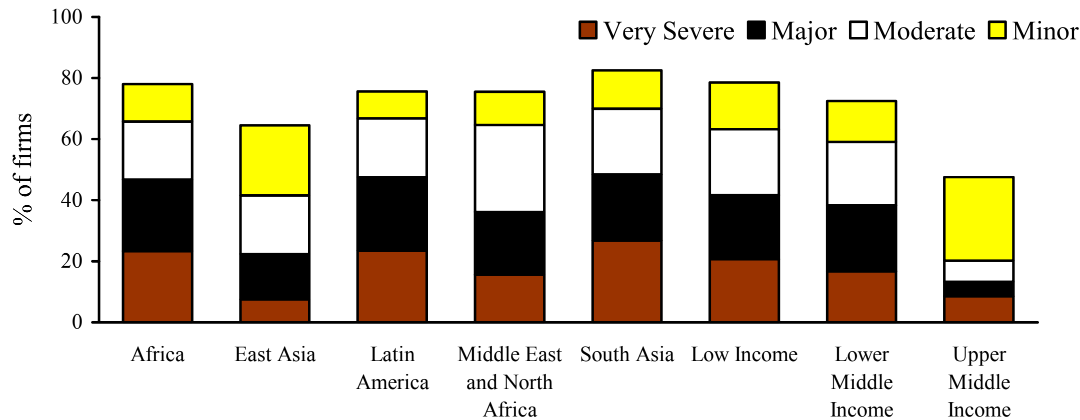


Source: Reinikka and Gauthier (2001); Gauthier and Gersovitz (1997).

5.47 Firms rate tax administration as a separate and additional obstacle to tax levels, and often rate it higher than labor or environmental regulations. Close to 40 percent of enterprises in low and lower middle income countries rated tax administration as a very severe or major problem (figure 5.9).[46] Enterprises in upper middle income countries were less likely to rate it as a major problem. Red tape and corruption in tax administrations are common. And poor administration weakens the incentives to comply with taxes and contributes to leakage.

5.48 *Tax and competition*. Taxes can also influence the level of competition between firms—in two main ways. First, many developing countries have traditionally relied heavily on trade taxes (tariffs and export taxes), in part because of the ease of collection, which have reduced competitive pressure on local firms. To take advantage of global integration (chapter 3), governments have been reducing trade taxes with a positive impact on the competitive discipline facing local firms—and reducing costs for firms and consumers. They have typically made up for the lost revenues by introducing or increasing value-added taxes.[47]

Figure 5.9 Many firms rate tax administration as a serious obstacle.



Source: Investment Climate Surveys.

5.49 The second way taxes influence competition is through differential treatment of firms in the same market. As noted above, medium firms may be disadvantaged relative to smaller and larger firms. Firms in the informal sector can have advantages over those in the formal sector. In Argentina, for example, it has been suggested that although labor productivity at large meat processors is almost twice as high as in smaller firms, small informal processors can undercut the prices of the large firms by evading taxes and not complying with all regulations.[48]

5.50 Simplifying corporate taxes and improving tax administration can both reduce the burden associated with compliance and pay large dividends for revenue collection. For the investment climate, improving tax administration can present opportunities to ease the tax demands for firms that do comply and reduce the compliance costs and corruption demands for firms. Tackling informality, while not easy, can also contribute.

Simplifying tax structures

5.51 Simplifying complicated tax systems can be beneficial for three main reasons. First, complicated tax systems riddled with exemptions are not transparent, and act as magnets for rent-seeking behavior by firms. While this benefits the favored firms, it reduces revenues and puts a greater burden on other firms. Second, such systems can provide significant opportunities for corruption, so simplifying the tax system can be a useful part of schemes to reduce corruption.[49] Third, they increase the cost of administration. Large firms can devote resources to reduce their total tax burden. This, in turn, increases the burden of administration for the agencies responsible for administering taxes and auditing returns. Simplifying the tax system is especially useful in countries where administrative capacity is limited or corruption is an especially significant problem.

Improving the autonomy of tax agencies

5.52 A common strategy for improving revenue collection and reducing compliance costs is to give tax agencies more autonomy. Since autonomous tax agencies were introduced in Bolivia

and Ghana in the 1980s, more than 15 countries have set them up.[50] Autonomous tax agencies promise better performance than traditional ministries. They can bypass restrictive civil service rules and pay better salaries to attract and retain well-qualified professionals.[51] And they are better protected from direct political pressures.[52]

5.53 Autonomy has to be balanced with accountability. Although an autonomous agency needs to have control over its day-to-day operations (deciding whom to hire and whom to audit), it is important that it remains accountable for its overall performance, including its relationship with taxpayers. In Mexico the autonomous agency has to present a report on its performance to the legislature three times a year. In Kenya the head of the tax authority is required to present quarterly audit reports, conducted by the internal audit unit, to the agency's board, the minister of finance, and the auditor general. The agency head is also required to present the agency's financial statements, performance indicators, and annual report to both the board and the minister of finance. The auditor general also conducts an annual audit, which the minister of finance presents along with the annual report, to the National Assembly.[53]

5.54 Performance often improves after revenue agencies become autonomous.[54] A recent study of autonomous tax agencies in Latin America and Africa concluded that the agencies that were granted the most autonomy were most successful in terms of boosting revenue collection and efficiency, increasing compliance, and improving service quality.[55] After the reform of the Kenya Revenue Agency in 1995, revenue efficiency and compliance improved, and despite an across-the-board reduction in tax rates, revenues declined by less than had been forecast.[56] But sustaining autonomy requires a high level of political commitment.[57]

Tackling corruption in tax administration

5.55 Corruption in the tax authority can also undermine collection efforts. In practice, corruption can be a persistent challenge, because the problems are rarely unique to tax administration. But governments can take several practical steps.[58] One general principle is to minimize direct contact between tax officials and taxpayers—by automating and computerizing procedures, increasing the use of third-party data for assessments, and relying on tax withholding.[59] A second useful step is to reorganize the tax agency along functional lines (such as auditing, taxpayer assistance, and processing tax returns) rather than by tax type, since this makes it harder for officials to develop relationships with taxpayers. Broader strategies for addressing corruption in civil service organizations can also help, such as allowing independent internal and external audits, protecting whistleblowers, and giving citizens a way of complaining about harassment (chapter 2).[60]

5.56 In some cases, corruption also appears to have been reduced when agencies have become autonomous. Of taxpayers surveyed in Peru, 85 percent believed that there was substantially less or much less corruption in SUNAT, the Peruvian tax agency, after it became autonomous.[61] Evidence from the Peru Investment Climate Assessment corroborates this.[62] Other performance improvements were more modest. For example, corruption remained a serious problem in Tanzania after reform of its revenue agency.[63]

Improving compliance through computerization

5.57 Increasing computerization in revenue administration agencies can sometimes help.[64] Singapore reduced tax arrears and staff turnover, while public satisfaction with the tax service improved.[65] But other reforms involving computerization have been less successful, and attempts to increase computerization are only likely to successful when they are part of an overall strategy that takes into account civil service wage structures and human capital constraints.[66] In general, computerization projects tend to be more successful when implemented with other reforms to improve tax administration.[67] Using off-the-shelf software and hardware can also reduce the risks of having to develop propriety technologies.[68]

Confronting informality

5.58 When larger firms evade tax obligations, the challenge is to improve compliance. But microenterprises in the informal economy raise more difficult and sensitive issues (chapter 3). Some small firms may not be viable if they had to comply with all taxes and regulations.[69] So, forcing them to comply might simply result in them closing down, with an adverse impact on poverty. And even a big increase in formality among microenterprises may not lead to significant increase in revenues and would greatly increased the administrative cost associated with collecting taxes.[70]

5.59 Governments are also experimenting with novel schemes to improve tax morality. In China, to encourage businesses to issue official receipts, some local governments have experimented with a scheme that allows official receipts to double as lottery tickets, to encourage customers to demand receipts from businesses (box 5.10). In Mongolia, some local governments (soum) issue awards, including consumer goods, cash, and plaques to firms nominated as the best taxpayers.

Box 5.10 Tax receipts as lottery tickets?

Shop owners sometimes have problems with employees who pocket the customer's cash rather than putting it into the register. To discourage employees from doing this, some stores and fast food restaurants offer customers a small amount if the checker fails to issue them a receipt. By giving the customer an incentive to report employees who fail to enter sales into the register, the owners effectively enlist the customer in their attempts to prevent employee theft.

In 2002, to boost tax collections, the city government of Beijing, China, instituted a similar program to encourage enterprises to issue proper receipts. Under this program, a small scratch box was added to official receipts. When the customers scratch the box, they can win small prizes ranging between 100 and 5,000 Yuan. To discourage forgeries, a second scratch box with a code number allows customers to check over the web whether the business gave them a valid receipt. In a pilot program outside Beijing, a small town increased tax revenues by $732,000 while giving out $17,100 in prizes.

Source: The Economist (2002a).

Regulating and taxing foreign trade and investment

5.60 In addition to regulating and taxes firms within their borders, governments also regulate and tax goods at the border and impose additional regulations and restrictions on foreign-owned firms. Government approaches to both are an important part of the investment climate.

5.61 Although the regulation of domestic transactions can sometimes be justified on efficiency grounds, such as addressing a market failure, similar arguments rarely apply to restrictions on trade or foreign direct investment—although restrictions on short-term capital flows can often be justified by the fact that large short-term flows can be destabilizing in some economies (box 5.11). Apart from revenue goals for import tariffs, the key driver tends to be the preferences of local firms to face less competitive pressure. Restrictions might be sought on a "temporary" basis to help the firm or industry develop, but firms protected from competition face few incentives to improve efficiency—and protection, once given, is difficult to dismantle (chapter 8). A growing appreciation of the benefits of openness has resulted in both developed and developing countries significantly reducing barriers to trade and investment in recent years (chapter 3). But many barriers remain.

Box 5.11 Dealing with short-term international capital flows

Although there is a strong consensus that foreign direct investment is beneficial, there is more debate about the merits of capital account liberalization, particularly for short-term capital flows.[71] Recent crises in Asia, Latin America, and Russia have contributed to the debate, with many observers questioning whether it is wise to allow short-term investment to flow freely in and out of developing countries.

Most of the debate has focused on short-term portfolio investment. Foreign direct investment—especially greenfield investment—is difficult to reverse. But portfolio flows can change direction very quickly, putting pressure on exchange rates and fragile banking sectors and sometimes causing currency or banking crises. What can governments do to insulate themselves from these reversals without deterring all foreign investment? Several proposals have been put forward, some more controversial than others.

*Avoid overspending and overborrowing during periods of rapid inflows***.** Although several recent crises (Asia in 1997) have been the result of private borrowing, governments often contribute to crises by overborrowing from international capital markets as foreign investment flows into their economy. Governments in many developing countries, including Latin America, have run procyclical fiscal policies, contributing to cycles of booms and busts. Avoiding overspending and overborrowing during booms is thus important.[72]

Strengthening government regulation and supervision of the financial system. One way to reduce problems associated with capital inflows is to improve management of financial sector risk. In addition to ensuring that banks are adequately capitalized and have appropriate levels of provisioning for bad loans it is important to ensure they do not develop portfolio mismatches in currencies or terms. Banks might also have to be discouraged from lending foreign currency to enterprises with earnings primarily in domestic currency (those operating in non-traded sectors). Removing implicit or explicit government deposit insurance might also be valuable.[73]

Capital controls. More controversial is whether capital controls that either prevent sudden outflows of investment or that discourage short-term inflows can lessen problems associated with short-term inflows of capital.[74] Several countries have experimented with capital controls. In 1991 Chile imposed a requirement that required foreign investors to make a 20 percent reserve deposit in an unremunerated account for up to a year for all portfolio inflows from abroad.[75] It also required that FDI stay in the country for at least three years—a restriction reduced to one year in 1992.[76]

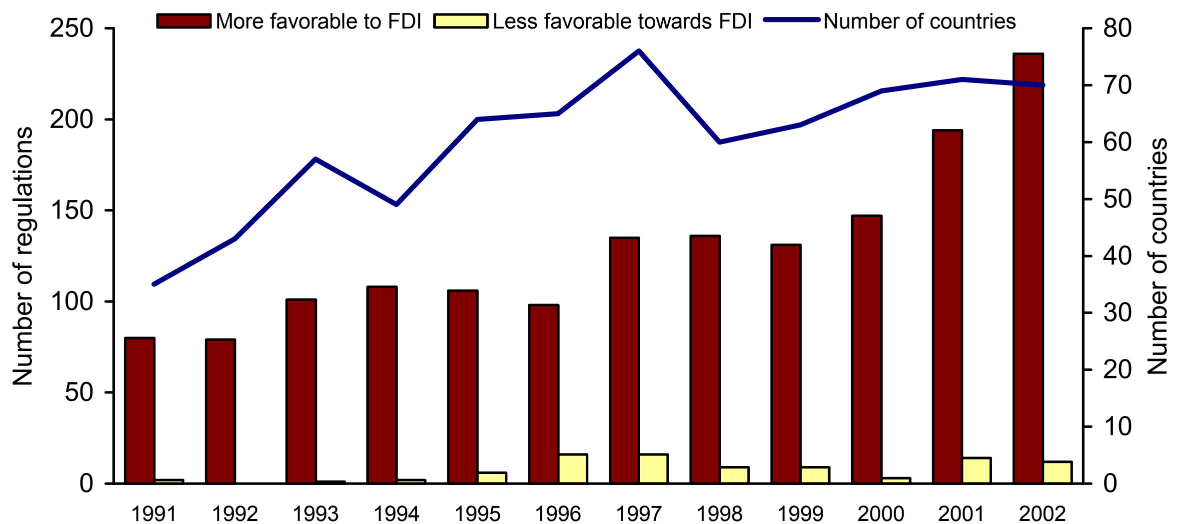
Evidence on the effectiveness of capital controls is mixed. Some studies have found that capital controls appear to have altered the composition of capital inflows, increasing the share of foreign direct investment and decreasing the share of short-term and portfolio investment.[77] But other studies have found that might have some harmful side-effects. Because capital controls impose costs on foreign investors whether they restrict inflows or outflows, they generally increase the cost of borrowing in the country.[78] And because controls can often be circumvented, especially in countries where corruption is a problem, it is unclear whether they are an effective way of deterring crises.[79]

Source: World Bank (2002a); Schmukler (2003); Kaminsky, Reinhart, and Végh (2003); Ariyoshi and others (2000); Edwards (1999).

Barriers to foreign investment

5.62 Since 1995 at least 60 countries have made regulatory changes affecting foreign investors every year, with the vast majority favorable to foreign investment (figure 5.10).

Figure 5.10 Most changes in national regulations of FDI made regulation more favorable



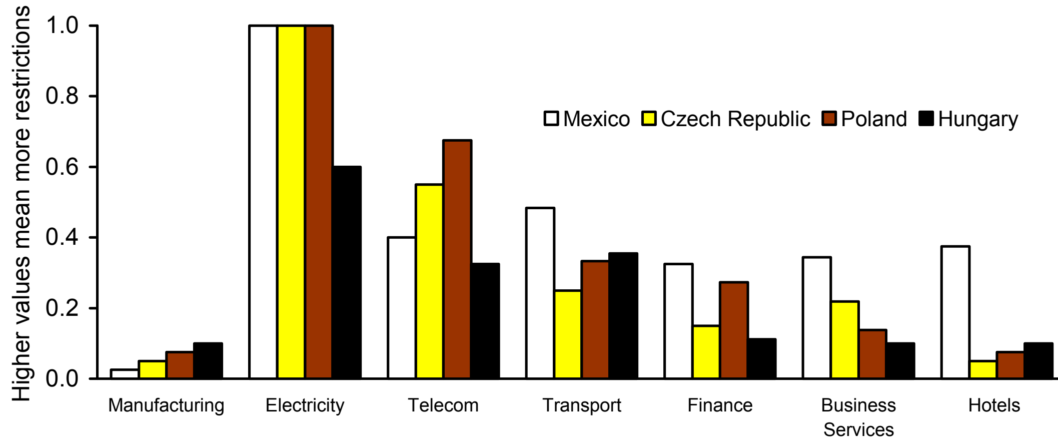
Source: United Nations Conference on Trade and Development (2003b).

5.63 Restrictions that discriminate against foreign investors usually have one of two objectives. First are those that seek to encourage FDI, but also seek to facilitate spillovers to local firms by imposing requirements on entering joint ventures with foreign firms. Experience with the effectiveness of such arrangements is at best mixed (chapter 8).

5.64 Second are those that seek to exclude or otherwise more tightly control foreign participation in sectors perceived to be especially "sensitive"—such as infrastructure, transportation services, and media services. For example, the United States restricts foreign ownership of radio licenses and prevents majority foreign-owned companies from operating domestic air services.[80] And although many middle income countries maintain few restrictions on foreign ownership in manufacturing, they often impose greater restrictions on foreign ownership in electricity, telecommunications, transportation, and financial services (figure 5.11). Given the benefits associated with foreign ownership in terms of improved productivity, and the

fact that many domestic firms rely on the services that firms in the restricted sectors provide, the restrictions are likely to increase the costs for domestic firms throughout the economy.

Figure 5.11 Restrictions on FDI have fallen in manufacturing, but remain in place in other sectors



Source: Golub (2003).

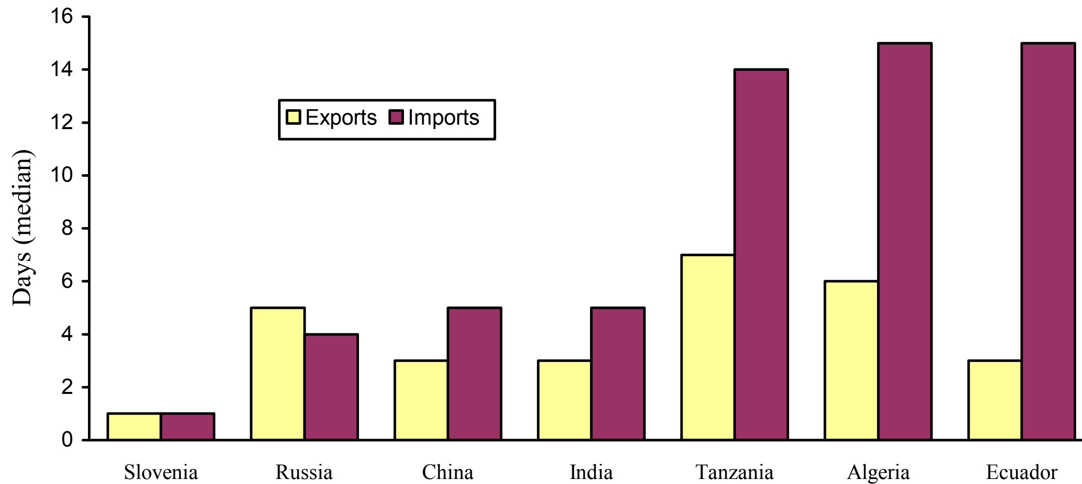
Barriers to foreign trade

5.65 Tariff and nontariff barriers to trade have been reduced over the past decade, but the remaining restrictions and weaknesses in customs administrations can have a big impact on the investment climate.

5.66 *Trade protection*. Average tariff rates remain relatively high in developing countries (13 percent, compared with only 4 percent for developed economies).[81] It has been estimated that if low and middle income countries reduced their average tariffs to 10 percent on agricultural products and to 5 percent on manufacturing products, their gains would exceed $350 billion by 2015. This is greater than the gains developing countries would get from industrial countries reducing the tariffs and other restrictions they impose to goods from developing countries.[82] Even without reciprocal reductions from industrial countries, developing countries would benefit from reducing the barriers they impose on trade.

5.67 *Improving customs administration*. When customs are administered poorly, this can also impose significant costs on firms engaged in importing or exporting—and indirectly on firms that supply exporters or depend on imported goods. Delays in imports can prevent firms from adopting production processes that rely on just-in-time deliveries and mean that firms have to hold larger inventories than they would otherwise. The median firms in Moldova and Romania reported that imports usually cleared customs the day they arrived, and it took only a day for imports to clear customs in 11 other countries. But the median firms in Algeria and Ecuador reported that it took imports 15 days to clear customs (figure 5.12). These delays can impose real costs on workers and firms in developing countries: on average firms in the garment industry grew more slowly, in terms of both output and employment, and wages were lower in countries where customs clearance took longer.[83]

Figure 5.12 Clearing customs for imports—from 1 day to 15



Source: Investment Climate Surveys.

5.68 Corruption can also be a major problem for customs administration in some countries. Officials can impose large costs on importers—especially for importers of perishable goods—by delaying the processing of imports. In Eastern Europe and Central Asia about 21 percent of firms that directly imported some inputs reported that bribes were needed at least sometimes to deal with customs and imports. Although import licenses are not needed in many areas in most countries, bribes were common for firms that reported applying for import licenses. Around 10 percent of firms that applied for import licenses in several countries reported that bribes were requested or expected when applying for them, with the median payments exceeding $100 in several countries.[84]

5.69 Improving customs administration promises large gains. Increasing the use of information technology can help by accelerating customs processing (box 5.12).[85] Computerization is now less costly and less demanding of human capital than before because several standard software packages can now help in customs administration. In addition to reducing delays, computerization can also increase transparency and in so doing reduce corruption.[86] Importers in Morocco now find out in real time the progress of customs operations and the status of their imports under special import regimes, monitoring payments of duties and taxes and even monitoring clearance times.[87]

Box 5.12 Reducing customs delays in Singapore and Ghana

Firms in developing countries often face long delays when importing and exporting goods. In recent years, computerization has had the potential to dramatically speed up some parts of the process. One initiative uses software and procedures based upon a program called TradeNet. Rather than having to submit multiple unique forms to multiple agencies, a trader can electronically submit a single document that contains all the information required by the different agencies. TradeNet then submits the information to the relevant agencies, which can then respond with the necessary permits or request additional information. By eliminating overlapping requirements and multiple forms, the process reduces transaction costs for firms and minimizes direct contact between public officials and the trader, potentially reducing opportunities for side-payments.

Singapore used these methods in 1989 to reduce processing time from 2-4 days to a few minutes and the number of required documents from between 3 and 35 to a single document. Freight forwarders estimate that the program has reduced their cost of handling trade documentation by between 20 and 35 percent.

Singapore's success, and a similar program in Mauritius, inspired the government of Ghana to adopt a similar program as part of its general strategy to become a more attractive location for exporters. Before the program, importers estimated that the fastest clearance time at sea ports was four days, while the average clearance time was several weeks. After implementing the program, about 14 percent of clearance took less than a day at Tema port and only 11 percent more than five days. At the airport, average clearance times fell from three days to four hours, with 18 percent of clearances taking less than two hours.

Although computerization can reduce delays, it will not succeed unless procedures are modified to fully exploit the benefits of computerization. Before implementing TradeNet, the Ghanaian customs administration was already using a standard software package to help them process imports. But procedures were not designed to take advantage of the package and as a result the technology was underused. For example, customs declarations had to be manually entered into the database, a process that took up to 24 hours, rather than being submitted electronically.

Source: De Wulf (2004); World Bank (1998).

5.70 Customs can also be improved by contracting out functions to private firms. The government of Mozambique signed a short-term contract for customs administration, extended several times, with Crown Agents, a British Company (box 5.13). Export clearance times were as fast as in any of the other countries in Africa with comparable data, and import times were faster than in four of the six African countries with comparable data. Even this might underestimate the benefits, since the Investment Climate Assessments ask about the time between imports reaching the point of entry and the time they could be claimed, not about the time to clear customs—that is, the estimates combine the time to clear customs with the time to complete other procedures (such as port procedures).[88] The two countries that processed imports faster, Uganda and Zambia, are both landlocked and do not have the same problems with port delays.

Box 5.13 Contracting out customs in Mozambique

Before 1995 customs administration had been a serious problem in Mozambique. There was no reliable system for detecting and punishing corrupt officials. More than three-quarters of staff did not have a high school education. There was little use of information technology. And all goods were physically inspected after arriving in the country. So, revenue collection was poor. The inspection process was slow. And corruption was a serious problem, with importers and customs officials frequently colluding to undervalue and misclassify imports.

In 1995 the government initiated an ambitious program to improve customs operations. The program included:

- Issuing a new customs code, to update the previous law, which dated from the colonial period.
- Replacing many workers with better educated personnel, while boosting employment by 20 percent.
- Introducing a new salary scale and compensation packet that was higher than for other civil servants and that compared well with private sector salaries.
- Adopting a new software package and new computer hardware.
- Reducing the agency's reliance upon physical inspections.

- Adopting anticorruption measures. In addition the government, with funding from DFID, entered a contract with Crown Agents, a private company, which took over the management of customs in 1996.

Even with a reduction in nominal tariff rates, better administration and reduced exemptions increased the ratio of customs revenue to imports between 1996 and 2000 (there was a slight decline in 2001). The reform also helped the investment climate. By 2002 the median number of days for imported goods to clear customs was significantly lower in Mozambique than in Tanzania or Kenya and was similar to the number in China.

Some questions remain. It is not clear whether the improvements can be sustained after Crown Agents leave. In 1999 Crown Agent's three-year contract was extended until 2003 and then extended again until 2005. Crown Agent's responsibilities and number of staff have declined since the first contract, but a review by DFID and the Mozambique government concluded that sustainability had not been achieved by mid-2003.

Source: Mwangi (2003).

5.71 How governments tax and regulate also plays a big part in the quality of a country's financial system and its infrastructure—the subject of the next chapter.

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Endnotes

1 See Coase (1960) and Pigou (1932).
2 Shirley and Walsh (2001), Megginson and Netter (2001), and Djankov and Murrell (2002).
3 Clarke and Xu (forthcoming).
4 Lovei and McKechnie (2000)
5 Acemoglu, Johnson, and Robinson (2001)
6 Pistor (2000).
7 See Alesina and others (2003) and Nicoletti and Scarpetta (2003)
8 Numbers based upon estimates presented in Alesina and others (2003).
9 Costs are median costs for each group, calculated for firms that report applying for basic activity license in the past three years. Data is from Investment Climate Survey for Tanzania.
10 World Bank (2003c).
11 McMillan, Rodrik, and Welch (2002)
12 See World Bank (2003e).
13 Although, in part, this was due to requirements associated with EU accession, this is not the whole story. Of the 322 changes, only 75 were required for EU accession. See World Bank (2003e).
14 Winston (1993). See also OECD (1997).
15 Although the literature on regulatory reform in developing countries is less voluminous than the literature for developed economies, Guasch and Hahn (1999) and Guasch and Spiller (1999) summarize studies for developing countries.
16 See references later in chapter.
17 Lawson and Meyenn (2000) describes the program. Data are from Grameen Telecom's website (http://www.grameen-info.org/grameen/gtelecom/) from February 2004.
18 Akiyama and others (2001).
19 Akiyama and others (2001).
20 See, for example, McMillan, Rodrik, and Welch (2002).
21 See La Porta and Lopez-de-Silanes (2001).
22 The data used in this paragraph are from World Bank (2003a), which also contains full descriptions.
23 Evenett (2003).
24 These are based upon the recommendations in United Nations Conference on Trade and Development (2003a).
25 See www.internationalcompetitionnetwork.org, "Advocacy and Competition Policy" ICN Conference, Naples, Italy, 2002.
26 Khemani (2002); Also Kovacic (1997).
27 Kee and Hoekman (2003).
28 The Economist (2002b)
29 The US did however levy a temporary income tax in 1862 during the civil war. The U.S. Government Internal Revenue Service (IRS) website provides information on the history of taxation in the United States (http://www.irs.ustreas.gov/).
30 Ebrill and others (2001).
31 In a closed economy with perfect competition and optimal taxation of consumption, taxes that are 'production efficient' (i.e., that do not favor certain factors of production, sectors or enterprises) will be economically efficient. More formally, Diamond and Mirlees (1971) show that if optimal commodity taxation is possible and there are constant returns to scale then production efficiency is optimal. Stiglitz and Dasgupta (1971) show that the constraint of perfect competition can be relaxed if 100 percent taxes on economic profits are possible. One argument in favor of value-added taxes (VATs) is that they are 'production efficient' under these circumstances. See, for example, Ebrill and others (2001). The literature on optimal commodity taxation and production efficiency is summarized by Sandmo (1976) and Slemrod (1990).
32 Although there is wide agreement that a significant portion of the burden of corporate income taxes falls on other factors of production including labor, there is significant disagreement about the exact share. For example, in a recent public economics textbook, Rosen (1995) concludes 'the economic consequences of the corporation tax are among the most controversial subjects in public finance (cited in Fuchs, Krueger, and Poterba (1998)). Fuchs, Krueger, and Poterba (1998) report that the median estimate of the percentage of the corporate income tax in the United States that was borne by capital was 40 percent in a survey of Public Economics professors in the mid-1990s. However, they note that there was substantial disagreement between economists. In part this reflects the fact that

the computable general equilibrium models (CGE) often used to estimate tax incidence require numerical models of the entire economy and results can depend upon numerical values chosen for key parameters. See Mulligan (2002) for a discussion of these models and some empirical estimates from econometric models.
33 Mitra and Stern (2003) discuss corporate tax revenues in the transition economies
34 See De Mooij and Ederveen (2001) and De Mooij and Ederveen (2002).
35 Hines (1999) concludes that a one-percent increase in taxes rates reduces foreign direct investment falls by about 0.6 percent. The difference between the results is due to the different surveys using different measures of changes in tax rates. The first calculates an elasticity (i.e., how FDI responds to a one percent change in tax rates – for example an increase from 30 percent to 30.3 percent), while the second calculates a semi-elasticity (i.e., how FDI responds to a one-percentage point change in tax rates – for example an increase from 30 percent to 31 percent). When the second study converts its results to elasticities rather than semi-elasticities, the results are similar. Similarly, multinationals appear to use various mechanisms such as transfer prices, interest rates on loans, and royalty rates between parent companies and their subsidiaries to reallocate income to low-tax countries. Since their ability to do this depends upon the income-generating capacity of their subsidiaries in low-tax countries, this strengthens their incentives to invest in these countries (Gordon and Hines (2002)).
36 See, for example, Haufler (2001), Oates (2001), Wilson (1999).
37 Tiebout (1956).
38 Brennan and Buchanan (1980) on taxes; Weingast on institutional competition more broadly.
39 Wilson (1999).
40 Gordon and Hines (2002).
41 See, for example, Glaeser (2001).
42 Wunder (2001) discusses changes in marginal corporate tax rates over the past decade. Devereux, Griffith, and Klemm (2002) note that this remains true even for more sophisticated measures of corporate tax rates, such as average effective tax rates, for OECD economies. See Mitra and Stern (2003) for a discussion of corporate tax revenues in the transition economies.
43 Rodrik (1997) notes that the countries that are most open do appear to have reduced corporate tax rates – also consistent with the potential for a race to the bottom.
44 Baldwin and Krugman (forthcoming).
45 In both countries, small enterprises mainly avoid taxation through evasion while large enterprise avoid it through exemptions and other privileges. See Gauthier and Gersovitz (1997) and Reinikka and Gauthier (2001).
46 Although tax administration was perceived to be less of an obstacle than tax rates in most countries, enterprises were more likely to rate tax administration as a major or very severe problem than any other constraint in six countries and rated it among the top five problems in close to half of low- and middle income countries where Investment Climate Surveys have been completed.
47 Taxes on goods and services increased on average as a percent of GDP between the mid-1990s and 2000/01 among all income groups, while taxes on international trade fell among all groups. Calculations were based upon data from IMF (2003), OECD (2002) and Dobrinsky (2002).
48 Elstrodt, Lenero, and Urdapilleta (2002).
49 Das-Gupta, Engelschalk, and Mayville (1999).
50 Taliercio Jr. (2003b).
51 Bird and Engelschalk (2003) discuss this in greater detail.
52 In practice, the autonomy of an agency depends upon many factors including the agency's legal position, its governance structure, and its financing mechanisms. The World Bank website on tax administration (http://www1.worldbank.org/publicsector/tax/autonomy.html) provides information on these practical issues.
53 Taliercio Jr. (2001); Taliercio Jr. (2003a); Taliercio Jr. (2003b).
54 Bird (2003).
55 Taliercio Jr. (2003b).
56 Taliercio Jr. (2003b).
57 In several countries, autonomy was substantially reduced several years after the initial reform. See Taliercio Jr. (2001).
58 See Das-Gupta, Engelschalk, and Mayville (1999) and Bird (2003).
59 Das-Gupta, Engelschalk, and Mayville (1999).
60 WBI studies of surveys of public service users are available on the WBI website (http://www.worldbank.org/wbi/governance/capacitybuild/d-surveys.html).

61 Taliercio Jr. (2003b).
62 World Bank (2003d).
63 Fjeldstad (2002) and World Bank (2004).
64 Gill (2003) and Engelschalk, Melhem, and Weist (2000).
65 Bird and Engelschalk (2003).
66 See Bird (2003), Engelschalk, Melhem, and Weist (2000) and Bird and Engelschalk (2003).
67 Gill (2003).
68 Bird (2003)
69 Djankov and others (2002)
70 In most developing countries a very small number of firms account for a significant portion of turnover. For example, Ebrill and others (2001) show that the largest 10 percent of firms account for about 90 percent of turnover in Georgia, Pakistan, Sri Lanka and Uganda.
71 See World Bank (2002a) and Schmukler (2003) for more detailed discussions of capital market liberalization.
72 See Kaminsky, Reinhart, and Végh (2003). De Ferranti and others (2000) show fiscal policy was pro-cyclical in Latin America during the 1980s and 1990s.
73 See World Bank (2001)
74 See Ariyoshi and others (2000), Box 1, for a description of different types of capital controls.
75 The actual provisions varied over time. See Ariyoshi and others (2000) for a summary of the changes that occurred over time.
76 See Edwards (1999)
77 Montiel and Reinhart (1999)
78 For example, several studies found that the Chilean controls increased the interest rate spread in Chile. See Ariyoshi and others (2000), Table 4 for a summary of these studies.
79 Edwards (1999).
80 APEC Committee on Trade and Investment (2003).
81 World Bank (2003b), Table 2.9
82 World Bank (2003b), Table 1.9. The static gains are estimated to be about $114 billion (in 1997 US$) and the dynamic gains, due to things such as improved productivity and increased FDI, are estimated to be $265 billion.
83 Dollar, Hallward-Driemeier, and Mengistae (2003).
84 For example, 10 percent of firms that reported applying for an import license reported that a bribe was requested or paid in Tanzania, 9 percent in Honduras, and 2 percent in Uganda. About 30 percent of Honduran firms that imported goods directly, 34 percent of Tanzanian firms and 35 percent of Ugandan firms reported applying for import licenses. Data are from Investment Climate Surveys.
85 Engelschalk, Melhem, and Weist (2000) discuss computerizing customs and tax administration in greater detail.
86 De Wulf (2003).
87 De Wulf and Finateau (2002).
88 The reason for this approach, however, is that entrepreneurs typically know only the total delay, not who is responsible for this delay.