

## Trade in Services: Using Openness to Grow

### *Services are vital for economic development—*

Services are the fastest growing sector of the global economy, and trade and foreign direct investment in services have grown faster than in goods over the past decade. Developing countries have witnessed even faster growth rates, and their share in world services exports increased from 14 percent in 1985–89 to 18 percent in 1995–98. Technological progress has greatly enhanced the scope for trade in conventional services, such as education and finance, and also created a host of new tradable services, such as software development and Internet access. Moreover, liberalization in many countries is leading for the first time to the private and foreign provision of services such as telecommunications, transport, and finance.

In virtually every country, the performance of the services sectors can make the difference between rapid and sluggish growth (box 3.1). Developing countries, in particular, are likely to benefit significantly from further domestic liberalization and the elimination of barriers to their exports. The income gains from a reduction in protection to services are estimated to be multiples of those from trade liberalization in goods.

### *—but the benefits from liberalization are not automatic*

Flawed reform programs can substantially reduce gains. The largest gains come from *eliminating barriers to entry*, but many developing

countries have given priority to a change in ownership through privatization, while retaining limitations on new entry. *Effective regulation* ranging from prudential regulation of financial services to procompetitive regulation of telecommunications is critical to the success of liberalization, but regulatory weaknesses are too prevalent in developing economies. Liberalization also frequently requires complementary policies to help improve *access to essential services* for the poor. The experience of several countries has demonstrated that universal service goals can be achieved in competitive markets.

### *Multilateral engagement can be an important catalyst for liberalization*

Even though governments can initiate reforms of services individually, multilateral engagement can help in two ways. First, negotiations under the General Agreement on Trade in Services (GATS) could help accelerate domestic reform and improve access to foreign markets for developing countries. However, for these negotiations to be fruitful, both developed and developing countries must recognize mutual interests in reciprocal liberalization. In particular, developed countries must see the advantages of allowing the temporary movement of individual service providers. Developing countries must see the advantages of multilateral agreements to increase competition, enhance credibility of potential domestic reform, and strengthen domestic regulation. Recognizing

## Box 3.1 Why do services matter for development?

In developing countries, the average share of services in GDP increased from around 40 percent in 1965 to around 50 percent in 1999, while in the OECD countries the average share increased over the same period from 54 percent to over 60 percent. Among the fastest growing sectors in many countries are services such as telecommunications, software, and finance.

Efficient services not only provide a direct benefit to consumers, but also help shape overall economic performance. An efficient and well-regulated *financial sector* leads to the efficient transformation of savings to investment, ensuring that resources are deployed wherever they have the highest returns; and facilitates better risk-sharing in the economy. Improved efficiency in *telecommunications* generates economywide benefits, because this service is a vital intermediate input and also crucial to the dissemination and diffusion of knowledge. The spread of the Internet and the dynamism that it has lent to economies around the world is telling testimony to the importance of telecommunications services. Simi-

larly, *transport services* contribute to the efficient distribution of goods within a country, and are particularly important in influencing a country's ability to participate in global trade. Although these are the more prominent services, others are also crucial. *Business services* such as accounting and legal services are important in reducing transaction costs—the high level of which is considered one of the most significant impediments to economic growth in Africa. *Education and health services* are necessary in building up the stock of human capital. Retail and wholesale services are a vital link between producers and consumers, and influence the efficiency with which resources are allocated to meet consumer needs. *Software development* is the foundation of the modern knowledge-based economy. *Environmental services* contribute to sustainable development by helping alleviate the negative impact of economic activity on the environment.

Source: World Bank staff.

these potential mutual gains will allow reciprocal “concessions” that benefit both.

In parallel, global cooperation is needed to provide support for developing countries at four levels: in devising sound policies, strengthening the domestic regulatory environment, enhancing their participation in the development of international standards, and in ensuring access to essential services in the poorest areas.

### Surging trade and investment in services

#### *Trade in services: four modes of supply*

Services include activities as disparate as transport of goods and people, financial intermediation, communications, distribution, hotels and restaurants, education, health care, construction, and accounting. In contrast to mer-

chandise trade, services are often intangible, invisible, and perishable, and usually require simultaneous production and consumption.<sup>1</sup> The need in many cases for proximity between the consumer and the producer implies that one of them must move to make an international transaction possible. Since the conventional definition of trade—where a product crosses the frontier—would miss out on a whole range of international transactions, it is now customary to define “trade in services” to include four modes of supply:

- Mode one: *cross-border supply*, which is analogous to trade in goods; arises when a service crosses a national frontier, for example, the purchase of software or insurance by a consumer from a supplier located abroad.
- Mode two: *consumption abroad*; occurs when the consumer travels to the terri-

tory of service supplier, for example, to purchase tourism, education, or health services.

- Mode three: *commercial presence*; involves foreign direct investment, for example, when a foreign bank or telecommunications firm establishes a branch or subsidiary in the territory of a country.
- Mode four: *movement of individuals*; occurs when independent service providers or employees of a multinational firm temporarily move to another country.<sup>2</sup>

Services have been among the fastest growing components of world trade over the last 15 years. Over the period 1985–99, the compound annual growth rate for services exports on a balance-of-payments basis—which covers primarily cross-border supply and consumption abroad—was over 9 percent per annum, compared to 8.2 percent per annum for merchandise (figure 3.1 left). As a result, services trade more than trebled its size in fifteen years

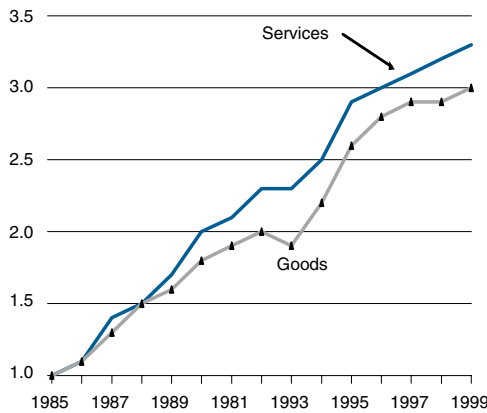
to \$1.2 trillion in the year 1999, and now accounts for a quarter of all cross-border trade.<sup>3</sup>

Developing countries as a group have witnessed an even more rapid (nearly four-fold) increase in their services exports, and a consequent increase in their share in world service trade from 14 percent in 1985–89 to 18 percent in 1995–98 (figure 3.1 right). From a regional perspective, Europe and Central Asia (ECA) and East Asia and Pacific (EAP) increased their services exports by a factor of six; South Asia (SAR) and Latin America and the Caribbean (LAC) kept up with world growth; and Sub-Saharan Africa (SSA) and the Middle East and North Africa (MNA) lagged behind. Even so, most trade in services still takes place between rich countries.

Over the last two decades, there has been a significant decline in the relative importance of transport services in total services exports—from around one-third to around one-fifth of total exports—which may in part reflect a decline in the relative price of transport services

**Figure 3.1 Trade in services has grown faster than trade in goods—**

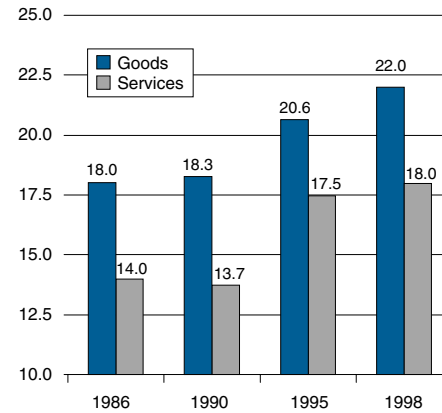
(compound growth, 1985=1)



Note: Population estimate from a sample of 100 countries for period 1985–98. Figure for 1999 is estimate from 69 countries. World trade defined as  $(X+M)/2$ . Source: IMF BoP Rev. 5, through SIMA; EPPG staff calculations.

**—and developing countries share in world exports have increased, 1986–98**

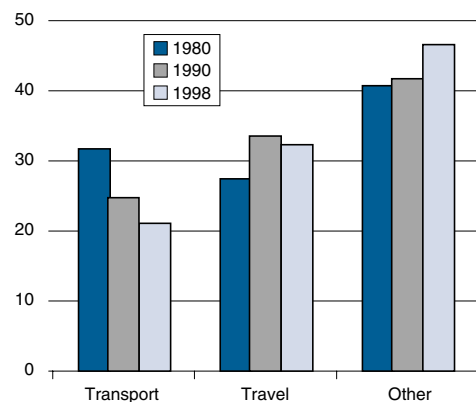
Percent



Note: Population estimate from a sample of 100 countries. Source: IMF BoP Rev. 5, through SIMA; EPPG staff calculations.

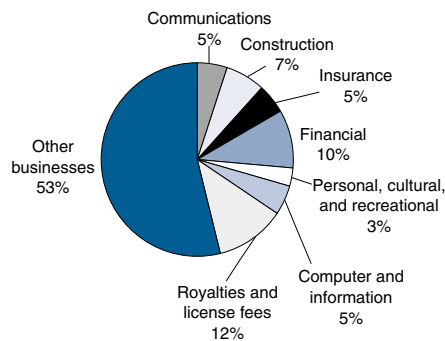
**Figure 3.2 Transport has declined, while “other” services have increased**

Percent of world total services exports



Note: Population estimate from a sample of 89 countries.  
Source: IMF BoP Rev. 5, through SIMA; EPPG staff calculations.

**“Other” services**



Source: Trade Handbook, based on IMF BoP rev. 5.

(figure 3.2). While the 1980s witnessed a growth in the relative importance of travel, the 1990s witnessed a significant increase in the share of other commercial services. Detailed information on this last category is not available for most countries. Estimates suggest that financial services are probably the most important, followed by construction, communications, and computer and information services.

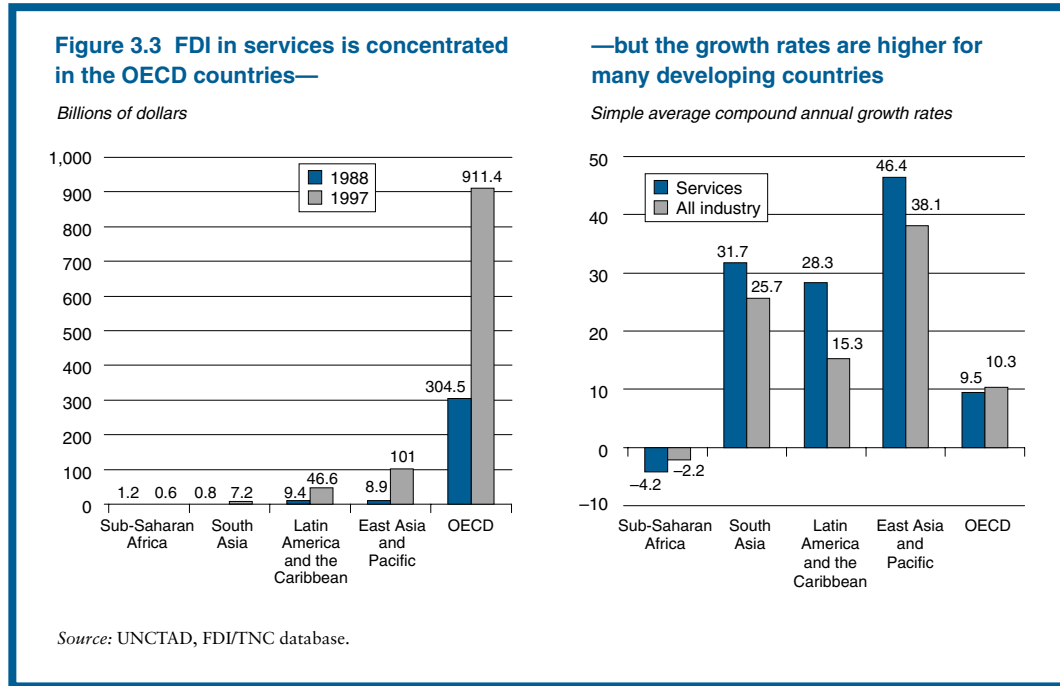
**Most FDI in services goes to OECD economies—**

A large amount of “trade” in services takes place through an established presence, for example through foreign direct investment (FDI). The available evidence suggests that commercial presence has been the most dynamic mode of services supply in recent years.<sup>4</sup> This may reflect the fact that there has been far greater liberalization of foreign investment than of cross-border supply of services, which was either already open or did not witness significant new opening. At the level of individual sectors, despite the growing use of information and communications technology, commercial presence

is the dominant mode of supply in all sectors except transport, and to a more limited extent telecommunications.<sup>5</sup>

**—but the growth rates of FDI flows to developing countries are higher**

The limited evidence available suggests that the bulk of FDI stocks are in the Organisation for Economic Co-operation Development (OECD) countries (figure 3.3). However, over the period 1988–97, stocks in developing countries have witnessed much faster rates of growth, increasing ten-fold in EAP, seven-fold in SSA, and five-fold in LAC, compared to a three-fold increase in the OECD.<sup>6</sup> The only exceptions are the three countries in SSA for which data are available, where the stock declined by a half. In all regions except SSA, the services sector now accounts for nearly half of the entire FDI stock—from 1988 levels of less than one-fifth in LAC and less than one-third in SAS. The limited information on sectoral composition of FDI stocks suggests that nearly half the stock in SAS is in financial services, whereas the stocks in EAP and LAC are more uniformly



distributed across finance, transport, storage and communications, hotels and restaurants, real estate, and other business services.

***Developing countries are becoming players in exporting services***

While some developing countries are increasingly investing in other countries to export services—for example, Malaysia in environmental services, and South Africa in telecommunications—most supply services via cross border sales (for example, data processing), to visiting foreign consumers (for example, tourism), and through the movement abroad of individual services providers (for example, professional services). Developments in information and communication technology have dramatically increased the scope for cross-border exports of services, ranging from software development in the Philippines to data processing in Barbados. Rough estimates suggest that the size of the potential market for developing-country exports of long-distance services could be in the range of 1 to 5 percent of the total employment in services in the seven richest economies—implying ex-

ports valued at between \$40 billion and \$120 billion (World Bank 1995). This mode of delivery is still free of explicit barriers, though regulatory barriers may impede trade (see box 3.2).

One of the most striking recent examples of a developing-country service export success story is the Indian software industry. Indian software exports grew from \$225 million in 1992–93 to \$1.75 billion in 1997–98 (at an annual growth rate of approximately 50 percent).<sup>7</sup> A recent report projects annual revenues of \$87 billion, 2.2 million jobs, and a market capitalization of \$225 billion for the Indian information technology (IT) sector by the year 2008.<sup>8</sup> By the same year, the IT sector could account for 35 percent of India’s exports and attract \$5 billion of FDI per year.

These figures are not implausible because India still accounts for only half a percent of the world software market, and there are still wide differences across countries in the cost of software development and support. The average cost per line of code in Germany (the most expensive country) exceeds by more than four times that of India (the cheapest country)

## Box 3.2 Whose regulations and for what purpose? Challenges in electronic commerce

Domestic regulations that affect trade pose the main challenge to ensuring open conditions for electronic delivery of services. Two examples illustrate how difficult it is to distinguish between regulations that incidentally impede trade in the pursuit of legitimate objectives and regulations that deliberately discriminate against foreign provision for the sake of protection.

### *Privacy*

An issue that could have a profound effect on electronic commerce is privacy. In late 1998, the European Union issued a wide-ranging directive that aims to safeguard the privacy of personal data of EU citizens and prevent its misuse worldwide. It is backed by the power to cut off data flows to countries that the EU judges not to have adequate data protection rules and enforcement. The directive caused frictions with the US, which accused the EU of trying to impose laws beyond its own frontiers. A compromise was reached under which the US agreed to set up arrangements for the processing by companies of personal data from the EU, but the issue has not been fully resolved.

The issue could have an impact on developing countries exports of data processing services, and poses a difficult choice for these countries. If they choose not to enact laws deemed adequate, they could be shut off from participation in this growing market. In the absence of such laws and given the weakness of local legal systems, it might be difficult for private firms in developing countries to emulate United States firms like Microsoft and credibly commit to meet the required high standards.

If they do enact stringent laws, it is unlikely that they could be made specific to trade with particular jurisdictions, and so the result could be an economy-wide increase in the costs of doing business. For instance, if private sector estimates generated in the United States are to be believed, information sharing saves the customers of 90 financial institutions (accounting for 30 percent of industry revenues), \$17 billion a year (\$195 per average customer household) and 320 million hours annually (4 hours per average customer household) (Glassman, 2000).

It is of course true that reporting of personal credit histories is critical to consumer credit, and, even in theory, excessively, strict privacy laws could create significant asymmetries of information and affect the efficiency of markets (Kitchenman, 1999). This is not to suggest that there might not be good reasons to protect privacy. However, achieving diverse national objectives without creating unnecessary impediments to trade is ideally accomplished through a multilateral process in which developing countries participate.

### *Offshore financial services*

Several Caribbean countries have become off-shore financial services centers. However, in recent years, their tax and regulatory regimes have drawn fire and elicited increased scrutiny. For example, the Financial Stability Forum (FSF), which assesses conformity with international regulatory standards (including cross-border cooperation) placed many of the Caribbean offshore centers in the lowest category; the Financial Action Task Force (FATF), which is concerned with protecting financial systems from money laundering and criminal use, placed a number of Caribbean centers in its list of “non-cooperative jurisdictions,” from the standpoint of willingness to cooperate with the FATF on the basis of a list of its own criteria; and the countries also attracted the attention of the OECD for tax practices deemed harmful.

While the regulatory objectives are legitimate, several concerns have been raised about these initiatives. First, most developing countries have not participated in the development of the standards that are being applied. Second, the standards are not always applied uniformly. For example, the FATF applies the FATF 40 Criteria when conducting mutual evaluations of its members, but uses a different standard, the FATF 25 Criteria, to assess jurisdictions that are not FATF members. Third, in some cases the assessment processes are not transparent. For example, the FSF does not specify how a country classified in a low category can improve standards and graduate to a higher category. And FATF deliberations determining “non-cooperative jurisdictions” are held in closed sessions. Finally, the evaluation processes are

### Box 3.2 (continued)

in some instances not voluntary and involve a “name and shame” approach to induce compliance.

These issues have provoked continuing discussions in the international financial institutions and other fora, but much work needs to be done before international consensus can be established. The Bank and the Fund are assisting many jurisdictions to assess their compliance with international standards

with the aim to help them address any underlying weaknesses. Key in this is the Bank-Fund Comprehensive Financial Sector Assessment Programs and the recent IMF-led program of voluntary off-shore financial center assessments. Several Caribbean off-shore financial centers have endorsed these initiatives.

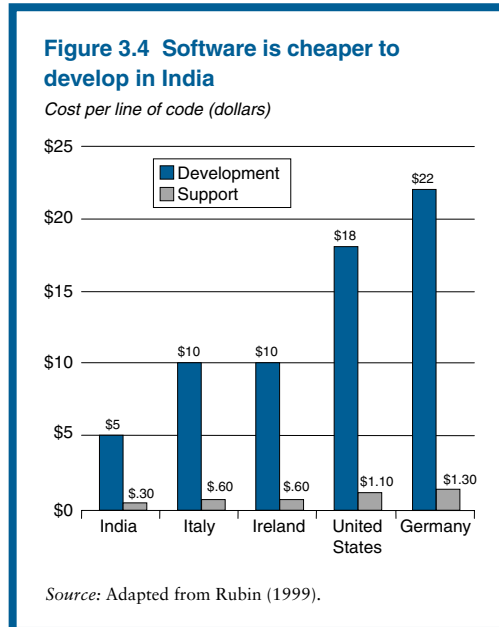
Source: Bank staff.

(figure 3.4). Against the background of a total market for software services worth about \$58 billion in the United States, \$42 billion in Europe, and \$10 billion in Japan, cost savings could well be substantial.<sup>9</sup> Other gains from trade liberalization include a more competitive market structure for software services, increased choice (because countries may develop a special expertise for certain development or support services), and greater diffusion of knowledge.

The movement of service-supplying personnel remains a crucial means of delivery. Even though the share of on-shore services in total Indian software exports has been in continuous decline (in 1988, the percentage of on-site development was almost as high as 90 percent), about 60 percent of Indian exports are still supplied through the temporary movement of programmers to the client’s site overseas.<sup>10</sup>

#### *Barriers to mode four deprive both home and host country of benefits*

Many more developing countries could “export” at least the significant labor component of services such as construction, distribution, environmental, and transport with greater liberalization in the movement of individuals (mode four). If the movement is temporary, then we can be fairly confident that both the host and home country will gain. For exporting countries, it is clear that both the financial and knowledge benefits would be greatest if service suppliers return home after a certain period abroad.<sup>11</sup> For importing countries, such



temporary movement should create fewer social and political problems than immigration.

Today, many different barriers constrain the movement of individuals. The most obvious barriers are explicit quotas or economic needs tests—for example, requirements that employers take timely and significant steps to recruit and retain sufficient national workers in the specialty occupation and that no worker has been laid off for a certain period preceding and following the filing of any work permit or visa application.<sup>12</sup> Then the many formalities (for

example, to obtain a visa) make red tape related to FDI seem trivial by comparison. The entry of foreigners can be impeded by non-recognition of their professional qualifications, burdensome licensing requirements, or by the imposition of discriminatory standards on them. The requirement of registration with, or membership of, professional organizations can also constitute an obstacle for a person wishing to provide the service on a temporary basis.

*Health services could be an area of comparative advantage—*

Health services are another area in which developing countries could become major exporters, either by attracting foreign patients to domestic hospitals and doctors, or by temporarily sending their health personnel abroad. In Cuba, the government's strategy is to convert Cuba into a world medical power. SERVIMED, a trading company created by the government, prepares health and tourism packages. During 1995–96 25,000 patients and 1,500 students went to Cuba for treatment and training respectively, and income earned from sales of health services to foreigners was \$25 million. Cost savings for patients and health insurers can be significant. For example, the cost of coronary bypass surgery could be as low as 70,000 to 100,000 Indian rupees in India, about 5 percent of the cost in developed countries. Similarly, the cost of a liver transplant in India is one-tenth of that in the United States (UNCTAD and WHO 1998).

*—but will require greater portability of insurance*

A major barrier to *consumption abroad* (mode two) of medical services is the lack of portability of health insurance. For example, U.S. federal or state government reimbursement of medical expenses is limited to licensed, certified facilities in the United States or in a specific U.S. state. The lack of long-term portability of health coverage for retirees from OECD countries is also one of the major constraints to trade. In the United States for instance, Medicare covers virtually no services delivered abroad. Other nations may

extend coverage abroad, but only for limited periods (two or three months). This constraint is significant because it tends to deter some elderly persons from traveling or retiring abroad. Those who do retire abroad are often forced to return home to obtain affordable medical care. If individual concerns about the quality of care received abroad are addressed, then the potential impact of permitting portability could be substantial. If only 3 percent of the 100 million elderly persons living in OECD countries retired to developing countries, they could bring with them possibly \$30 to \$50 billion annually in personal consumption and \$10 to \$15 billion in medical expenditures (UNCTAD and WHO 1998).

**Service reforms can promote efficiency and growth**

Liberalization of trade in services, accompanied by the reform of complementary policies, can lead to sectoral and economy-wide improvements in performance.

*At the sectoral level—*

Removing barriers to trade in services in a particular sector is likely to lead to lower prices, improved quality, and greater variety. As in the case of trade in goods, restrictions on trade reduce welfare because they create a wedge between domestic and foreign prices, leading to a loss to consumers that is greater than the increase in producers' surplus and government revenue.<sup>13</sup> Several empirical sectoral studies support this contention.<sup>14</sup> Because many services are inputs into production, the inefficient supply of such services acts as a tax on production and prevents the realization of significant gains in productivity. As countries reduce tariffs and other barriers to trade, effective rates of protection for manufacturing industries may become negative if they continue to be confronted with input prices that are higher than they would be if services markets were competitive.<sup>15</sup>

A major benefit of liberalization is likely to be access to a wider variety of services whose production is subject to economies of scale.



Consumers derive not only a direct benefit from diversity in services such as restaurants and entertainment, but also an indirect benefit because a wider variety of more specialized producer services, such as telecommunications and finance, can lower the costs of both goods and services production (Ethier 1982; Copeland 2001). In such circumstances, smaller markets can be shown to have a strong interest in liberalizing trade in producer services, since this can offset some of the incentives that firms have to locate in larger markets (Markusen 1989).<sup>16</sup>

*—and economywide—*

Estimates of benefits vary for individual countries—from under 1 percent to over 50 percent of gross domestic product (GDP)—depending on the initial levels of protection and the assumed reduction in barriers.<sup>17</sup> In simulations of global service trade liberalization, developed countries gain more in absolute terms—which is not surprising given the relative size of their economies—but developing countries also see significant increases in their GDP. One model predicts gains of between 1.6 percent of GDP (for India) to 4.2 percent of GDP (for Thailand) if tariff-equivalents of protection were cut by one-third in all countries (Chadha and others 2000). The gains from liberalizing services may be substantially greater than those from liberalizing trade in goods (box 3.3), because current levels of protection are higher and because liberalization would also create spillover benefits from the required movement of capital and labor. For instance, one model finds that the welfare gains from a 50 percent cut in services sector protection would be five times larger than those from nonservices sector trade liberalization (Robinson and others 1999). These results are particularly striking because they are derived from models that do not fully allow for the temporary movement of individual service suppliers—potentially a major source of gain.

*—with accelerator effects on growth*

Certain services industries clearly possess growth-generating characteristics (see box 3.1). Furthermore, barriers to entry in a number of

services sectors, ranging from telecommunications to professional services, are maintained not only against foreign suppliers but also against new domestic suppliers. Full liberalization can, therefore, lead to enhanced competition from both domestic and foreign suppliers. Greater foreign factor participation and increased competition together imply a larger scale of activity, and hence greater scope for generating the special growth-enhancing effects.<sup>18</sup> Even without scale effects, the import of foreign factors that characterizes services sector liberalization could still have positive effects because they are likely to bring technology with them.<sup>19</sup> If greater technology transfer accompanies services liberalization—either embodied in foreign direct investment or disembodied—the growth effect will be stronger.<sup>20</sup>

Econometric evidence—relatively strong for the financial sector and less strong but nevertheless statistically significant for the telecommunications sector—suggests that openness in services influences long-run growth performance (figures 3.5 and 3.6). After controlling for other determinants of growth, countries that fully liberalized the financial services sector grew, on average, about 1 percentage point faster than other countries. An even greater impetus on growth was found to come from fully liberalizing both the telecommunications and the financial services sectors. Estimates suggest that countries that fully liberalized both sectors grew, on average, about 1.5 percentage points faster than other countries. While these estimates indicate that there are substantial gains from liberalizing key services sectors, it would be wrong to infer that these gains can be realized by a mechanical opening up of services markets.

*A flawed reform program can undermine the benefits of liberalization*

If privatization of state monopolies to private owners (sometimes foreigners) is conducted without concern for creating conditions of competition, the result may be merely transfers of monopoly rents to private owners. Similarly,

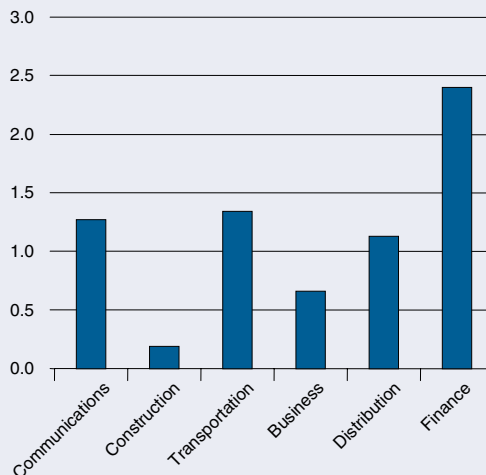
### Box 3.3 Welfare gains from service liberalization: The case of Tunisia

The implications of services liberalization for the Tunisian economy have been analyzed by Konan and Maskus (2000) using a computable general equilibrium model. Using actual data as the foundation, they analyze the effect of liberalizing six service sectors: communications, construction, transportation, business and insurance, distribution, and finance. The Tunisian economy is relatively closed, and also faces constraints on its exports through the movement of individuals. The model is developed so as to consider three different modes of liberalization: “import” liberalization of cross-border trade and the right of establishment by foreign investors, as well as increased “exports” through cross-border movement of natural persons.

The main finding is that services liberalization could provide significant gains to Tunisia, with welfare gains equivalent to 7 percent of GDP. These are twice as large as the gains the model predicts for Tunisia from its preferential agreement with the EU. The largest benefits come from the liberalization of foreign investment in financial services, communications, and transportation. Liberalization vitalizes the economy by eliminating inefficiency through increased international competition. Services are available not only at lower prices but also in greater varieties through an increase in the number of firms that would operate in Tunisia. More efficient financial, communications, and transportation sectors are also likely to attract foreign firms to other industries in Tunisia. As more and more foreign firms start to operate in Tunisia, the number of varieties of goods and services made available to consumers and producers also increases, which further improves welfare. The possible cost in terms of restructuring the economy turns out to be small. For example, it is predicted that a mere 3 percent of the workforce would have to change sectors—a much lower figure

if increased entry into financial sectors is not accompanied by adequate prudential supervision and full competition, insider-lending and poor investment decisions may result. Also, if policies to ensure universal service are not put

Percentage change in GDP resulting from liberalization of selected service sectors



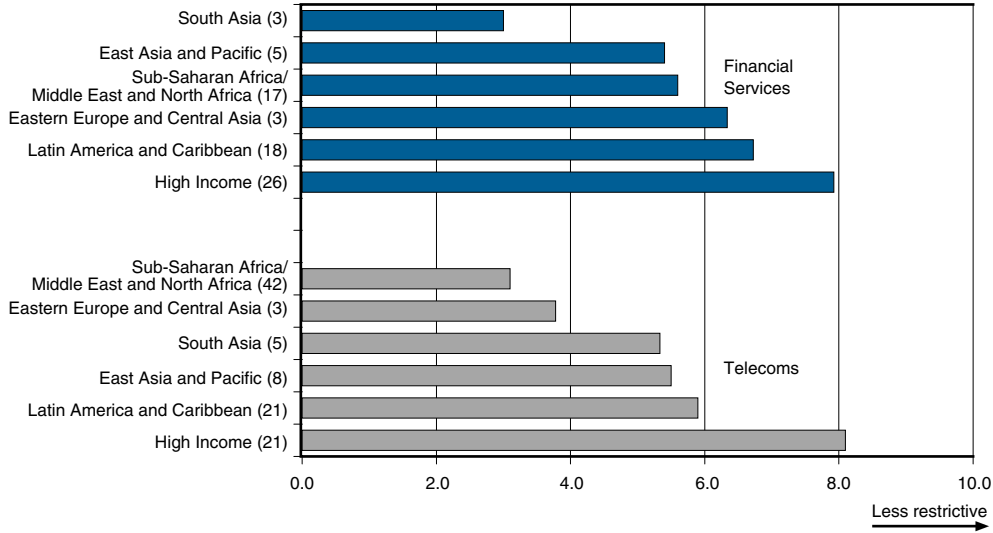
Source: Konan and Maskus 2000.

than the 6.6 percent adjustment the model predicts as a consequence of the Tunisia-EU free trade agreement on goods trade. The gentler impact on the labor market is a consequence of the fact that services liberalization induces foreign investment, so that workers simply change employers within the same sector. Finally, if Tunisia were to obtain a 20 percent increase in overseas permits for its guest workers in foreign markets, then there would be an additional gain in welfare equivalent to 0.4 percent of GDP.

Source: Konan and Maskus 2000.

in place, liberalization need not improve access to essential services for the poor. Managing reforms of services markets therefore requires integrating trade opening with a careful combination of competition and regulation.

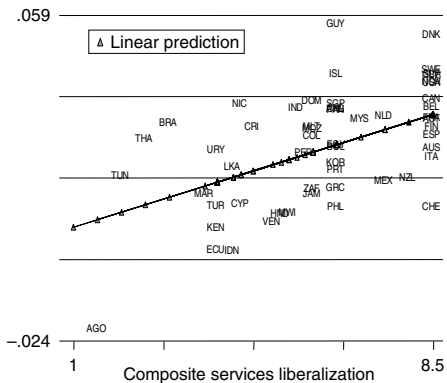
**Figure 3.5 Services liberalization indices: telecoms & financial services**



Note: The openness index for telecommunications captures the degree of competition, restrictions on ownership and the existence of an independent regulator (needed to enable competitive entry), and draws on an ITU-World Bank database for 1998. The index for financial services captures the restrictions on new entry, foreign ownership and capital mobility, and draws primarily upon commitments made by countries under the GATS, which are known to reflect closely actual policy, and data in the IMF's Annual Report on Exchange Arrangements and Exchange Restrictions.  
 Source: Mattoo, Rathindran, and Subramanian 2001.

**Figure 3.6 Greater liberalization in services is associated with more rapid growth**

Growth rate (adjusted for other factors)



Source: Mattoo, Rathindran, and Subramanian 2001.

South Africa's experience with liberalizing telecommunications services is instructive. The government recognized the need for a more efficient supply of services. It decided to sell a 30 percent equity stake of the public incumbent, Telkom, to a strategic investor and to grant the newly privatized entity a five-year monopoly period for fixed-line telephone services. It was hoped that market exclusivity would facilitate rapid infrastructure rollout to previously underserved areas, but the program has had mixed results. Even though network growth picked up, Telkom did not meet its rollout obligations and sought to renegotiate the targets specified in its monopoly license. The cost of the fixed-line monopoly was also reflected in Telkom's rising price-cost margin, with gains in productivity leading to higher margins rather than lower prices (Hodge 1999). Finally, despite some improvement, la-

bor productivity was only a quarter that of leading international operators, with the lack of competition in the domestic market identified as a major contributing factor. Continued restrictions on domestic and foreign entry appear to have prevented the realization of the full benefits of competitive markets.

In addition to competition, the institutional and regulatory framework plays a critical role. For example, in the 1990s financial reforms were introduced in many African countries, but have been less successful than expected (World Bank 2001a). Some of the reasons for the disappointing results are directly related to the financial system, while others pertain to the general economic environment. The restructuring of state-owned banks was not sufficient to change the behavior of the financial institutions. Public authorities still pressured these institutions to lend money to loss-making public enterprises. Liberalization failed to trigger competition in the banking sector and governments were generally reluctant to close down distressed state banks. Furthermore, liberalization of interest rates in a setting characterized by uncontrolled fiscal deficits had a pernicious effect on domestic public debt, which in turn led to larger deficits. Finally, and crucially, there was a lack of adequate regulation and supervision mechanisms to monitor the functioning of the financial system.

The collapse of the Republic of Korea's economy in 1997 also reveals the precariousness of financial liberalization in an imperfect policy environment. Korea did liberalize its financial markets substantially, but it encouraged the development of a highly fragile financial structure.<sup>21</sup> By liberalizing short-term foreign borrowing, the Korean authorities made it possible for the larger and better-known banks and conglomerates (chaebols) to assume heavy indebtedness in short-term foreign currency debt. Meanwhile, the second tier of large chaebols greatly increased their short-term indebtedness in the domestic financial markets (funded indirectly through foreign borrowing of the banks). The funds borrowed were being invested in the over-expansion of productive capacity. At the

same time, financial regulation and supervision were fragmented with responsibilities spread unclearly between the Bank of Korea and several parts of the Ministry of Finance. In addition, Korea had a restrictive regime in terms of foreign bank entry. Until the 1997 crisis, the Korean banking system was virtually closed to foreign banks, in contrast to some other East Asian economies, such as Hong Kong (China), which was almost completely open for all financial services. This restrictive regime impeded the development of the local institutions, and may have contributed to the large capital outflows as foreign creditors refused to rollover their loans.

*Liberalization could increase prices of some services for the poor—*

Opening up essential services to foreign or domestic competition could have an adverse effect on the poor—which is often cited as a reason for the persistence of public monopolies. However, a more efficient solution is to have regulations with a social purpose.

If a country is a relatively inefficient producer of a service, liberalization and the resultant foreign competition are likely to lead to a decline in domestic prices and improvement in quality. But there is a twist. Frequently, the prices before liberalization are not determined by the market but set administratively, and are kept artificially low for certain categories of end-users or types of services products. Thus rural borrowers may pay lower interest rates than urban borrowers, and prices of local telephone calls and public transport may be kept lower than the cost of provision.<sup>22</sup> This structure of prices is often sustained through cross-subsidization within public monopolies, or through government financial support.

Liberalization threatens these arrangements. Elimination of restrictions on entry imply an end to cross-subsidization, because it is no longer possible for firms to make extranormal profits in certain market segments. New entrants may focus on the most profitable market segments (“cream-skimming”), such as urban areas, where network costs are lower

and incomes higher. And privatization could mean the end of government support. The result is that even though the sector becomes more efficient and average prices decline, the prices for certain end-users may actually increase or availability decline, or both.

The evidence on the relationship between competitive market structures and wider access to services is mixed. In some cases, a positive relationship has been observed in services such as basic telecommunications, especially in countries where initial conditions are feeble, as exemplified by a low teledensity or service rationing (long waiting lists for obtaining connections). However, there is also evidence that financial services liberalization in some countries has had an adverse affect on access to credit for rural areas and the poor.<sup>23</sup> These point to the need to create mechanisms to ensure that the poor have adequate access to services in liberalized markets.

*—and entail adjustment costs*

Different modes of supply have different effects on factor markets. Cross-border trade and consumption abroad resemble goods trade in their implications. The impact of the movement of factors depends critically on whether the factors are substitutes or complements for domestic factor services. Given the structure of factor prices in poor countries, we would typically expect liberalization to lead to an inflow of capital and skilled workers. Such inflows would tend to be to the advantage of the unskilled poor, increasing their employment opportunities and wages.<sup>24</sup> Interestingly, it has been shown that even when foreigners compete with local skilled workers in a services sector, the productivity boost to the sector from allowing foreigners access could lead to an increase in the demand for domestic skilled workers—the scale effect could outweigh the substitution effect (Markusen, Rutherford, and Tarr 2000). Given these predictions, why are workers in developing countries sometimes skeptical about the benefits of liberalization? One concern is the possible reduction in employment in formerly public monopolies that

have frequently employed surplus labor. For example, Alexander and Estache (1999) find that the privatization of electricity distribution in Argentina led to a 40 percent reduction in the workforce after privatization.

But there is also evidence that pessimism may not always be justified. For example, a number of developing countries have managed to maintain or even increase employment in their liberalized telecommunications sectors. Since many developing countries have low teledensities (in the vicinity of five lines per 100 people), roughly 70 percent of telecom investment in developing countries is directed toward building wire line and mobile networks, which are labor intensive and hence help maintain or raise employment levels. Petrazzini and Lovelock (1996) find in a study of 26 Latin American and Asian economies that telecom markets with competition were the only ones that consistently increased employment levels, while two-thirds of the countries with monopolies saw considerable declines in their telecom workforce.<sup>25</sup> Nonetheless, reform programs will generally require complementary policies to mitigate any social and economic costs of adjustment in factor markets.

## **Domestic policy: emphasizing competition and regulation**

### *Increasing competition is the first order of business*

Many developing countries have moved away from public monopolies in sectors such as communications, financial, and transport services, but are still reluctant to allow unrestricted new entry. Privatization does not axiomatically mean greater competition. Restrictions on foreign presence assume particular significance in the case of services where cross-border delivery is not possible, because consumer prices then depend completely on the domestic market structure. Several studies have concluded that larger welfare gains arise from an increase in competition than from a simple change in ownership from public to private hands (Armstrong and

others 1994). Foreign investment clearly brings benefits even in situations where it does not lead to enhanced competition. Foreign equity may relax a capital constraint, can help ensure that weak domestic firms are bolstered (for example, via recapitalizing financial institutions), and serve as a vehicle for transferring technology and know-how, including improved management. However, if restrictions on competition artificially inflate the returns on investment, the net returns to the host country may be negative.

Are there good reasons to limit entry? In some cases, technical limitations may prevent competition—such as those imposed by the scarcity of radio spectrum needed for the provision of mobile telecommunications services, and scarcity of space for department stores or airports in a city. More generally, entry restrictions might be justified by the existence of significant economies of scale. For example, if there are substantial fixed costs of networks, competitive entry could lead to inefficient network duplication.<sup>26</sup> However, entry restrictions are increasingly hard to defend in principle, in the face of technological change and in the face of mounting evidence that competition works.

First of all, entry restrictions change the nature of interaction between incumbents and may well make collusion more likely. Second, such restrictions dampen the impact of competition on productive efficiency. Third, the regulator is usually not better placed than the competitive process to determine the optimal number of firms in the market, especially given the difficulty of obtaining information about the cost structure of firms and other sources of regulatory failure. Furthermore, technological advances have significantly lowered network costs in a unisector such as telecommunications, and vertical separation (for example, through network unbundling) has widened the scope for competitive entry (Smith 1995). Therefore inefficiencies introduced by duplication of networks may be small compared to operational inefficiencies that can result from a lack of competitive pressure.<sup>27</sup> For example, even in telecommunications, a sector where

fixed costs are significant, countries in Latin America that granted monopoly privileges to telecom operators of six to ten years to the privatized state enterprises saw connections grow at one and a half times the rate achieved under state monopolies, but only half the rate in Chile, where the government retained the right to issue competing licenses at any time (Wellenius 1997). A recent study of countries in Asia found that the largest increases in mainline penetration and productivity were witnessed in countries where a change of ownership was accompanied by the introduction of competition and the strengthening of regulation (Fink and others 2001).

#### *Efficient regulation: Making competition work*

Regulation in services, as in goods, arises essentially from market failure, which is attributable to the problems of natural monopoly and inadequate consumer information, and from considerations of equity and protecting the poor.

The existence of natural monopoly or oligopoly is a feature of the so-called locational services. Such services require specialized distribution networks: roads and rails for land transport, cables and satellites for communications, and pipes for sewerage and energy distribution (UNCTAD; and World Bank 1994).

Many countries have instituted independent regulators for basic telecommunications services to ensure that monopolistic suppliers do not undermine market access by charging prohibitive rates for interconnection to their established networks (see box 3.4).<sup>28</sup> A similar approach is being taken in a variety of other network services, including transport (terminals and infrastructure), and energy services (distribution networks).

Regulation of the interconnection price may not, however, be sufficient. Small markets may not be able to create conditions for effective competition in the supplies of certain telecommunications, transport, and financial services, even if they eliminate all barriers to entry—for

### Box 3.4 Challenges in implementing procompetitive regulation

It is now widely recognized that in basic telecommunications procompetitive regulation is needed to deliver effective competition and gains from liberalization. But the experience of different countries reveals a range of political and economic difficulties that are only gradually being overcome.

In India a conflict between the department of telecommunications (DOT) and the regulatory agency, Telecommunications Regulatory Authority of India (TRAI), as it was initially constituted, hampered progress toward an efficient telecom infrastructure. Underlying a number of these problems was the DOT's joint role in awarding licenses for both basic and cellular services while remaining as the main telecommunications service provider. Absent an independent regulator, empowered to rebalance tariffs, enforce fair interconnection agreements, and ensure rapid, equitable issuance of radio spectrum, the benefits of a sector opened to allow private participation and foreign investment were significantly limited.

The government announced a new telecommunications policy on March 26, 1999 that addressed several of these key outstanding issues. The DOT's policymaking and service provision functions were separated, and the operations arm was corporatized. TRAI was reconstituted in 2000, and its dispute resolution powers are now vested in a new quasi-judicial agency. The authority announced a new telephone tariffs decision that will substantially restructure telephone service prices over a three-year period, significantly improving incentives for local network investment. The regulator has also programmed an agenda of activity to address several other important regulatory matters, such as interconnection arrangements; a numbering plan; quality of service; rules of business; and customer satisfaction.

For smaller countries, a different problem arises: the creation and operation of an efficient regulatory agency involves substantial fixed costs that could

place a significant resource burden. Apart from spectrum monitoring equipment, computers, and programs, there is the cost of professional assistance for activities such as interconnection, cost estimation, and spectrum management. For example, the total cost of government in Dominica is \$41 million a year, whereas the budget of the U.S. telecom regulator (the Federal Communications Commission) runs to \$210 a year. It is estimated that even a bare-bones regulatory authority is likely to cost in the region \$2 million each year, or 5 percent of Dominica's government budget.

In response to these problems, in May 2000, St Lucia, Dominica, Grenada, St Vincent and the Grenadines, and St Kitts and Nevis set up, with World Bank support, the Eastern Caribbean Telecommunications Authority (ECTEL), the first regional telecommunications authority in the world. ECTEL is in the process of developing from a legal entity into a functioning institution. Although the member countries will retain their sovereign power over licensing and regulation, ECTEL will provide technical expertise, advice, and support for national regulations. Apart from the economies of scale in establishing a common regulator, there are at least three other advantages. It will promote the development of harmonized and transparent regulation in the region, allow for a greater degree of independence (and hence credibility) in regulatory advice, and enhance bargaining power in negotiations with incumbents and potential entrants. In fact, there is evidence that the creation of ECTEL, along with other reforms, has already prompted a decline in the prices of telecommunication services in the region. One example is that the per-minute cost of a daytime call to the United States has fallen between 24 and 42 percent in these countries.

*Source:* DeFreitas, Kenny, and Schware 2001; and World Bank staff.

two related reasons. First, with services, unlike in the case of goods, national markets are often segmented from the international market due to the infeasibility of cross-border delivery. Sec-

ond, changing technologies may have reduced the optimal scale of operation as well as sunk costs in these sectors, but not enough for small markets to sustain competitive market struc-

tures. Some form of final price regulation may, therefore, be unavoidable. In some cases, such regulation can be implemented at the national level although, in practice, many developing countries today lack the means to do so. In other cases, the limited enforcement capacity of small states strengthens the case for multilateral initiatives.<sup>29</sup>

#### *Regulation to remedy inadequate consumer information*

In many intermediation and knowledge-based services, consumers have difficulty securing full information about the quality of service they are buying (UNCTAD and World Bank 1994). Consumers cannot easily assess the competence of professionals such as doctors and lawyers, the safety of transport services, or the soundness of banks and insurance companies. When such information is costly to obtain and disseminate, and consumers have similar preferences about the relevant attributes of the service supplier, the regulation of entry and operations in a sector could increase social welfare. However, the establishment of institutions competent to regulate well is a serious challenge, as is revealed by the difficulties in the financial sector—not only in a number of developing countries but also in the United States, Sweden, and Finland in the 1980s and 1990s. The fact that regulatory inadequacies cannot be quickly remedied raises the issue of how different elements of reform—particularly prudential strengthening and trade and investment liberalization—are best sequenced (see box 3.5).

A separate problem is that domestic regulations to deal with the market failure may themselves become impediments to competition and trade, as a result of differences across jurisdictions in technical standards, prudential regulations, and qualification requirements in professional, financial, and numerous other services (see box 3.2). In many cases, the impact on trade is an incidental consequence of the pursuit of a legitimate objective, but in some cases regulation can be a particularly attractive means of protecting domestic suppliers from foreign competition.<sup>30</sup> The issue of how multilateral trade rules might sift the legitimate from

the protectionist is an issue to which we return in the final section of this chapter.

#### *Regulation to ensure universal service*

Reform programs can accommodate universal service obligations by imposing this requirement on new entrants in a nondiscriminatory way. Thus such obligations were part of the license conditions for new entrants into the fixed network telephony and transport in several countries. However, subsidies have often proved more successful than direct regulation in ensuring universal access (Estache and others 2001).<sup>31</sup> In 1999, Peru adopted a universal service levy of 1 percent to finance a fund dedicated to providing universal access in remote areas. Funds were allocated through a competitive bidding process that encouraged operators to adopt the best technology and other cost-saving practices at minimum subsidy. The Chilean government adopted a similar scheme that permitted it to leverage over \$2 million in public funds into \$40 million in private investment; this resulted in installation of telephones in 1,000 localities at about 10 percent of the costs of direct public provision. Household ownership of a telephone in Chile increased from 16 to 74 percent from 1988 to 2000, and all but 1 percent of the remaining households were provided with public access to telephones.

Public subsidies may also be directed to the consumer rather than the provider (Cowhey and Klimenko 1999). Governments have experimented with various forms of vouchers, from education to energy services. This last instrument has at least three advantages: first, it can be targeted more directly to those who need the service and cannot afford it; second, it avoids the distortions that arise from artificially low pricing of services to ensure access; and finally, it is an instrument that does not discriminate in any way between providers. Of course, no single approach will fit all sectors and countries, and the appropriate model to ensure service delivery to low-income groups will depend on local circumstances, particularly regulatory capacity.



## Box 3.5 Financial sector liberalization: the need for policy coherence

Financial reform is especially complicated. It is useful to distinguish three types of financial liberalization and the scope of each.

- *Domestic financial liberalization* allows market forces to work by eliminating controls on lending and deposit rates and on credit allocation and, more generally, by reducing the role of the state in the domestic financial system.
- *Capital account liberalization* removes controls on the movement of capital in and out of a country and restrictions on the convertibility of currency.
- *Internationalization of financial services* eliminates discrimination in treatment between foreign and domestic financial services providers, and removes barriers to the cross-border provision of financial services.

Internationalization has raised several fears: the threat to the survival of local banks and financial companies; the loss of monetary autonomy; and the increased volatility of capital flows. Many of these concerns do not relate just to internationalization of financial services, but also to the processes of financial deregulation and capital account liberalization. But the extent of benefits and costs of internationalization depends, to a great extent, on how it is phased in with these other two types of financial reform, and, in particular, the strengthening of prudential regulation and supervision.

Many countries that have successful experiences opening up to foreign financial firms (Brazil, Chile, Hungary, Ireland, Poland, Portugal, Spain, and others) also engaged in a process of domestic deregulation and, consequently, reaped substantial gains (World Bank 2001b). The experience of the countries acceding to the EU suggests that internationalization and domestic deregulation can be mutually reinforcing. Increased foreign entry bolstered the financial sector framework by creating a constituency for improved regulation and supervision, better disclosure rules, and improvements in the legal and regulatory framework for the provision of financial services. It also added to the credibility of rules. These benefits of opening up to foreign entry followed from both top-down actions on the part of government, as well as from bottom-up

pressures from the market as best international practices and experiences were introduced.

While the two reform processes (internationalization and domestic financial deregulation) are mutually reinforcing, they are not sufficient in themselves. More than in other sectors, the gains and costs of financial reform depend on the regulatory and supervisory framework, (Barth and others 2001). Experience shows that it is vital to strengthen the supporting institutional framework in parallel with domestic deregulation and internationalization. In the absence of such strengthening, foreign entry may entail risks. Foreign bank entry can destabilize local banks by taking away the lowest risk business—including large, exporting firms—leaving local banks to venture further out on the risk frontier. Also several countries, especially in Africa, discovered with the failure of banks—such as BCCI and Meridien—that a foreign name did not guarantee safety and soundness even when these foreign banks were operating in industrial economies or had some ownership links with reputable foreign sources.

Having a supportive institutional framework is even more obvious when it comes to capital account liberalization. Experiences in the past, most recently in Asia, have shown that achieving the potential gains, and avoiding the risks, of capital account liberalization depend to a great extent on whether domestic institutions and prudential authorities have developed sufficiently to ensure that foreign finance will be channeled in productive directions (Eichengreen forthcoming). Recent experiences also shows the potential benefits of foreign financial institutions in stabilizing capital flows. Several countries with significant foreign presence, such as Argentina and Mexico, benefited from the access of these institutions to foreign capital during periods of economic presence (Dages, Goldberg, and Kinney 2000). More generally, studies show that diversity in ownership contributes to greater stability of credit in times of crises (Barth and others 2000a; b); and La Porta and others 2000). In so far as foreign presence leads to a stronger regulatory and supervisory framework, it contributes to making capital account liberalization and internationalization mutually reinforcing.

Source: World Bank staff.

### Multilateral engagement: Buttressing domestic reforms

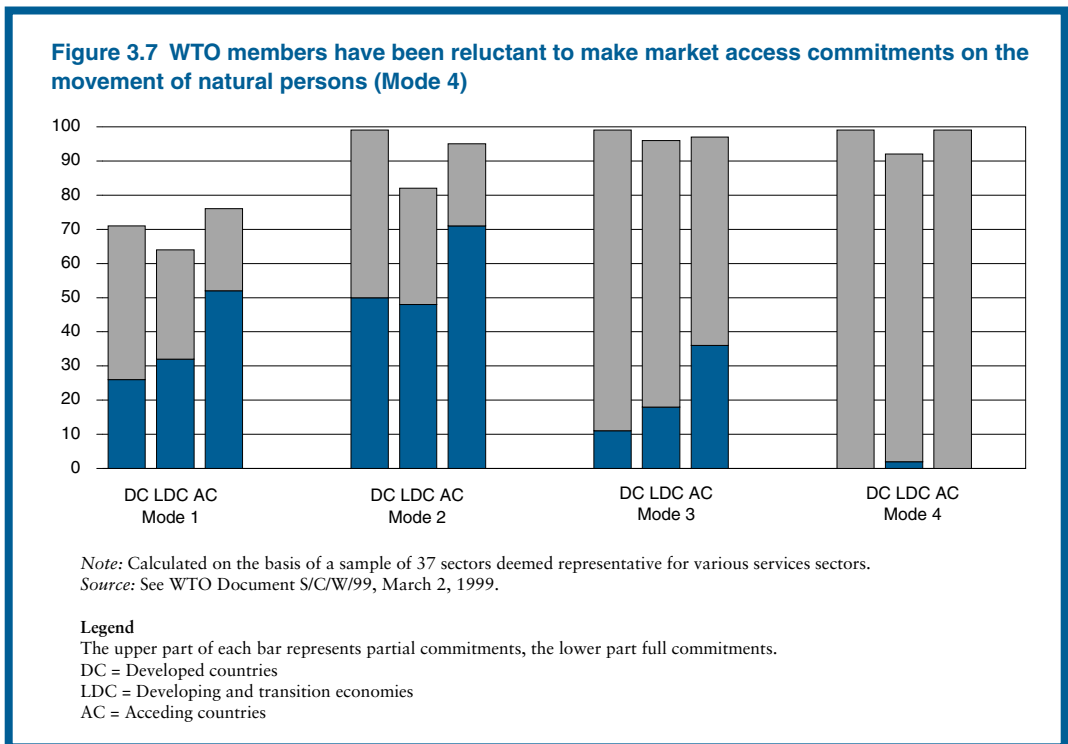
In principle, a country can liberalize its markets and strengthen its regulatory institutions unilaterally, but four types of issues create benefits from multilateral engagement. First, liberalization may be constrained by domestic opposition from those who benefit from protection. Second, a country cannot on its own improve access for its exports to foreign markets. Third, a small country may not be able to deal adequately with anticompetitive practices by foreign suppliers. Finally, a country may lack the expertise and resources to devise and implement optimal policy, especially in the area of domestic regulation.

The WTO is the natural forum to pit the first two elements—opposition to reform at home and barriers to access abroad—against each other constructively through the process of mercantilist negotiations. But there is also a need for complementary multilateral efforts

to ensure that the gains from liberalization are not undermined by inadequacies in policy choice and regulation.

### Using the current round of GATS negotiations to deliver liberalization at home and access to markets abroad

The General Agreement on Trade in Services (GATS) had a deliberately symmetric structure, encompassing the movement of both capital and labor for services provision. In theory, developed and developing countries could indeed bargain to exploit their modal comparative advantage: improved access for capital from developed countries being exchanged for improved temporary access for individual service providers from developing countries. In practice, all countries have been unwilling to grant greater access for foreign individuals (except for the limited class of skilled intra-corporate transferees), and a tradeoff between modes of delivery simply has not occurred



(figure 3.7). Moreover, even the negotiating links across services sectors and between services and goods sectors do not seem to have been particularly fruitful. And so, since governments could not demonstrate improved access to foreign markets as a payoff for domestic reform, GATS commitments reflect for the most part the existing levels of unilaterally determined policy—rather than liberalization achieved through a reciprocal exchange of “concessions.”<sup>32</sup>

This may change with time. With severe shortages of skilled labor in the United States and Europe and the powerful constituency of high-technology companies lobbying for relaxation of visa limits, the prospects for serious intermodal tradeoffs—such as obtaining temporary labor movement in return for allowing greater commercial presence for foreign service providers—are now greater. The challenge is, first, to devise mechanisms that provide credible assurance that movement is temporary rather than a stepping-stone to migration; and second, to devise negotiating formulae that credibly link Mode 4 liberalization to reductions in restrictions in other areas.

#### *Strengthening GATS rules and commitments*

In line with the WTO’s central concern with securing market access, it would also be natural to use the GATS to enhance the credibility of policy at home and security of access to markets abroad through legally binding commitments; to ensure that domestic regulations support trade liberalization; and to prevent discrimination between trading partners by ensuring effective application of the most-favored nation (MFN) principle.<sup>33</sup>

First, the GATS could help secure access to markets that are already open. Trade in electronically delivered products, in which more and more developing countries are beginning to participate, must continue to remain free of explicit barriers—should such barriers ever become feasible. It would be far more effective to widen and deepen commitments under the GATS on cross-border trade (see box 3.6).

At home, policies that are believed in are most likely to succeed. Developing countries themselves could take greater advantage of the opportunity offered by the GATS to lend credibility to reform by committing to maintain current levels of openness or to greater levels of future openness. In basic telecommunications, the one sector where countries have been willing to make such commitments, there is evidence that the commitments have facilitated reform.

Developing countries have much to gain from stronger multilateral rules on domestic regulations. Such rules can play a role in promoting and consolidating domestic regulatory reform, as happened to some degree in the telecommunications negotiations. The rules are also needed to equip developing-country exporters to address regulatory barriers in foreign markets in the form of burdensome licensing and qualification requirements for professionals, or restrictive standards in electronic commerce.

It is desirable also to remedy the current weaknesses in the application of the MFN principle in the GATS. One obvious problem is the explicit departure from the MFN obligation through numerous MFN exemptions listed by countries. Less visible, but potentially more serious, is the possibility of implicit discrimination through preferential recognition agreements and allocation of quotas. Rules in these areas need to be clarified and strengthened to protect developing countries both from discrimination in their export markets and from pressure to grant particular foreign suppliers privileged access to their markets—as, for instance, is reported to be happening in the Chinese insurance market.

#### *Dealing with anticompetitive practices*

Anticompetitive practices that fall outside the jurisdiction of national competition laws may be important in sectors such as maritime, air transport, and communication services. The current GATS provision in this area provides only for information exchange and consultation. Strengthened multilateral rules are needed to reassure small countries with weak enforcement capacity that the gains from liberaliza-

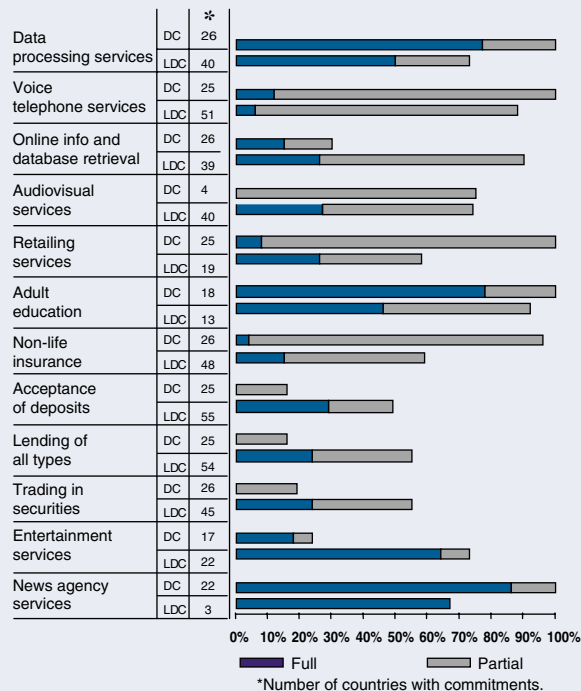
## Box 3.6 Ensuring barrier-free trade in electronically delivered products

Trade in electronically delivered products, in which more and more developing countries are beginning to participate, and which offers an increasingly viable alternative to the movement of individuals, is today largely free of explicit barriers. The main concern should be preventing the introduction of new barriers if they become technically feasible. What is the best route to preventing the imposition of explicit restrictions, such as tariffs and quotas? (The issue of regulatory barriers is discussed in box 3.2.)

WTO Members have so far focused on prohibiting the imposition of customs duties on electronically delivered products. It is ironic that considerable negotiation energy has been invested in prohibiting the economically superior (and probably not feasible) instrument of protection whereas little attention has been devoted to inferior (and possibly more feasible) instruments such as quotas and discriminatory internal taxation. In any case, since the bulk of such commerce concerns services, open trading conditions are more effectively secured through deeper and wider commitments under the GATS on cross-border trade regarding market access (which would preclude quantitative restrictions) and national treatment (which would preclude all forms of discriminatory taxation).

There is considerable scope for an improvement in such commitments. For instance in data processing, of the total WTO Membership of over 130, only 66 Members have made commitments; and only around two-thirds of these commitments guarantee unrestricted market access. Many developing countries have not made sectoral commitments, but the commitments of the few which have, are frequently superior to those of developed countries. It is particularly striking that in some of the core financial services, about a third of the developing countries which have made commitments guarantee unrestricted cross-border supply, whereas none of the 26 developed countries does so. Developing countries have also been more forthcoming than developed countries in audiovisual and entertainment services. One possible approach to improving com-

Commitments on cross-border supply in selected services sectors



Source: World Trade Organization.

mitments would be for all Members to agree that no restrictions would be imposed on cross-border delivery, either of all services or of a bundle whose composition could be negotiated.

These commitments have additional value because other GATS disciplines, for example, on domestic regulations, would only meaningfully kick in once these commitments are in place. For instance, if there were excessively restrictive regulatory barriers to cross-border trade in the core banking services in developed countries, it would be difficult today to challenge them, since these countries have not even committed to provide market access and national treatment.

Source: Mattoo and Schuknecht 2000.

tion will not be appropriated by international cartels. For instance, the United States and the EU could begin by ending the exemption of cooperative price-setting and related practices in maritime transport from the scope of their competition law. Ending the exemption would enable a careful assessment by competition authorities of the social costs and benefits of these collusive arrangements. Competitive discipline could also be strengthened by creating a right for foreign consumers to challenge anticompetitive practices by services firms in the national courts of countries whose citizens own or control these firms—a variant of the precedent in the WTO rules on intellectual property and government procurement.

#### *Global cooperation to support liberalization*

Beyond WTO negotiations multilateral support is needed at four levels: in devising sound policy, strengthening the regulatory environment, enhancing developing country participation in the development of international standards, and ensuring access to essential services in the poorest areas.

While there is growing consensus on the benefits of liberalization, there is less agreement on the precise route to liberalization. Certain issues have prompted differing strategies. Should all barriers to entry be eliminated in sectors with significant economies of scale? How far should trade and investment liberalization be conditioned on strengthened prudential regulation? Developing countries in particular could benefit from the experience of other countries on these issues—but the experiences with electricity in California and rail transport in Britain suggest that there is scope for learning in all countries. More work is needed at the national and international levels to take stock of individual and cross-country experience to identify the areas where there are clear prescriptions for policy and those where there is a need for further research, and therefore for humility in policy advice and formulation.

Sound domestic regulation—ranging from prudential regulation in financial and profes-

sional services to procompetitive regulation in a variety of network-based services—is critical to realizing the benefits of services liberalization. We have also seen that devising and implementing such regulation is not easy, and that there are acute regulatory problems in many developing countries. Regulatory institutions can be costly and may require sophisticated skills. To some extent such costs can be recovered through fees or regional cooperation—but external assistance could help ensure that adequate regulation is in place. Some technical assistance is already being provided, but often on an ad hoc basis either bilaterally or through international organizations. More systematic efforts—along the lines of the Integrated Framework for least-developed countries—are needed to assess the needs of individual developing countries and to ensure that the most appropriate assistance is provided in key sectors.

Improvements in domestic standards and qualifications are also needed in order to export services. For example, in the case of professional services, low standards and disparities in domestic training and examinations can become a major impediment to obtaining foreign recognition. Thus inadequacies in domestic regulation can legitimize external barriers to trade. At the same time, developing countries need to participate more actively in the development of international regulations and standards, especially in new areas such as electronic commerce. Otherwise, standards could evolve to reflect the concerns only of developed countries and impede the participation of developing countries in services trade.

There will remain certain poor countries, or certain regions within poor countries, where improvements in services policy and regulation will not be sufficient to ensure access to essential services. The criterion for determining whether assistance is needed could be the absence of private sector provision despite comprehensive policy reform. International assistance effectiveness could be maximized by allocating it in a manner similar to that used domestically by countries such as Chile and

Peru to achieve universal service. For instance, once a country (or a region within a country) has been selected for assistance, funds—such as those provided by certain countries to bridge the digital divide—could be pooled and allocated through international competitive tenders to the firm that offers to provide the necessary infrastructure at least cost. Providing international assistance in meeting the costs of the required subsidy programs could increase the benefits of, and facilitate, liberalization by ensuring that the needs of the poor would be met.

## Notes

1. There are, however, exceptions to each of these characteristics of services: a software program on a diskette or an architect's design on paper are both tangible and storable, many artistic performances are visible, and automated cash-dispensing machines make face-to-face contact between producers and consumers unnecessary. These exceptions do not, however, detract from the usefulness of the general definition of services presented above.

2. This view of trade originated in Bhagwati 1984 and Sampson and Snape 1985, and has been formalized in the General Agreement on Trade in Services (GATS).

3. The invisibility and intangibility of most services imply that when they are delivered across borders, their passage is not recorded by a customs official. Data on services are therefore unreliable and volatile. Furthermore, statisticians in most countries do not keep track of the sales of services by foreign investors or foreign individuals who stay for longer than a year. Despite these difficulties, it is possible to put together a rough picture of trade in services by drawing on three complementary sources. The International Monetary Fund (IMF) balance of payments statistics are the only services trade statistics available on a global basis, and capture cross-border supply, consumption abroad (as part of the category "travel"), and some temporary movement of service suppliers. The more limited United Nations Conference on Trade and Development (UNCTAD) data on FDI in services capture the flows through which commercial presence is established. Finally, the United States is the only country that has regularly collected data on the sales of services by foreign affiliates.

4. The United States is the only country that has regularly compiled data on sales of services to foreign persons by majority-owned foreign affiliates of U.S. companies, and on sales of services to U.S. persons by

majority-owned U.S. affiliates of foreign companies. A comparison of the balance of payments and foreign affiliates transactions reveals in broad terms the relative importance of sales through cross-border delivery and commercial presence.

5. It must be borne in mind, though, that the relative importance of trade by different modes in a particular sector reflects the choices of economic agents given the constraints of both technological feasibility and policy restrictions.

6. The FDI data are extremely thin, with data missing for many countries and only available for three SSA countries.

7. See the National Association of Software and Service Companies (NASSCOM) Web site <<http://www.nasscom.org>>. These exports consist mainly of standardized coding and testing services.

8. This report was prepared by McKinsey and Company for NASSCOM.

9. These figures were computed from WTO 1998, table 3. Data refer to 1997.

10. See <http://www.nasscom.org>. The dominance of on-shore delivery is due, among other things, to a reduction in information asymmetries with regard to the performance of programmers, the need for continuous client-developer interaction, and demands by Indian programmers to be sent abroad, in part to improve their skills and expose themselves to international markets (see Heeks 1998).

11. With permanent movement, the gains to the host country must be weighed against the possible cost to the home country in terms of "brain drain." Over 50 percent of all migrating physicians come from developing countries. In Ethiopia, for example, during 1984–94, 55.6 percent of the pathology graduates from the Addis Ababa Faculty of Medicine left the country. In Ghana, of the 65 who graduated from the Medical School in 1985, only 22 had remained in the country by 1997. If these countries had adequate medical staff at home, these figures would be less cause for concern.

12. Other barriers to movement of natural persons include double taxation, wage-matching requirements (wages paid to foreign workers should be the similar to those paid to nationals in that profession, eliminating the cost advantage for foreigners), and local training requirements (to replace foreign with national labor within a certain time frame).

13. This is strictly true in static models without market imperfections—such as monopolistic market structures, internal and external economies of scale, or other distortions. The presence of imperfections opens up a plethora of possibilities in which the effects of trade policies are typically indeterminate, depending on the prior distortion.

14. See Hoekman and Braga (1997) for a review.

15. Consider, for instance, the case of the Arab Republic of Egypt, where the import-weighted tariff was 31 percent in 1997, and the average manufacturing-wide effective rate of protection (ERP) was much higher at 70 percent (Hoekman and Djankov 1997). However, services inputs used by Egyptian industry, including construction, communications, financial, business, distribution, transport, and storage, were more expensive than they might have been if competition had been allowed. If it were assumed that prices were higher by, say, 15 percent, then the average ERP for manufacturing would not only be lower, but negative for several industries (chemicals, crude petroleum, and other extractive industries), implying that the tariff on intermediate goods, together with the implicit tariffs on services inputs, outweighed the tariff protection on the final goods.

16. If no trade in either goods or services is possible, the production of final goods is cheaper in larger markets, because a larger market can support a greater variety of services. If trade in only goods is possible (for instance if services must be supplied through a local establishment), then goods production tends to agglomerate in the larger country. The large country gains from this as productivity increases since a larger final goods sector can support a wider variety of intermediate goods production. For the same reason, the smaller country can lose from goods trade as final goods production shrinks. However, if there is free cross-border trade in services, then all countries have access to the full range of producer services. As a result, productivity in final goods production increases in all countries, and so all countries gain from trade.

17. The last few years have seen a profusion of national and global computable general equilibrium models seeking to estimate the economywide effects of services liberalization. The models suffer from weaknesses, particularly the inadequate treatment of different modes of supply, the poor data on the levels of protection in different services sectors, and an inability to capture the regulatory institutional detail that is a key determinant of the consequences of services liberalization. The models are, nevertheless, useful in providing a rough idea of the costs of maintaining services barriers and the corresponding welfare gains from their removal.

18. As pointed out by Rodriguez and Rodrik (1999), there are two contradictory impulses on growth emanating from the scale effect described above. Protecting a sector increases its size, leading to higher growth, but it also creates a wedge between domestic and foreign prices imposing a production inefficiency that rises over time exerting a negative impact on growth. The larger the size of the protected sector the larger this impact. By contrast, liberalization of the services sector, in which the country is assumed to have a comparative disadvan-

tage, will also lead to increased static efficiency. This will strengthen the growth impact of liberalization.

19. For example, there is evidence to suggest that foreign bank entry qualitatively changed Turkish banking by introducing financial and operations planning and improving the credit evaluation and marketing system (Denizer). Foreign banks also took the lead in spreading electronic banking and introduced new technologies. They raised the human capital level of Turkish workers through domestic training programs, and by sending local recruits to training centers abroad.

20. Coe, Helpman, and Hoffmaister (1999) and Lumenga-Neso and others (2001) are among those who present empirical evidence demonstrating the impact of technology diffusion—in their case through trade in goods—on total factor productivity growth. In principle, the same should hold true for technology that is diffused through factor flows

21. In terms of the financial instruments employed (too much reliance on short-term bills), in terms of the financial intermediaries that were unwittingly encouraged (lightly regulated trust subsidiaries of the banks, and other newly established near-bank financial intermediaries), and in terms of market infrastructure development (failure to develop the institutions of the long-term capital market). See, for instance, Claessens and Glaessner (1999)

22. Sometimes the object is to ensure access to all consumers at the same price, irrespective of the cost of provision (for example, in transport and postal services). At other times, the object is ensure cheaper access for certain categories of users (for example, in financial services).

23. Mosely (1999) estimates the impact of financial liberalization on access to rural credit in four African countries Uganda, Kenya, Malawi, and Lesotho. Using sample survey data, Mosely reports that between 1992 and 1997, the percentage of sampled households with access to rural credit rose in Kenya and Uganda from 13.1 percent and 9.2 percent to 25 percent and 21 percent respectively. However, in Malawi, there was a decline in the corresponding number from 12 to 8 percent. Access to credit of the poorest 10 percent (by income) remained unchanged in Uganda and Kenya, but in the case of Malawi and Lesotho declined from 1.9 and 2 percent to .9 and 1.9 percent respectively. Mosely's study also shows that financial reform by way of financial innovation in rural areas and development of financial institutions catering to the poor has strong and significant effects on improving access to rural credit and lowering poverty. But simply privatizing state micro-finance agencies has proven to be unsuccessful, as illustrated by the experience of Malawi.

24. The poor are likely to be unskilled, so the question arises as to the services sectors in which they are

likely to be employed. Unfortunately, data on the skill composition of the workforce in services sectors are only available for some OECD countries and that at a rather aggregate level. Still a certain pattern can be inferred. Construction, distribution and personal services tend to be unskilled-labor intensive, whereas communications, financial and business services tend to be skilled-labor intensive.

25. In India, the incumbent operator—the department of telecom expanded its workforce over the 1996–2000 period. In the face of competition, it was forced to improve its marketing strategy, expand its network and opened up thousands of public call offices all over India.

26. One such possibility is the case of “nonsustainability” of natural monopoly. This could arise, for instance, under some natural monopoly cost conditions, when there exist no prices that will not attract entry, even though single firm supply is efficient. Armstrong and others (1994, p. 106) conclude that, “Notwithstanding the logical possibility of this happening, we are doubtful whether it provides a good case for entry restrictions in the utility industries, which are not for the most part remotely contestable and where there is little evidence that cost conditions give rise to nonsustainability.”

27. Interesting evidence in this context is available from the Indian telecommunications sector. Das (2000) estimates a frontier multi-product cost function of the incumbent fixed-line operator, covering 25 years from 1969 to 1994. The study finds the existence of very high economies of both scale and scope in the technology used—the parameter estimates even suggest that telecommunications in India is a natural monopoly. However, the incumbent operator displays great inefficiency, leading to a 26 percent increase of the operator’s cost of production. Based on these findings, Das concludes that India’s market liberalization program, started in the mid-1990s, is justified, but he argues that there may be a need to regulate entry in order to reduce unnecessary duplication of common costs. Moreover, with continued improvements in technology, the fixed costs of entrants are likely to fall, reducing losses of scale economies and thus increasing the costs of entry restrictions.

28. Several countries have found it difficult to create an open, competitive telecommunications sector because of a weak regulatory environment. Poland opened up its telecommunications sector to private competition as early as 1990. There was a rush to invest, and about 200 licenses were awarded in the first six years of the newly liberalized regime. The dominant state operator, operating in a weak regulatory system, limited access to its network and benefited from unequal terms for revenue sharing, however. By 1996, only 12 of the 200 li-

censes were still being used by the few competitive operators who had managed to survive.

29. Studies of Argentina show that all income classes gain from services reforms but that the rich (and the foreign investors) gain relatively more if the regulator is weak and that the poor win relatively more if the regulator is effective in ensuring that the rents of the sector are shared with the rest of the economy (Chisari and Romero 1999; and FIEL 2000). The additional gains from good regulation are estimated to be about 0.35 percent of GDP on an annual basis.

30. As UNCTAD and World Bank (1994) argue, “Service providers are likely to prefer the higher incomes that result from control of entry into their occupation, or form restrictions on competition between those who are admitted to it . . . whenever regulation is judged necessary, a major concern must be to ensure that regulatory powers are not captured by the existing providers of a service and used to further their interests.”

31. In some cases, though, where the cost of raising revenue is very high, the direct regulation route may be preferable.

32. Hoekman 1996.

33. For a detailed treatment see Mattoo 2000 and forthcoming.

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