Face-to-Face with Productivity

Grocery store in Chincheros, Peru.

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It is not lack of investment but inefficient production that holds back Latin American incomes

MOST Latin American countries withstood the global financial crisis better than advanced economies. In 2010, Latin America experienced outstanding per capita income growth of more than 4 percent, with countries like Argentina, Brazil, and Peru roaring ahead at rates above 5 percent. But over the next few years, per capita growth is projected to moderate to no better than 2 to 3 percent a year. Sustaining growth at this rate would not be bad, but it won't allow the region to catch up quickly with the advanced economies—as such fast-growth economies as Japan and Korea have done or as China is doing now.

Moreover, because of a legacy of poor growth, the gap between Latin America and the developed world has actually increased during the past 50 years. The per capita income of a typical Latin American country was one-quarter that of the United States a half-century ago. Today it is one-sixth.

Despite frequent calls for more investment in the region, that's not the main reason for its flagging growth. Latin America's most serious problem is slow growth in productivity or, more precisely, in *total factor productivity* (TFP)—which is the ratio of the total goods and services an economy produces to the factors of production—such as capital, labor, and human skills (see Chart 1).

Paying attention to productivity

The price of failing to pay attention to productivity is high. Had TFP in Latin America grown at the same rate it did in the United States since 1960, per capita income today would be 54 percent higher—and relative per capita income would still be one-quarter that of the United States. (It is common to use the United States as a benchmark because of its diversified economy and its leading place in the world's income rankings since the early 20th century.)

Chile and Costa Rica are the two economies in the region that use their resources best, yet their TFP is about 75 percent that of the United States. If a typical country in the region achieved the same productive efficiency as the United States, its per capita income would double. Furthermore, more productivity would increase incentives to invest in human and physical capital, which would accelerate income convergence with advanced economies.

Achieving faster productivity growth is complex and entails more than fostering innovation and technological development. Low productivity is often the unintended result of myriad market failures and bad policies, which tend to be more prevalent in developing economies—including in Latin America. These flaws weaken incentives for innovation, discourage competition, prevent efficient companies from growing, and promote the survival and expansion of less productive firms. Developing countries can improve the efficiency of their economies in a number of ways, including by promoting competition, deepening credit markets, and improving tax and social policies.

More than an industrial problem

Analysis of productivity and competitiveness often tends to concentrate on the industrial sector alone, missing the overall picture.

Agriculture, a sector that in 1970 accounted for 40 percent of employment in Latin America, has been the star performer in most countries of the region. Unlike what occurred in other sectors, labor productivity (the only agricultural input for which we have good data) grew steadily during the past 50 years, at rates of 2 percent a year or higher. This is in sharp contrast to the performance of the industrial, and particularly the service, sector, where labor productivity growth plummeted during the 1980s and remained stagnant for two decades (see Chart 2).

Industrialization and prosperity are usually linked for good reason: developed countries became rich after the industrial revolution shifted workers from agriculture and traditional crafts to the more productive industrial manufacturing sectors.

Latin American countries tried to follow this route to prosperity during the second half of the 20th century, with only partial success. High tariffs kept firms oriented toward domestic markets, which were in most cases too small to foster competition. Attempts to promote industrial policies and exports were in general insufficient to absorb a growing number of workers migrating to cities. Instead, those workers entered the service sector, which today employs more than 60 percent of the labor force. Latin American economies leapfrogged the historical pattern by becoming service economies halfway along the road from poverty to prosperity.

Because the manufacturing sectors in Latin America employ barely 20 percent of the labor force, solving the problems of industrial competitiveness or technological backwardness will do too little to overcome underdevelopment. Raising manufacturing sector labor productivity growth to east Asia's levels would boost overall labor productivity growth from 1.5 percent to 1.8 percent per year. In contrast, aggregate productivity growth could more than double, to 3.1 percent a year if Latin America's service sector matched the productivity growth in east Asia. That would go a long way toward closing the 85 percent labor productivity gap vis-à-vis the United States in services—much larger than the 61 percent gap in manufacturing.

Too many small firms

Small and medium-sized firms outnumber large firms in every country, but Latin America has an overabundance of extremely small firms. In the United States, for example, 54 percent of firms have 10 or fewer workers. In Latin America the number of small firms is much greater: in Argentina, 84 percent of firms have 10 or fewer workers; in Mexico and Bolivia it is more than 90 percent.

Low productivity is much more common among smaller firms. In Mexico, manufacturing firms in the bottom 10 percent of the total factor productivity distribution require four times more capital and labor resources per unit of production than those in the top 10 percent. These gaps are much larger than in the United States or China. Mexico is not an isolated case in Latin America. In countries as different as El Salvador and Uruguay, productivity gaps between firms are high by world standards.

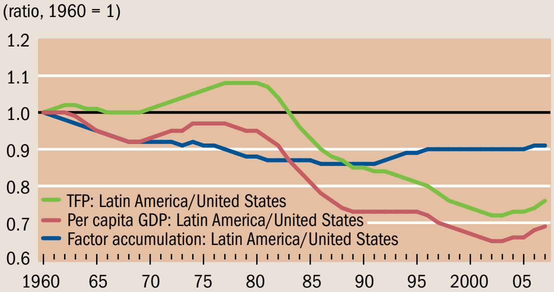
Firm size is only one reason for the poor allocation of resources in the region. Estimates suggest that large gains could be made in aggregate TFP if physical and human capital were allocated in a way that allowed more productive firms to grow and the least productive to shrink or disappear.

Chart 1

Lagging productivity, lagging income

Since 1960, total factor productivity (TFP) has grown substantially less in Latin America than in the United States, which accounts for most of the decline in per capital GDP relative to the United States.

(ratio, 1960 = 1)



Source: Pagés (2010) based on Daude and Fernández-Arias (2010).

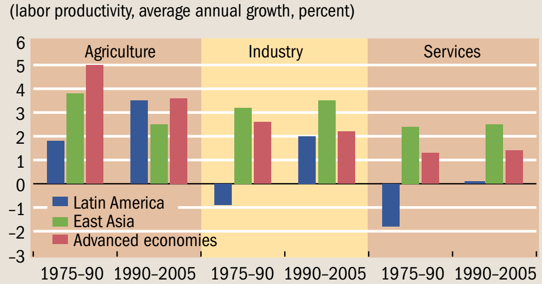
Note: Total factor productivity represents the ratio of the total amount of goods and services an economy produces to the factors of production—such as capital, labor, and human skills—used to produce the output. Factor accumulation represents essentially the growth in the stock of such inputs as capital and labor.

Chart 2

Up on the farm

Only in agriculture has the growth in Latin American labor productivity compared favorably with the rest of the world.

(labor productivity, average annual growth, percent)



Source: Pagés (2010) based on Timmer and de Vries (2007).

Note: Labor productivity represents the output per hour worked.

If resources moved from the least productive to the most productive firms, Mexico could double its industrial production; the typical gain for the rest of Latin America would be about 60 percent (estimates based on Hsieh and Klenow, 2009).

Outside the manufacturing sectors there seems to be even more room to improve productivity by reallocating resources. Productivity in retail trade has the potential for enormous increases. Millions of Latin American workers sought refuge in that sector because better jobs in manufacturing and in the modern service sectors, such as public utilities and financial services, were hard to come by. In Mexico and Brazil, retail labor productivity could rise from 15 percent to 54 percent of U.S. retail labor productivity if capital and labor were reallocated from less to more productive firms. Similar gains could be achieved in many other service industries.

Only companies with significant profit prospects find it worthwhile to expand beyond a certain level in Latin America.

Misallocation of resources results from myriad market and policy failures that create an uneven playing field for firms. This reduces productivity because it gives an inordinate market share to low-productivity firms, while restricting the growth of more productive ones—and is why reallocation of resources can yield such large gains.

Nowhere is this more apparent than in the service sector, where the norm is small, informal firms—that is, those that are unregistered, do not pay taxes, and do not abide by government regulations. Policies that tolerate evasion of taxes and social security levies can offset informal firms' lower productivity, allowing them to stay in business and absorb resources that formal firms could use more productively.

Latin American economies must face up to low productivity in the service sector. The industrial sectors of the region have few opportunities for growth—not only because China is becoming the producer for the world, but because capital inflows cause currency appreciation, which reduces the competitiveness of those sectors. As long as China—and other large emerging economies with fewer natural resources than Latin America—keep growing at a fast pace, the agriculture and raw materials sectors are sure to expand. However, that will not by itself generate the number and types of jobs needed for continued poverty reduction and a better quality of life for Latin Americans. Improving the productivity of the service sector is the most effective way to reach this goal for two reasons. First, the service sector employs the most workers and second, greater industrial competitiveness requires better productivity in such service sectors as logistics, transportation, distribution, and communications.

Many policy inadequacies have contributed to the dismal productivity levels and growth in Latin America. Trade, transportation, innovation, and industrial policies as well as support programs for small and medium-sized firms all affect productivity (see Pagés, 2010). But financial and tax policies merit special attention because of their considerable influence on firms' productivity and on the ability of productive firms of all sizes to stagnate or grow.

Productivity needs credit

Latin American financial systems have fixed many of their inefficiencies, which stemmed from governments that intervened too much, regulated badly, and neglected oversight. Latin American banks' ability to weather the world financial crisis relatively unscathed is evidence of these improvements. But by international standards, Latin American credit systems remain small and offer too few products. Systems in many countries are shallower than in the early 1980s.

Scarce credit helps explain the uneven productivity, especially among small and medium-sized firms. Because they cannot borrow, many highly productive firms cannot expand and many low-productivity firms cannot make the technological changes and investments needed to increase their productivity. In Colombia, a 14 percent increase in the amount of credit received by small businesses over a decade produced TFP increases of 50 percent (Eslava and others, 2010).

Lack of credit also hurts productivity because it weakens incentives for compliance with tax and labor regulations—usually required to obtain bank credit—thus lowering the costs of informality. Greater credit availability can make a major contribution to formalizing employment, as became clear in Brazil between mid-2004 and the outbreak of the world financial crisis four years later (Catão, Pagés, and Rosales, 2009). During that period, credit to formal firms rose from 15 percent to 24 percent of gross domestic product, and the percentage of workers with formal employment contracts rose from 38 percent to 45 percent. This was not a coincidence. The sectors whose investment and cash flow needs made them most dependent on credit were those with the fastest rate of labor force formalization.

A stable supply of credit is needed to make productivity improvements sustainable. A sudden credit crunch can harm productivity in the long term in two ways. First, it delays needed investment in new technologies and, second, it can force productive but credit-constrained firms to close. A study of firms in Colombia shows that a small firm must be three and a half times more productive than a large one to have the same chance of surviving a credit drought, which strongly suggests that credit crunches hit smaller firms hard (Eslava and others, 2010). If credit crises are frequent, efficient small firms have fewer opportunities to survive and grow.

Although the Latin American economies survived the world financial earthquake relatively well, greater credit stability will take work. Better financial supervision and prudential regulation to protect the financial sector from shocks still has a way to go in most countries, especially those more dependent on external finance and more exposed to possible swings in commodity prices.

Most countries must also strengthen creditors' property rights, so that banks can lend with collateral to small and medium-sized firms. This is perhaps the most difficult, but most necessary, step to get credit systems to contribute more to the growth of productivity.

Taxes and productivity

Along with insufficient credit, taxation is a major contributor to misallocation of resources, which leads to slower productivity and growth. According to the World Bank's *Doing Business*, Latin American companies spend an average 320 hours a year preparing their tax returns, compared with 177 hours in advanced economies. Colombian firms are relatively fortunate, spending less time on these tasks than their counterparts in the region. Even so, Colombian companies spend an average of 208 hours on tax matters. In Brazil, Bolivia, Ecuador, and Venezuela, companies waste between 600 and 2,600 working-hours on tax issues.

Because tax systems are so complex—and smaller companies contribute so little to tax collection—it seems reasonable to create simplified systems for them. Such regimes exist in 13 of 17 Latin American countries. In two other countries, the tax offices have exempted small companies from taxes.

But these systems have altered the natural incentives for firms to reach their optimal scale. For instance, although simplified tax regimes would seem to be good for productivity because they save small companies costly hours of bureaucratic work, in fact, they discourage small firms from growing beyond the sales or payroll threshold at which the benefits phase out and the higher taxes would cut into their profitability. Were a small Peruvian company to exceed the threshold, its profits would fall by half; the profits of an Argentine company would slide 25 percent. Only companies with significant profit prospects find it worthwhile to expand beyond a certain level in Latin America. That helps explain why there are so few medium-sized firms in the region and why many small, low-productivity companies can survive, using resources that would be more productively employed in larger companies.

Moreover, because tax authorities concentrate their collection efforts on large companies and because corporate taxes for large firms are high (an average of 20 percent compared with 16 percent in advanced economies), many companies with growth potential are reluctant to make investments that could increase their productivity, because they would not reap sufficient returns. The larger the company, the more investment decisions are affected by these tax concerns. And the more investment is concentrated in a few large companies, the greater the temptation of the political system and the tax administration to impose heavy taxes on their income.

The evasion of social security contributions adds to the harmful effects of unequal tax payments and enforcement. Only one in three workers is registered for social security in Latin America and the Caribbean. Evasion of social security taxes also subsidizes firms that fail to pay—which tend to be smaller and less productive than those that make employer contributions—and reduces small productive firms' incentives to grow for fear of showing up on the authorities' radar. As with tax systems, productivity problems can be made worse by either promoting special social security regimes for microenterprises and small firms or by subsidizing the contributions of those in the informal sector. Expanding the reach of social security and social protection is justifiable, and vigorous social policy is essential in a region plagued by inequalities. But such well-intentioned but poorly conceived remedies increase incentives to work in the informal sector and hurt aggregate productivity.

Simplifying, unifying, and enforcing the tax provisions that apply to firms and expanding social security coverage in a way that does not encourage inefficient behavior could contribute greatly to productivity. Tax and social contribution regimes that vary by sector, company size, or for other reasons distort the allocation of resources, divert scarce managerial resources, and are an extra burden for public administration.

No substitute for productivity

Per capita income in Latin America and the Caribbean has trailed income in the rest of the world not because this region's citizens work or invest less, but because, in relative terms, productivity growth has plummeted. This can't continue. The cost of extracting some commodities and primary products is low compared with international prices for those products, which can raise the standard of living. However the past 50 years have shown that this strategy is not enough. There is no substitute for producing more effectively, innovating, training, adapting, changing, experimenting, reallocating, and using work, capital, and land with greater efficiency. In other words, productivity must grow. ■

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