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These notes summarize recent research on global trade issues. They reflect solely the views of the author, and do not necessarily reflect the views of the World Bank Group or its Executive Directors, or the countries they represent.

Trade Note 9

Trade for Development in Latin America and the Caribbean

Introduction

Beginning in the 1980s, but especially during the 1990s, Latin American and Caribbean (LAC) countries launched trade policy reforms that remain controversial partly due to the mixed overall economic performance of the region. Economic growth has been sluggish, particularly after 1998, and unemployment, the incidence of informal employment, and income inequality have risen after the reforms. Reform critics associate these outcomes with international trade; we examine some of their claims in this article. After describing trade policies in the region, we review the relationship between openness and a variety of economic outcomes. We conclude by drawing attention to forgotten complements required to maximize the benefits of trade.

Trade Liberalization in LAC

The past two decades saw major changes in trade policies in the region. Figure 1 shows the evolution of the average level of import tariffs. Between 1980 and 1999 the region reduced tariffs from an average of 30% to 10%, very close to OECD standards. The set of protectionist policies included a variety of non-tariff trade barriers. Licensing requirements, prohibitions, quotas, tariff quotas and administered pricing used to be very popular in the region. Table 1 shows the coverage of non-tariff barriers (NTBs) in 1989-94 and 1995-98. With the exception of South Asia, the coverage of NTBs fell

worldwide, but LAC already had a lower incidence of NTBs than other regions by the early 1990s.

Table 1

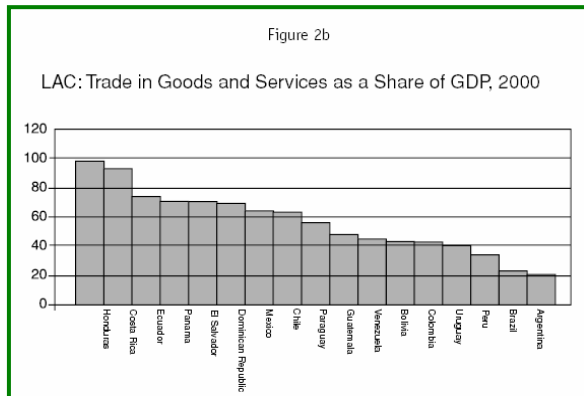
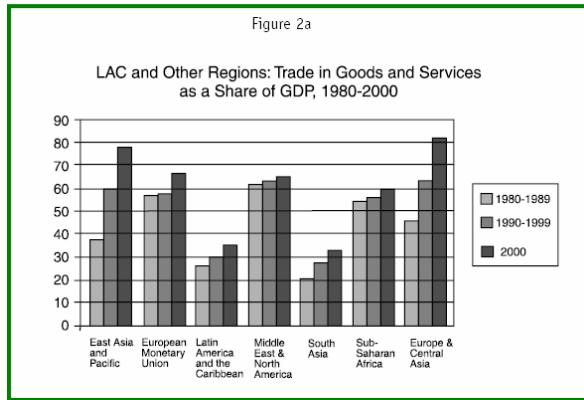
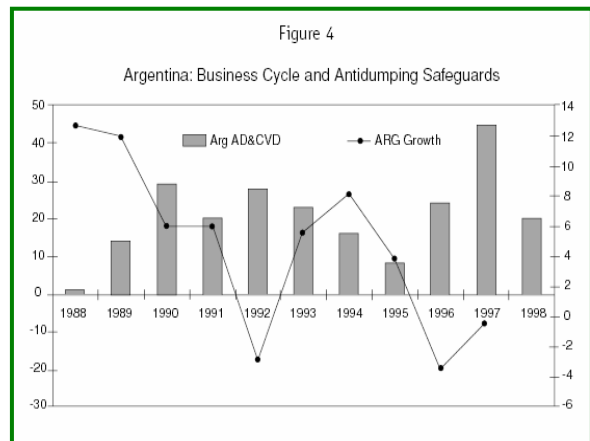
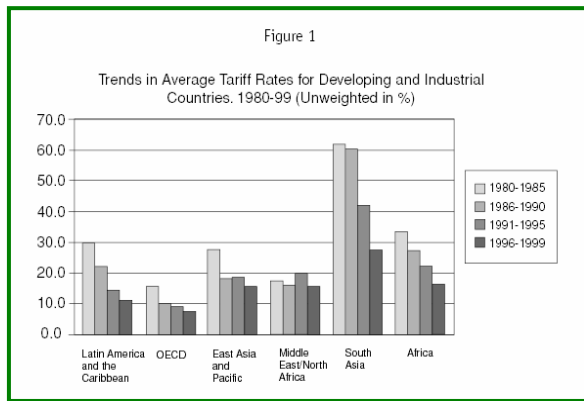
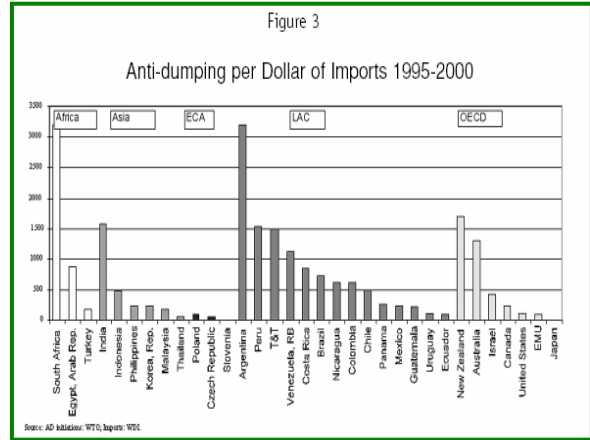
Frequency of core NTBs (percentage)	1989-94 1995-98	
	East Asia and Pacific	30.1
Latin America	18.3	8.0
MiddleEast/North Africa	43.8	16.6
South Asia	57.0	58.3
Sub-Saharan Africa	26.00	10.4

The 1990s also witnessed the revival of regional and bilateral trade agreements. This global phenomenon was a by-product of unilateral liberalization of trade and investment. Initiatives to create common markets gave rise to the overhaul of existing agreements (Central American Common Market—CACM, Andean Community—AC, and Caribbean Community - CARICOM) and the creation of a new one (MERCOSUR). Also, free trade agreements (FTAs) flourished in the region. There are now more than twenty FTAs among LAC countries and with industrialized countries (NAFTA), and LAC remains committed to the proposed Free Trade Area of the Americas (IDB 2002).

Despite regional and unilateral trade liberalization, the extent of liberalization was not the same across countries or sectors. The region still lags behind other regions in the liberalization of trade in financial and other services and agriculture. This heterogeneity of experiences is reflected in the wide range of trade-to-GDP ratios observed in the region (Figures 2a-b). The relatively low average trade share of LAC is partly explained by geography, transport costs, and other factors unrelated to trade policy. However, as the use of tariff and non-tariff restrictions fell over time,



many countries turned to antidumping laws to restrict trade. Antidumping laws allow import duties when “material injury” to domestic firms *and* pricing at less than-fair-value have been proven in antidumping investigations. The abuse of antidumping laws has turned this instrument into a source of international disputes. Figure 3 shows antidumping investigations per dollar of imports around the world in the late 1990s, when LAC was a leader in the use of this protectionist instrument. In countries, such as Argentina, these duties were imposed in times of economic downturn (Figure 4). This trend is thus the Achilles’ heel of LAC’s trade reforms.



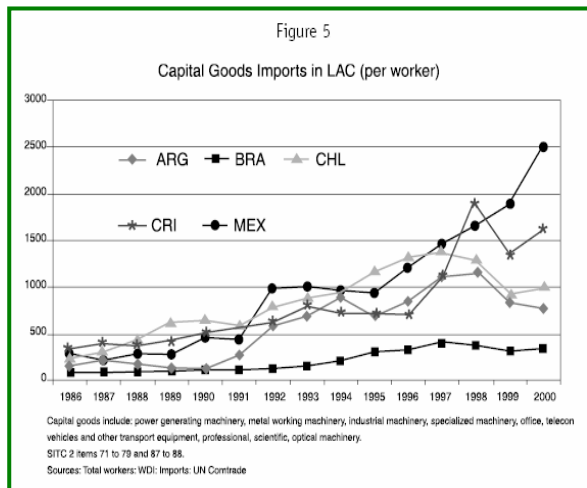
Trade and Growth

Trade liberalization in LAC was accompanied by macroeconomic and other structural reforms. The success of the reform package has been questioned by critics of globalization because the region’s post-reform growth did not replicate the East Asian or past LAC growth “miracles” as promised by some reformers. Disentangling the effect of trade liberalization from other policies is challenging, especially because the region was hit by volatile capital flows, often exacerbated by weak macro-financial policies. Loayza, Fajnzylber, and Calderón (2002), however, found that after controlling for cyclical and global factors, variables that measure outcomes of the reform package had a positive effect on growth. The reforms thus explain the modest improvement in growth in the 1990s relative to the 1980s, although there are some exceptions.

There are many plausible channels through which trade can spur development. Some highlight static



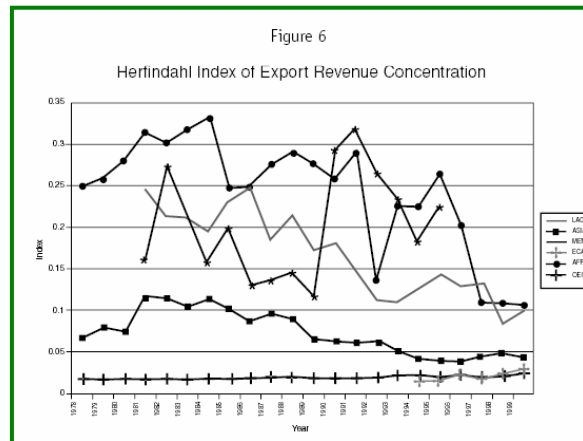
efficiency gains arising from the reallocation of labor and capital from protected and inefficient to export-oriented industries. Other avenues provide dynamic gains through technological spillovers and learning when knowledge is embodied in traded goods, particularly capital goods. In LAC, trade reforms were associated with an increase in the value of imports of capital goods per worker as shown in Figure 5.



Most cross-country studies have found a positive relationship between trade openness and income growth.¹ This view was challenged by Rodríguez and Rodrik (2000) on the grounds that empirical measures of openness capture the effect of omitted variables. However, Wacziarg (2001) improved upon existing work by identifying a positive direct effect of liberal trade *policies* on economic growth. Furthermore, the econometric study by Lederman and Maloney (2003) suggests that the concentration of export revenue hampers growth, whereas trade liberalization *policies* have a positive effect on growth. As shown in Figure 6, LAC exports diversified in the 1990s, probably due to the reduction of the anti-export bias of import barriers. This bodes well for long-term growth.

Trade and Natural Resources

A criticism of trade liberalization is that the ensuing pattern of development is restricted by dependence in natural resources. There are various versions of the theory. One strand says that resource-based development is associated with lower human and physical capital accumulation, productivity growth, and spillovers. Another



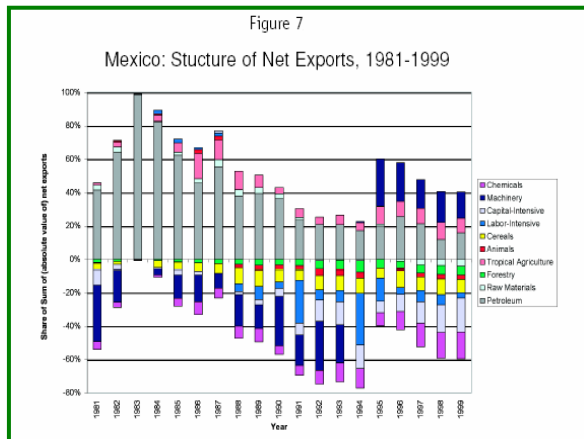
maintains that growth prospects in a natural resource economy are limited by the secular deterioration of its terms of trade. Others argue that natural resource specialization increases vulnerability due to export concentration on a limited basket of commodities, or that rent-seeking activities associated with resource extraction lead to weak institutions.

Sachs and Warner (1999, 2001a,b) provide econometric results in favor of the resource curse theory by including natural resource exports as a share of GDP in an otherwise standard cross-country growth regression. Lederman and Maloney (2003) found that this result is not robust to alternative measures of resource abundance or estimation technique and that, if anything, the effect of natural resources on growth is positive. De Ferranti, Perry, Lederman and Maloney (2002) find that resource-based activities historically have been a source of economic dynamism, as demonstrated by the experience of countries such as Australia or Finland, where resource activities turned into knowledge activities exhibiting high productivity growth. Martin and Mitra (2001) show that productivity growth in agriculture outperformed that of manufacturing in both developed and developing countries. In LAC, Chile is the most salient example of a successful development experience based on natural resources, both in mining and agriculture.

Even if policymakers are concerned about specialization in agriculture or mining, it is misleading to argue that protectionism is the road to economic diversification. Modern trade theories highlight the importance of geography (distance to



large markets), technical knowledge, human capital, public infrastructure, the quality of institutions in determining, combined with labor, land, capital and natural resources, production decisions, specialization patterns, and the direction of trade flows. De Ferranti, Perry, Lederman, and Maloney (2002) thus concluded that economies can diversify their trade structures through policies that favor the accumulation of new endowments. Figure 7 shows Mexico's experience. This country was able to diversify its export base and change its trade structure, which was originally concentrated on natural resources (petroleum). Now it is a net exporter of machinery. Another case of structural change in an agricultural economy is Costa Rica, which became an exporter of computer chips and medical equipment thanks to foreign investment attracted by its well trained labor force, institutional stability, and geographic proximity to the United States. In sum, natural resources are neither a curse nor destiny.



Trade, Wages, and Inequality

During the 1990s several LAC countries experienced high unemployment, wage losses, and increased informality. A source of controversy is the role played by trade. Part of the efficiency gains from trade occurred via resource reallocations. Since labor does not automatically migrate from declining to emerging sectors, this adjustment process could have created temporary unemployment. In the long-run, supply and demand for labor, for example, will adjust to ensure a natural rate of unemployment, which depends more on labor market regulations than on trade policy. There is no evidence of any systematic relation between openness and unemployment at either

worldwide (Figure 8) or regional (Table 2) levels. Unemployment rates in many liberalizing economies are not systematically higher after reforms. For instance, Chile, the LAC country with most liberal trade policy, experienced high unemployment rates in the years immediately following its reforms. More recently (prior to the downturn of 1999) Chile's unemployment returned to low levels. Similarly, in Mexico — after eight years of living under NAFTA rules — the unemployment rate is currently similar to its historical average.

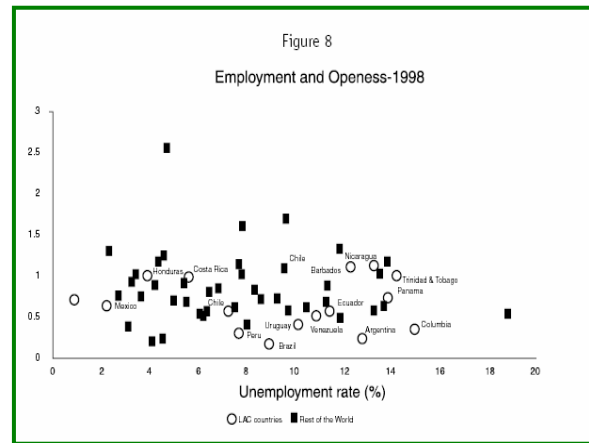


Table 2
Average Unemployment Rates in LAC (%)

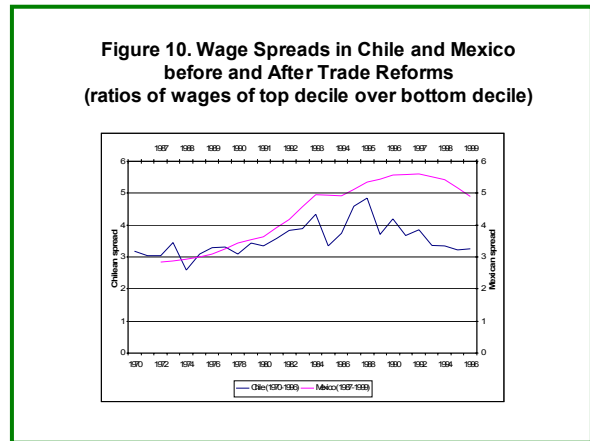
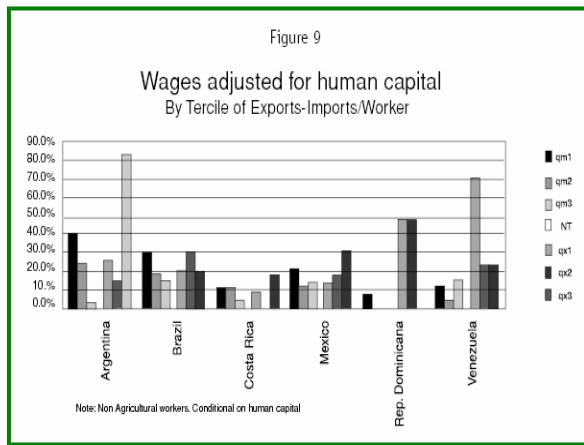
Country	1970s	1980s	1990s	Entire Period
Argentina	4.1	4.8	11.6	6.9
Bolivia	6.3	7.7	4.8	6.3
Brazil	6.6	5.4	5.4	5.7
Chile	10.5	14.4	7.0	10.7
Colombia	9.6	11.3	10.7	10.6
Costa Rica	5.0	6.9	5.3	5.9
Guyana	0.5	0.3	n.a.	0.4
Honduras	n.a.	4.5	3.4	3.7
Mexico	7.0	4.7	3.8	5.0
Peru	7.4	7.4	8.5	7.7
Paraguay	7.3	11.8	14.2	10.7
Uruguay	9.2	10.6	9.8	9.9
Venezuela	5.7	8.8	9.7	8.0
LAC-mean	6.6	7.6	7.9	7.0
LAC-median	6.8	7.4	7.8	6.9

The increase in wage inequality in Mexico and Chile, as in most countries in LAC, was the consequence of skill-biased technological change brought by international trade and investment (De Ferranti, Perry, Gill, Guasch, Maloney, Sánchez-Páramo, and Schady, 2003). Most countries in the region experienced a significant increase in relative demand and skill premiums for more educated workers. Moreover, Figure 9 shows that exposure to global competition is associated with higher

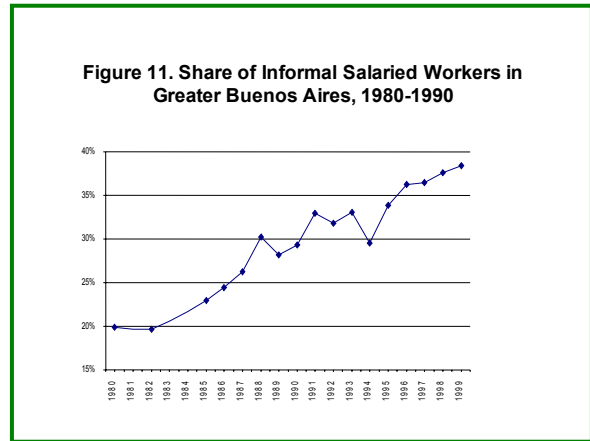


wages for a given level of education.² International competition is thus associated with the adoption of new technologies that utilize skilled labor and an increasing gap with respect to wages of low-skilled workers. But this “skill premium” offers an opportunity for long-run development as families and the public sector can thus focus on improving the quality and coverage of education demanded by technological change. If LAC countries increase the supply of skills, they can accommodate high real wages and an equitable wage distribution. Figure 10 shows a decline in wage inequality in Chile and Mexico as the demand for skills was met by rising supply of skills.

duties, non-tariff barriers, and even domestic support policies are often used to limit import competition. Multilateral negotiations under the WTO and regional agreements can guarantee market access, and the latter also offer “preferential” access. Their efficacy depends on their enforcement mechanisms, which may be more effective in regional or bilateral agreements than under the WTO.



The incidence of informality is a concern for LAC. Stallings and Peres (2000) found that six of 10 jobs in seven LAC countries were created in the informal sector during the 1990s. However, it is not clear how liberalization can erode job quality. In the case of Argentina, informality began to rise before the first trade reforms of 1988 (Figure 11). De Ferranti, Perry, Lederman and Maloney (2002) argue that informal employment is not explained by trade, but rather by booming nontradable activities driven by overvalued exchange rates resulting from capital inflows after the macro stabilizations of the early nineties.



Unilateral and Regional Liberalization

Unilateral liberalization came in tandem with the proliferation of regional trade agreements. Why is unilateral trade liberalization not enough to reap the benefits of freer trade as suggested by theory? The simple answer is that unilateral liberalization does not guarantee market access. Tariffs, antidumping

Perhaps more importantly, regional agreements cover issues beyond trade and can have important developmental impacts. For example, comprehensive trade agreements with developed countries such as the United States or the European Union can enhance the credibility of the economic reforms, because reversals can be costly in terms of potential retaliations. Moreover these agreements cover issues related to investor protection and intellectual property rights, which for most middle-income countries of LCR can have significant positive effects by reducing country risk and stimulating national research and development (R&D) efforts that accelerate the pace of



technological progress. Finally, FTAs can have powerful effects on the domestic politics of trade by mobilizing export interests in favor of the trade reforms. These benefits have to be weighed against potential trade diversion effects from regional agreements, which can be minimized through simultaneous unilateral and multilateral liberalization.

Forgotten Complements to Trade

Neoclassical trade theory predicts that income levels across liberalized economies will converge over time. From a theoretical perspective there are many reasons to be cautious about this prediction. Productivity levels may not converge in the presence of labor skill gaps between poor countries and innovator countries (Acemoglu and Zilibotti 2001). Similar arguments can be made for other factors that impair the capacity of a country to adopt new technologies and innovate, such as differences in infrastructure, domestic institutions, and R&D expenditures and policies. Clear examples of incomplete convergence can be found within countries, where there are persistent pockets of poverty, in spite of extensive economic integration across regions.

Lederman and Maloney (2003) conclude that trade liberalization and NAFTA are not enough to help Mexico catch-up in innovation and productivity levels to the levels observed in its North American partners. Mexico suffers from low levels of R&D expenditures, low levels of patenting activity, and a weak and inefficient national innovation system. De Ferranti, Perry, Gill, Guasch, Maloney, Sánchez-Páramo, and Schady (2003) show that LAC in general suffers from significant deficits in both skills and innovation. All these factors explain why productivity growth is sluggish in the region and why productivity differences are so persistent even when contrasted with some East Asian economies. Given the complementarity between skills and technology reflected in the global skill-biased technological change, trade reforms alone are not enough: Without a well trained labor force and greater R&D effort, these reforms will soon face skill bottlenecks and persistent inequality in earnings and the process of acquisition and production of knowledge will be severely limited. It might be naïve to expect that trade and stability

alone will enable LAC to catch up to the world's technological leaders.

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¹ See Dollar (1992), Ben-David (1993), Sachs and Warner (1995), Edwards (1992, 1998), Frankel and Romer (1999), Dollar and Kraay (2000), Alesina, Spolaore and Wacziarg (2000), and World Bank (2001) among others.

² In this figure NT stands for non-traded industries. qx1, qx2 and qx3 represent terciles of workers in industries with highest, second highest and lowest shares of exports in total production, respectively. qm1, qm2 and qm3 represent a similar ordering for imports shares.