Policy Discussion Brief

Bridging Integration Gaps

Scenarios and Policy Recommendations to Promote Physical Infrastructure and Reduce Intra-Regional Trade Costs

Third Meeting of the Finance Ministers of the Americas and the Caribbean

Lima, Peru ▪ May 28, 2010

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This policy brief is a joint Inter-American Development Bank (IDB), World Bank, and United Nations Economic Commission for Latin America and the Caribbean (UNECLAC) response to the request made by Ministers during the Second Meeting of the Finance Ministers of the Americas and the Caribbean held in Viña del Mar, Chile, on July 3, 2009.

Overall direction for the preparation of this policy brief was provided by Santiago Levy, Vice-President for Sectors and Knowledge (IDB), Augusto de la Torre, Chief Economist for Latin America and the Caribbean (World Bank), and Alicia Bárcena, Executive Secretary (UNECLAC).

The policy brief was prepared by a team that included Antoni Estevadeordal, Paolo Giordano, and Mauricio Mesquita Moreira (IDB), Jordan Schwartz, Tomas Serebrisky and Aiga Stokenberga (World Bank), and Ricardo Sánchez (UNECLAC).

Juan Blyde, Esteban Diez Roux, Julio Guzmán, Jeremy Harris, and Rodolfo Huici (IDB), Darwin Marcelo, and Raquel Fernández (World Bank), Georgina Cipoletta Tomassian, Octavio Doerr, Gabriel Pérez Salas, Patricio Rozas Balbontín, Varinia Tromben, and Gordon Wilmsmeier (UNECLAC) contributed to the brief. Ziga Vodusek, Joaquim Tres, Ariel Mecikovsky, María Lissette Romero, María Rospide and Martha Skinner (IDB) provided valuable support to the team.

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EXECUTIVE SUMMARY

This policy brief is intended to serve as the basis for the discussion of the Ministers of Finance on action needed to "promote physical infrastructure and reduce intra-regional trade costs," as formally requested in the Second Annual Meeting held in Chile in 2009.

The Latin American and Caribbean region must bridge three interrelated policy gaps in order to advance its integration agenda. First, despite advances in trade liberalization, significant progress still must be made to perfect, harmonize, and bridge existing trade agreements. Second, the logistical costs related to the coverage and quality of physical infrastructure and lack of regulatory harmonization pose a serious constraint to regional integration and global competitiveness. Third, although cross-border strategic investments hold the potential to further advance the region's integration, their execution would be accelerated by overcoming certain institutional and operational obstacles.

Bridging these gaps in trade and physical integration, and achieving significant operational progress in regional cooperation, are crucial steps to building the region's competitiveness in the aftermath of the financial crisis. With the objective of informing policy decision making, this policy brief provides an overview of the following:

- The main missing trade policy links in areas in which trade liberalization can remove welfare-reducing trade protection and where regulatory harmonization can promote further integration of productive value chains. Although 89 percent of current total intra-regional commerce is traded preferentially, rules of origin restrict preference utilization and free trade agreements cover only half of the potential bilateral trade relationships.

- The main factors that explain high logistics costs, such as: an inefficient multimodal transport mode mix; bottlenecks at border crossings and customs-related inefficiencies; insufficient capacity and quality of land transportation networks; congestion, underinvestment, and inadequate regulation of ports and maritime services; uncompetitive market structures in air cargo services. Estimations of these costs range from 18 to 40 percent of the GDP and can constitute up to more than half of the price of the delivered goods.

- New counterfactual simulation scenarios that provide a sense of the potential trade and welfare gains that could result from policy action aimed at reducing trade protection and logistics costs. In South America, a reduction of only 4.3 percent of current transport costs would match the benefits of the complete liberalization of intra-regional trade; in Central America, intra-regional exports would double if the region achieved a full level of integration.

- An assessment of the institutional and operational factors that hamper the design and implementation of regional cooperation projects and policy recommendations to overcome these obstacles.

Based on the evidence presented in this policy brief, key strategic questions that may be debated by the Ministers to prepare the ground for future action include the following:

- Is there a need to give higher priority to a regional agenda that addresses trade integration and the wider issue of a comprehensive reduction of logistic costs?

- Should investments in physical integration—the "hardware"—be supplemented with grant resources aimed at promoting policy harmonization, regulatory convergence, and the development of regional cooperation frameworks—the "software?"

- Do the Ministers endorse the diagnostic of the binding constraints that currently limit the demand and supply of integration investment projects? Is the proposed compact of financial and non-financial instruments adequate to overcome these obstacles?

- What is the role of international and regional financial institutions? What is the most appropriate division of labor across institutions?

I - Trade Costs: Why Should We Care?

The impressive progress made by Latin America and the Caribbean (LAC) in liberalizing its regional and extra-regional trade in the last decades might give the impression of a "mission accomplished." Nothing could be further from the truth. While traditional trade barriers such as tariff and non-tariff barriers have been drastically reduced, there is still an unfinished agenda related to the need to perfect, harmonize, and bridge numerous existing agreements (Estevadeordal *et al.,* 2009), whose potential benefits can be anything but residual.

Furthermore, tariffs and non-tariff barriers do not cover the wide range of costs to intra- and extra-regional trade faced by LAC countries. Thus, while these types of barriers were indeed prominent in the late 1980s, and the emphasis on their removal was justifiable then, other less visible costs that increasingly matter for trade were neglected. These costs can generally be described as logistics costs, that is, costs incurred in the distribution of goods and services from the production to retail markets, and whose main components include expenses related to transportation and trade facilitation. Taken as a whole, these costs in LAC range from 18 to 40 percent of GDP by country (Guasch and Kogan, 2006) and can constitute more than half of the price of delivered goods (Schwartz, *et al*. 2009), depending upon product and trade route.

Factors that have combined in recent years to give logistics costs an unprecedented strategic importance to the region include the following:

- The very success of the trade reforms, which has drastically altered the relative importance of tariff barriers on one hand and physical and administrative barriers to trade on the other.

- Decades of underinvestment in transport infrastructure, compounded by a dysfunctional regulatory framework of transport services, and costly, fiscally-oriented border-crossing management.

- The growing geographical fragmentation of production and the time sensitivity of trade.

- The internationalization of consumer taste and retail options, resulting in the replacement of local products with goods from abroad.

- The emergence of vastly labor-intensive and resource-importing economies such as China and India, which is pushing the LAC region towards increasing specialization in transport-intensive goods, such as resource-intensive manufacturing, basic commodities, and other bulk-shipped or time-sensitive products.

This new reality calls for a more balanced trade agenda that not only presses ahead on removing traditional trade barriers, but that also leads to a greater commitment of resources for measuring, identifying causes, and understanding the impact and development of policies that minimize logistics costs.

This balanced agenda is particularly critical for regional integration. Without further perfecting and bridging the existing trade agreements, it is unlikely that LAC will maximize the gains of scale and specialization of a truly unified market. Likewise, these gains will never materialize without improvements in the region's interconnecting transport infrastructure—historically biased towards extra-regional markets—and without a drastic reduction in paperwork and time spent at border crossings.

This document aims at advancing this agenda and offers a brief road map on priorities for minimizing the region's trade costs. It begins with a brief analysis of tasks for removing the remaining traditional obstacles to trade in the region, a challenge that should not be underestimated. It follows with a more extensive discussion of what is arguably the "forgotten agenda" of the regions' trade policy by seeking to assess the importance, determinants, and impact of logistics costs on LAC's trade. The emphasis is placed on the cost of transport, which is arguably not only the main component of those logistics costs, but also the one whose resolution will demand the most financial and institutional resources. The final section summarizes the main policy recommendations.

II - The Unfinished Liberalization Agenda: Addressing the Remaining Barriers

Since the late 1980s tariffs in the region have come down drastically, with most favored nation (MFN) tariffs falling from an average of more than 40 percent to close to 10 percent in the late 1990s, and with preferential tariffs declining even further. In fact, LAC is rapidly reaching the point where the largest bilateral trading relationships are covered by preferential trade agreements. There are 42 agreements in force, covering 237 bilateral relationships (of a possible 496), which represent 89 percent of intra-LAC trade.[1] Of these agreements, 24 eliminate tariffs on at least 80 percent of products.[2] Despite these impressive achievements, the region has still a long way to go before traditional trade costs cease to be a barrier to intra-regional trade (Estevadeordal *et al.*, 2009).

FTAs and Missing Links

Most of the "missing links," or bilateral relationships not covered by free trade agreements (FTAs), have relatively little trade. The majority of these are between the countries of Central America or countries of the Caribbean, on one hand, and South America on the other (except for Chile and Colombia, which each have agreements with some or all Central American countries). The big "missing links" within LAC are the bilateral relationships of Mexico with Venezuela, Panama, and the Dominican Republic, and those between Brazil and the Caribbean Basin, including Central America. These alone represent nearly half of the intra-LAC trade that is not between countries with an FTA in place. Furthermore, although Mexico has a series of partial-scope agreements with the Mercosur countries, only the agreement with Uruguay has a broad coverage of products, thus leaving significant sectors out of the agreements.

[1] Based on 2008 figures, excluding exports from Antigua and Barbuda and Haiti, for which 2008 figures are not yet available. All figures cited are sourced from INTradeBID (www.iadb.org/int/intradebid).
[2] Measured as more than 4,000 of the 5,000+ subheadings of the Harmonized System. All figures cited sourced from INTradeBID (www.iadb.org/int/intradebid).

Residual Protection in FTAs

Even where an FTA is present, not all trade between the respective countries is free. Most FTAs exclude a subset of products from the tariff elimination process, or defer full liberalization for a long period of time with residual tariff protection lasting up to 20 years in some cases. Examples include several Mercosur-Andean Community agreements[3] where large proportions of tariff lines will not be fully liberalized for 14 years. Additionally, the degree to which tariff liberalization is extended can be subjected to quantitative restrictions, whereby many countries in the region maintain tariff rate quotas (TRQs) within their regional FTAs.

Most importantly, duty free preferential treatment is only available for products that originate in one of the FTA signatory countries based on the criteria set out in the rules of origin (RoO). These criteria specify which materials, or what share of materials, may be sourced from outside the signatory countries. As supply chains lengthen and sourcing becomes increasingly global, these restrictions can impede utilization of the tariff preferences established in the FTAs.

Furthermore, in a region with so many different FTAs, and where each country may be a signatory to multiple agreements, the differences in RoO from one FTA to the next can generate additional costs to exporters as they must manage a different RoO for each foreign market, each with different procedures for demonstrating, certifying, and verifying compliance with the rules. For example, in the Mexican, Chilean, and Peruvian agreements with their trade partners, in over half of these agreements, the same rules apply for only slightly more than 40 percent of products traded. For an exporting firm trying to take advantage of preferences in multiple markets, a situation in which the rule of origin is different in each market can generate significant compliance costs, undermining the value of the tariff preferences.

Additional residual barriers to trade in goods can be found in sanitary and phytosanitary (SPS) regulations, as well as other technical barriers to trade. Recent years have witnessed growth of SPS-related barriers, since they can be used to disguise protectionism under the cloak of safeguarding the health and safety of the local population. Since the creation of the World Trade Organization (WTO) in 1995, LAC countries have referred 142 cases of suspected abuse of SPS regulations to that organization. Of these, two thirds have challenged the scientific justification for measures, procedural barriers, or failure to harmonize with international standards established by the competent organizations (OIE, IPPC, Codex). LAC countries have also been the subject of 64 cases notified to the WTO regarding potential violations of the WTO SPS agreement, particularly concerning animal health measures established in the wake of the bird flu and swine flu outbreaks.

Intra-Regional Trade without Policy Barriers

What would LAC look like without policy barriers to trade? The missing links of market access would have to be completed, and the residual protection and regulatory divergence would have to be significantly reduced or eliminated. In existing and "missing link" FTAs, the number of

[3] These include the Mercosur-Bolivia agreement, the agreement of Mercosur with Peru (Acuerdo de Complementación Económica, ACE 58), and the agreement of Mercosur with Colombia, Ecuador, and Venezuela (ACE 59).

products excluded from tariff elimination would have to be minimized. Where there are TRQs, these would have to be converted to unlimited preferences, or their limits increased to the extent possible, and the procedures for taking advantage of such quotas would have to be simplified. In the case of very long tariff elimination schedules, acceleration of tariff elimination is a useful and desirable option.

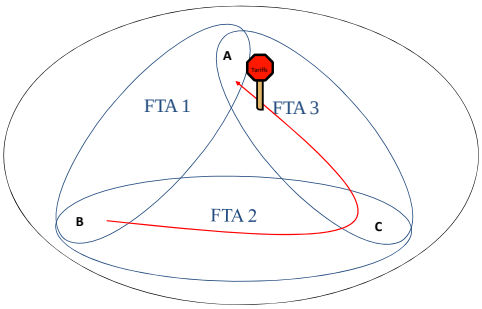
Regarding SPS measures, a seamless LAC would have a single set of food, animal, and plant health regulations. But even short of this, better harmonization at the sub-regional level, for example, within Mercosur, Caricom, the Andean Community, or the Central American Common Market, would be a significant step forward. Additionally, the establishment of regional laboratories for technical analysis of SPS measures would greatly facilitate trade of agricultural goods.

Of particular importance are the rules of origin and in first place the implementation of cumulation mechanisms that help address the impediments to global supply chain integration. At present, a major consequence of defining rules of origin agreement-by-agreement is that preferential treatment can be jeopardized when production processes are carried out in countries that are not members of the same agreement. In these cases, parts or components that are not sourced within a single FTA can cause the final good to be disqualified from originating status, even if the exporting country and the importing country both have FTAs with the country in which the part or component was produced.

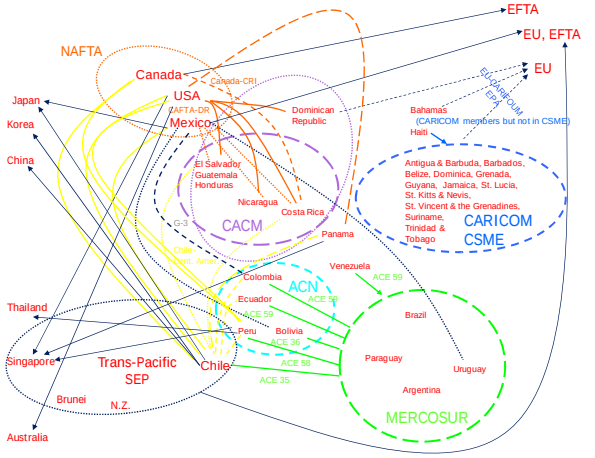
Box 1. Dealing with Rules of Origin in Free Trade Agreements (FTAs)

The purpose of rules of origin (RoO) is to restrict the benefits of a FTA to the signatory parties, by defining criteria for determining what products are eligible for the negotiated tariff preferences by virtue of "originating" in a member country. In many cases, these criteria take the form of defining which material inputs in a product must be sourced within the region.

However, in a region with many bilateral, overlapping agreements, each with different RoO and each defining a different set of countries from which certain inputs may be sourced, these rules become a constraint on lengthening supply chains, and can impact negatively on competitiveness.



FTA Agreements in Latin America and the Caribbean (2008)



For example, suppose each of countries A, B, and C has a bilateral agreement with each of the others. Because each FTA specifies that key inputs must be sourced from within the signatory countries, producers in C may not source these inputs in B to produce for the market in A, because these materials do not originate in the A-C FTA.

The simplest solution to such impediments to regionally integrated production would be to eliminate or harmonize tariffs on imports from all countries (most favored nation or MFN tariffs). However, this may be a lengthy political process. The next option is to seek a "convergence" of existing FTAs, which would permit "cumulation" of materials that originate in any participating country so that they do not jeopardize preference utilization by products which incorporate these materials.

Source: Estevadeordal *et al.* (2009)

Preliminary efforts to resolve these problems within the region are underway. The agreements between Mercosur and the Andean Community countries provide for cumulation of materials across the three agreements that exist among them. Nonetheless, among these nine countries there are 16 different sets of product-level rules of origin, which makes it very difficult to establish a clear definition of what materials may be cumulated. Furthermore, Chile is excluded from this cumulation zone despite having FTAs in place with all nine countries. Mexico and Central America are not fully connected. Approaching the same problem from a different angle is the Pacific Basin Initiative (Iniciativa del ARCO del Pacífico). Specifically, the Pacific Basic Initiative has launched a process to overcome the rules of origin by identifying mechanisms for implementing extended cumulation across their existing agreements while also negotiating market access for the bilateral relationships that have not already been negotiated.

Whatever the path chosen, the destination should be one in which trade policy does not impose unnecessary or undesired costs on trade, in this way facilitating the productive integration of the region to the benefit of all.

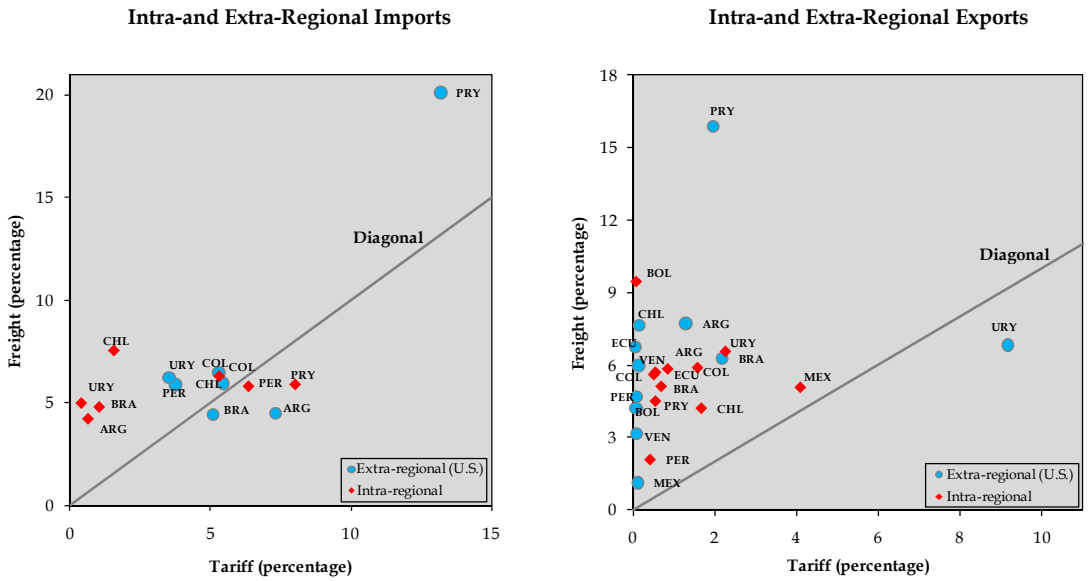
III - The "Forgotten Agenda": What Hurts More—Tariffs or Freight Rates?

As important as the remaining tariff barriers are to trade and commerce, they cannot continue to be the only focus of LAC's trade policy. Tariffs, quotas, and related barriers are neither the only nor the most important obstacles to trade in the region. Instead, logistics—particularly transport costs—today constitute the main barrier faced by LAC in achieving its trade potential both for intra-regional and external commerce.

Data presented in Figure 1 provide empirical support for this statement for both imports and exports and for both intra- and extra-regional trade. In the case of imports (left graph), most of the countries fall to the left of the diagonal, meaning that their transport costs are higher than tariffs by a large margin. Even for the few exceptions on the right of the diagonal, the difference between tariff and freight costs is too small to justify a trade agenda focused primarily on policy barriers. In the case of exports, the dominance of freight over tariff barriers is even more pronounced, with all countries positioned to the left of the diagonal, except for Uruguay's exports to the United States.

Even though these figures tell a powerful story, they fail to capture fully the importance of transport costs by focusing only on their international and freight components. At least two other components tend to play a major role: (a) domestic freight expenditures, which can account for as much as 30 percent of the price of mining and agricultural exports at the port of departure; and (b) the time costs of transportation associated with depreciation and inventories, which can more than double the ad valorem freight rates (Moreira, Volpe, Blyde 2008).

Figure 1. Ad Valorem Freights and Tariffs in LAC, 2006



Note: Freight is the ratio of freight expenditures to imports. Tariff is the ratio of tariff revenue to imports. Import data for Paraguay and Colombia are for 2000 and 2003, respectively. Intra-regional exports include Argentina, Brazil, Chile, Peru and Uruguay
Source: Blyde and Moreira (2010)

While the data in Figure 1 focus on freight costs, the costs of logistics go well beyond transport outlays. For a more precise estimate of the relative importance of those costs vis-à-vis the traditional trade barriers, it is necessary to consider factors such as the incipient costs of port inefficiencies, warehousing, and customs costs, the latter of which often represents the most important component in a logistics chain, particularly for products that are traded intra-regionally. For the poor, who consume to survive, who save less, and who often spend more on food than on all other household expenditures combined (Dessus *et al.*, 2008; Giordano and Watanuki, 2010), the cumulative effects of transport and customs clearance inefficiencies result in a logistics "tax" that is particularly burdensome. When taken together, logistics costs represent the largest share of a good's final price to consumers (Schwartz *et al.*, 2009). This fact is illustrated by supply chain analyses of tomatoes traded across Central American borders (Fernández *et al.*, forthcoming); meat and soy traded within the Southern Cone; Central American fruit reaching the Caribbean; and wheat and flour movements into and within the Andean region.

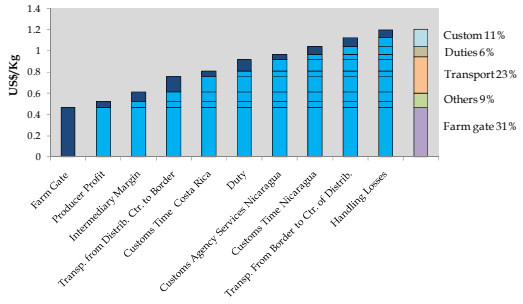
Box 2. Logistics Bottlenecks in Intra-Regional Trade: Supply Chain Analysis of Tomato in Central America

The importance of logistics costs in intra-regional trade can be illustrated by the example of tomato exports from Costa Rica to Nicaragua. The country pair was chosen so as to capture movements between the Central America's highest and lowest performers on the World Bank's Logistics Performance Index. Tomatoes were chosen because: (i) their unusual sensitivity to time and susceptibility to damage make them greatly dependent on efficient logistics movements; (ii) both large and small shippers could be evaluated along the supply chain; and (iii) among vegetables, tomatoes represent the most important export to Nicaragua in terms of value.

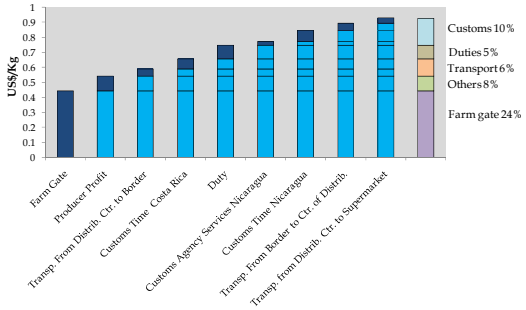
Two supply chain analyses were conducted in December 2009/January 2010 through the use of a Standardized Logistics Survey The analyses capture the cost structures involved in transporting a kilogram of tomatoes from the farm gate in Costa Rica to the final sales point in Managua, Nicaragua for both a small and large exporter. Cost components include farm gate price, producer profit, transport and handling costs, customs agency services and time, storage, insurance, duties, and retail costs and profit. Overall, results indicate that the biggest burdens for both small and large exporters are: (i) high domestic transportation costs and (ii) bottlenecks at the region's border crossings, mostly attributed to customs delays, which are particularly relevant in the trade of perishable goods.

As shown in the figures below, the largest cost component as a percentage of the final price of a kilogram of tomatoes for the small exporter is transport (23 percent), followed by customs (11 percent), and duties (6 percent). Outside of trade and logistics costs, the farm gate price represents the largest cost component. Similarly, for the large exporter, the two most important trade and logistics costs remain customs (10 percent) and transport (6 percent), while duties represent a similar share at 5 percent. When comparing the small exporter to the large exporter, it is observed that the small exporter has the equivalent of a 27.5 cent extra cost per kilogram of tomatoes due to logistics inefficiencies.

Small Tomato Exporter



Large Tomato Exporter



Note: The cost decomposition does not add up to 100 percent because the graphs do not include retailer's operating and administrative costs and profits.
Source: Fernández *et al., (*forthcoming)

IV - How High are LAC's Logistics Costs and Why?

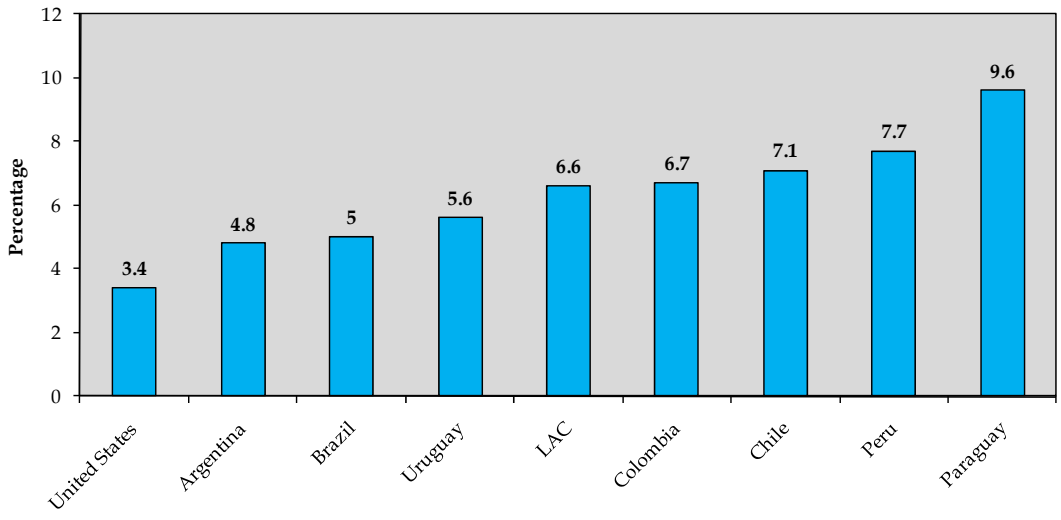
Information comparing logistics costs to traditional trade barriers is important for guiding public policy, but not for helping policymakers find ways to reduce these costs. Unlike tariffs, logistics costs cannot be cut to zero, so an international comparison is needed to reveal how much these costs can be reduced. Guasch and Kogan (2006) have found that individual LAC countries' logistics "burdens" average 18 to nearly 40 percent of GDP, as compared to 9 to 10 percent for OECD countries. Judging by the fragmentary evidence available on the quality of LAC's transport infrastructure and the burden of customs procedures, it seems likely that logistics costs in the region are considerably higher than in other emerging regions, such as Asia.

Traditional indicators such as the percentage and density of paved roads, port capacities, and vessel turnaround times, or qualitative indicators based on perceptions, all suggest that LAC's transport infrastructure, with a few exceptions, lags behind other regions of the world, both developing and developed. For instance, according to the *Global Competitiveness Report 2009-2010*, only four Latin American and Caribbean countries rank in the top half of the Infrastructure

Pillar[4], and the region is perceived as posing one the highest administrative burdens to trade. Likewise, the *Doing Business 2010* report places LAC well behind global best practice for trading across borders. According to the survey, the region suffers not only from the effects of its historic underinvestment in infrastructure compared with comparator regions (Serven and Calderon 2006) but also in terms of the soft side of trade facilitation. It takes an average of twice the number of days to export from LAC than from high-income OECD economies. According to the World Bank's *Connecting to Compete 2010* report, the Latin America region is still logistically constrained, facing many challenges such as high transport costs, poor infrastructure and customs performance, and poor reliability of the trading system.

How much more do the region's businesses pay to transport their goods than their counterparts elsewhere? What is the magnitude of the problem? The U.S. is one of the few countries that collects data on international trade freight, thus providing a rare opportunity to get a comparative perspective on LAC's freight costs. Figure 2 offers the preliminary answer that LAC spends nearly twice as much as the U.S. to import its goods (as a share of the final price of goods), with Argentina having the lowest costs and landlocked Paraguay the highest. However, data alone cannot pinpoint what is driving the results: Is it geography, trade volume and composition, or other policy-related issues such the quality of the infrastructure?

Figure 2. Total Import Freight Expenditures as a Share of Imports, U.S. and Selected LAC Countries, 2006

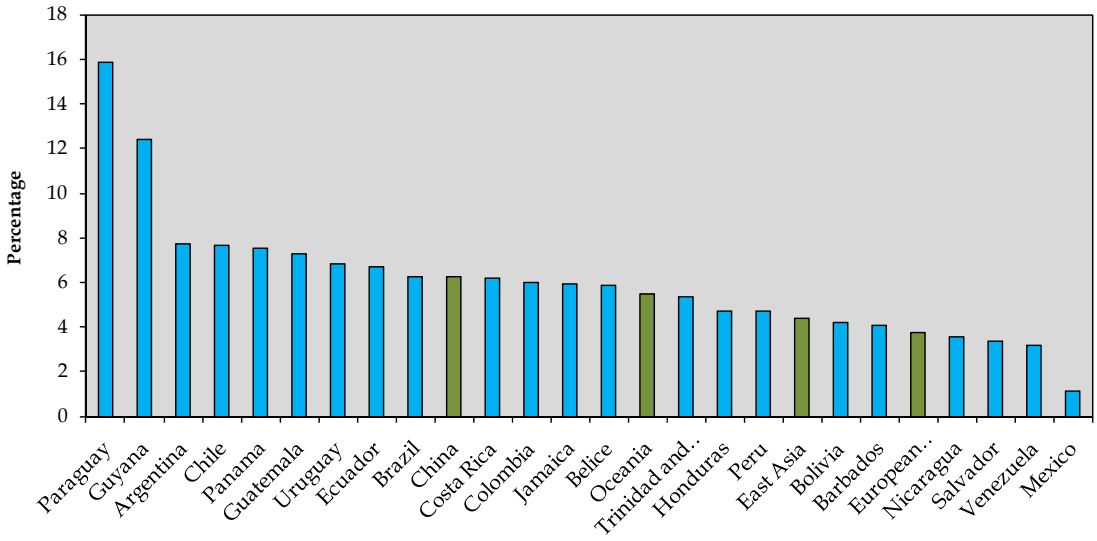


Note: Latin America is the simple average of Argentina, Brazil, Chile, Colombia, Paraguay, Peru and Uruguay
Source: Blyde and Moreira (2010)

Figure 3 compares LAC's export freight expenses with those of other exporters to the U.S. What is striking is that proximity does not necessarily result in lower freight rates. In particular, most LAC countries, including nearby Caribbean and Central American countries, have higher rates than their counterparts in the Far East and Europe.

[4] That is, Chile (30), El Salvador (51), Trinidad and Tobago (54) and Panama (65).

Figure 3. Freight Expenditures as a Share of Exports to the U.S., LAC Countries and Selected Regions, 2006

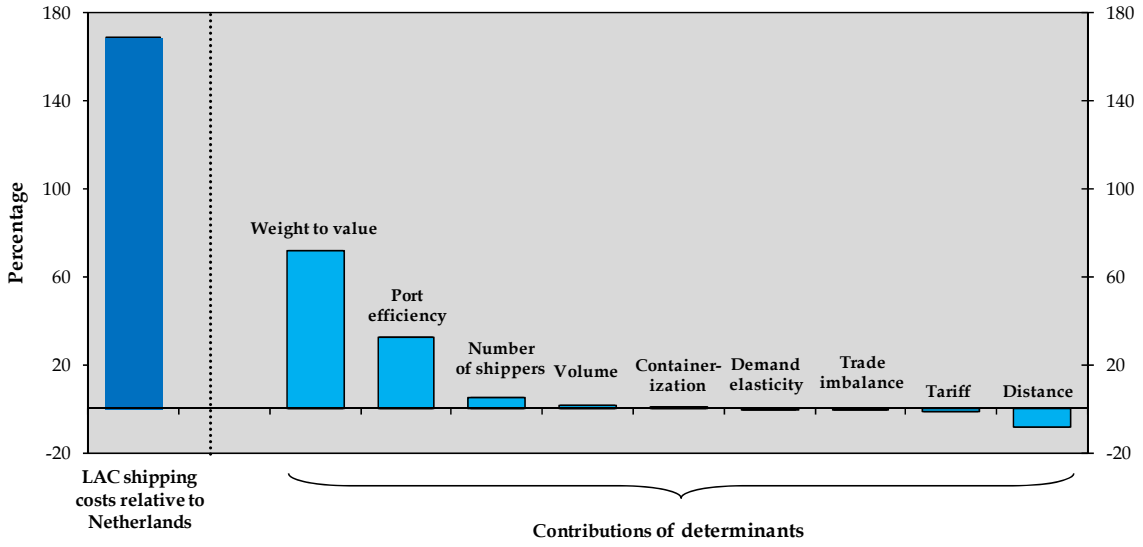


Source: Blyde and Moreira (2010), based on U.S. Census Bureau

At this point, the burning question is why LAC's transport costs are so high. Answering this question involves isolating the role of a number of complex and interrelated issues including the quality of infrastructure services, distance, scale, and market structure. Moreira, Volpe, and Blyde (2008) compare LAC's export freight costs to the U.S. with those of the Netherlands (maritime freight) and the EU-15 average (airfreight). Figure 4 shows that LAC's exports to the U.S. pay ocean freight rates that average 70 percent higher than those from the Netherlands. The main factors explaining this difference are the weight-to-value ratios and port efficiency, followed by the levels of competition among shipping companies and, to a lesser degree, volumes of trade.

LAC's higher airfreight costs are explained in large part by differences in the composition of total exports. Freight rates are directly proportional to weight-to-price ratios, and the goods that the region exports are considerably heavier than those exported by the Netherlands or other European countries. Even though export composition mainly reflects the region's resource endowments and not its policies, it does have important policy implications. Because transport costs matter more for LAC, largely because of the types of goods it exports, then lowering these costs should be among the governments' key priorities.

Figure 4. Decomposing Differences in Ocean Freight Between LAC and the Netherlands in Exports to the U.S., 2000-2005



Source: Blyde and Moreira (2010)

Export composition does not tell the whole story, however. Netting out the influence of weight to value leaves about 40 percent of the differences in ocean and air shipping costs between LAC and the U.S. and Europe attributable to the efficiency of infrastructure in ports and airports. The third contributing factor to the higher transport costs in LAC—although to a lesser extent than transport efficiency—is the low degree of competition among shipping companies. It is worth noting that the beneficial impact of competition on transport costs might not be limited to actual transportation services. A whole array of auxiliary, port, and airport services, such as storage and warehousing, provisioning, repairing or fueling, can be allocated competitively. As such, competition and port efficiency are interrelated.

V - What Should be Fixed? A Sectoral View

Cross-country econometric exercises such as the one described in the previous section identify only part of the problem. They make it clear that LAC costs are relatively high, even if differences in factors such as export composition and distance are controlled for, and they indicate the poor quality of the region's infrastructure as the main determinant of these high costs. However, a more detailed diagnostic of the problems, which would cover other segments of the logistics chain for which hard data is not available—e.g. domestic freight costs and border crossing—calls for both a more descriptive and qualitative analysis and a deeper look into details of the region's transport and logistics network.

Is the Mix Right? Taking Advantage of Multimodality

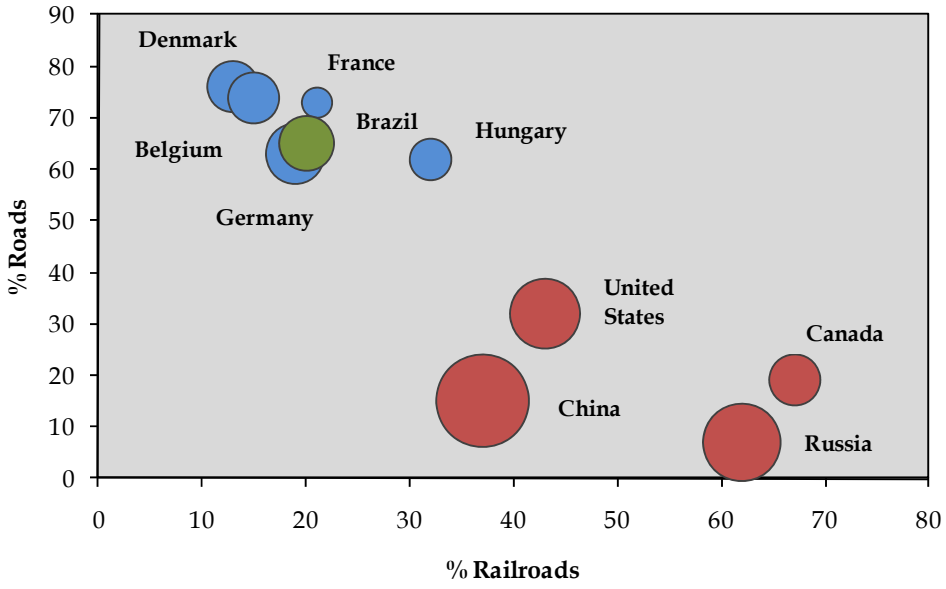
Transport analysts have long raised the issue of the unbalanced modal composition of the region's transport network. They argue that LAC's transport costs are high not only because of

the inefficiencies of each of the transport modes, but also because the modes are not integrated in a way that minimizes costs.

Modal composition reflects not only exogenous factors such as geography, but also direct or indirect policy decisions that can ultimately facilitate or hamper the choice of a transport mix that minimizes freight costs. Some analysts argue that LAC's policy choices in transport have been more a hindrance than help. Batista da Silva (1996), for instance, argues that "in emphasizing roads over rail, river and coastal logistics systems, these countries have selected the most expensive as well as the least environmental friendly option for their infrastructure system." For Brazil, avoidable logistics costs related to inefficient multimodal transport add "more than US$1.2 billion per year to the costs of external trade and at least US$1.3 billion per year to the costs of domestic interregional trade in corridors with available rail services" (World Bank, 2004).

Figure 5 illustrates this point further by comparing Brazil's modal composition with that of a number of small and large countries. The pattern that emerges is that large continental countries such as the U.S., China, Russia, and Canada make greater use of rail and waterways to transport cargo than roads. On the contrary, Brazil, despite its large area, has a modal composition which is closer to that of smaller countries, with heavy use of road transportation. This situation is similar to that of Mexico, Colombia, and Argentina.

Figure 5. Modal Composition of Transport, Brazil and Selected Countries, 2000



Note: The circle area represents the use of water ways transport
Source: COPPEAD (2000)

The unbalanced composition of LAC's transport network is the product of not only underinvestment in infrastructure such as rail and waterways, but also of a pronounced deficit of interfaces between railways and ports. With the exception of a few specialized terminals, most of

the ports do not adequately connect with railways (Sgut, 2003). A similar problem is related to the interface between ports and the road network. Many ports in the regions must be accessed by narrow and often congested roads, very few of which were designed to provide connection with the interior. Interfaces between railways and road networks are equally deficient in the region.

The region must also address regulatory issues to allow it to take increasing advantage of its intra- and extra-regional trade potential. For example, managing separate transport contracts for each mode of transportation can be very cumbersome for an exporter. On the other hand, a unified document can facilitate bank transactions and speed up trade credit. However, a unified multimodal transport contract might not be possible without enacting proper legislation, which means that governments must establish an enabling regulatory framework to foster multimodal transport.

Land Transportation: Capacity and Quality Issues

Road transportation, particularly because of the bias in the modal mix discussed earlier, plays a disproportionately important role in LAC's trade, particularly in intra-regional trade. IDB estimates for 2009 put the share of road transportation costs incurred in intra-regional trade in South America at as much as 39 percent of the goods in value terms, whereas the same figure for global imports is estimated at 4.4 percent. The low figure for total trade, however, hides a wide variation across countries and does not take into account the overwhelming role played by trucks in transporting goods to and from the ports.

Despite the key role of road transport in Latin America, spatial coverage of the road network in the region is below the world average. Indicators show a world average of 241 km of road network per 1,000 km^2 of surface, whereas in LAC the coverage is about 156 km (Barbero, 2010). The quality of the existing network is also subpar when compared to other regions. For instance, the average percentage of the paved road network in the world as a whole equals 57 percent, compared to only 16 percent in LAC. In most of the developed world, this figure is close to 100 percent, and even in developing countries like China, Malaysia, or India, the percentage of paved roads is much higher than in LAC, with figures reaching 80, 78 and 64 percent, respectively. Measures from *World Road Statistics* suggest that road maintenance in Latin America is considerably worse than in many other parts of the world including Europe, Asia Pacific, North Africa, and the Middle East.

This limited road network with its relatively poor quality is clearly inadequate to meet LAC's growing demand for cargo transportation, a problem exacerbated by the lack of domestic intermodal competition. A clear challenge in this regard is the inability of governments to take corrective action due to fiscal and financial constraints; the traditional budgetary demands of recurring costs such as public sector salaries and pensions; and the region's history of financing fiscal deficits out of infrastructure expenditures (Serven, 2007). Public-private partnerships could be a practical way to move forward. For instance, in Colombia, around 17 percent of the primary road network is already managed through concessions. While not a panacea, given the potential contractual intricacies and contingent liabilities, concessions can reconcile the need for state coordination and intervention with the lack of government funds and management limitations.

The costs of transportation and the quality of transport services are also closely related to industry regulations. These regulatory frameworks need to address both "industry function" as well as "market entry and exit" characteristics. Function regulations would address, among other things, the behavior of logistics and transport service providers, such as vehicle load and dimensions, weight distribution, fleet age, allowable emission levels, and disclosure of documentation. Market behavior regulations would include incentives for use of one mode of transport over another, competition within freight services, availability of third party cargo warehousing, and inventory finance. The regulatory framework and the capacity of the state to enforce it affect the performance of the sector and the costs of transportation. More market access, for example, can result in lower freight rates by fostering competition in the industry. However, regulation and its enforcement can also impact transport costs in less obvious ways. For instance, failing to comply with maximum weights generates unfair competition in the truck industry and increases significantly the costs of road maintenance (Barbero, 2010).

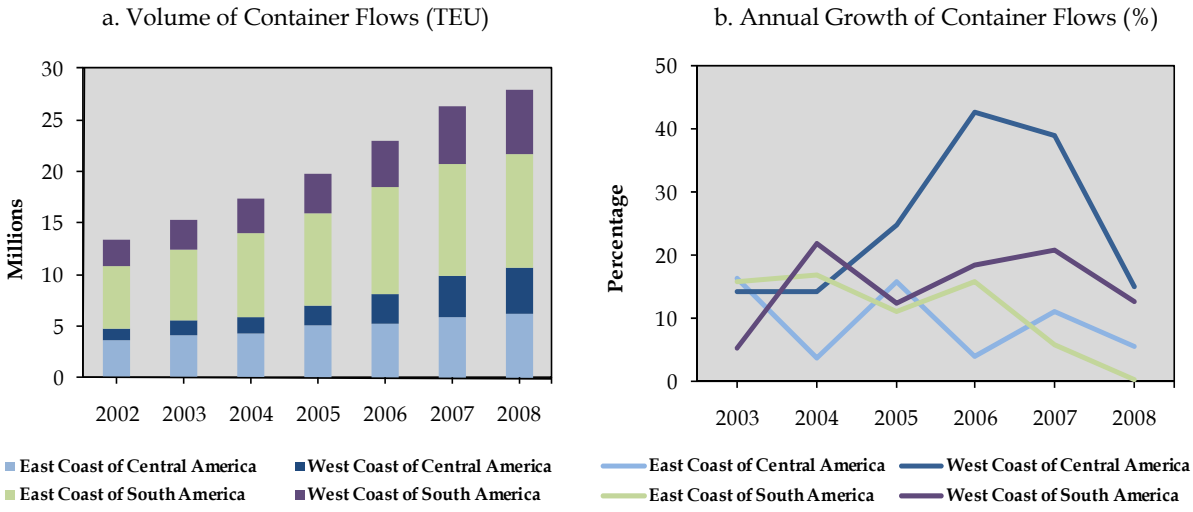
In addition to road transport problems, there are serious deficiencies in the region's rail networks. Urgent action must address currently low levels of rail transport, its potential for reducing costs for transporting low weight-to-value goods over long distances, and the tremendous environmental benefits that come from switching from trucks to rail. The IDB estimates that in 2009, rail freight accounted for only 0.2 percent of South America's international trade volume, reflecting the extreme underdevelopment of rail networks and the deficit of interfaces with other transport modes and with the region's ports. Putting the region's rail status into perspective, Brazil and Mexico's railroad density in the early 2000's was, respectively, 3.4 and 13.5 kilometers per 1,000 square kilometers of land surface, whereas the same figure for the U.S. was 29.8 km/1000 km^2.

Although countries such as Brazil, Peru, Argentina, and Guatemala have privatized the most profitable segments of the rail networks in recent years, the results of these reforms have varied sharply. Some countries have benefited from well designed regulatory frameworks that clarify the roles and responsibilities of infrastructure, rolling stock, and service providers complemented by robust support from the state (e.g. Brazil), particularly through concessionary financing. Other countries are still struggling to establish a regulatory framework and the much needed government support (e.g. Guatemala). Clearly, however, even the more successful countries must go a long way to reverse decades of mismanagement and underinvestment in the sector.

Maritime Transport: Risks of Congestion and Taking Advantage of Cabotage.

In the last decades, LAC has rapidly expanded its port operations fueled by the increasing opening of its economies to foreign trade (see Figure 6). To a large extent, this development was made possible by a steady growth of port productivity driven by policies that have brought substantial investment and management contributions by the private sector. Several countries have eliminated cargo reserves for state-owned shipping companies, privatized or liberalized national flag carriers, and granted concessions to several port operations, among other reforms.

Figure 6. Container Flows in Central and South America

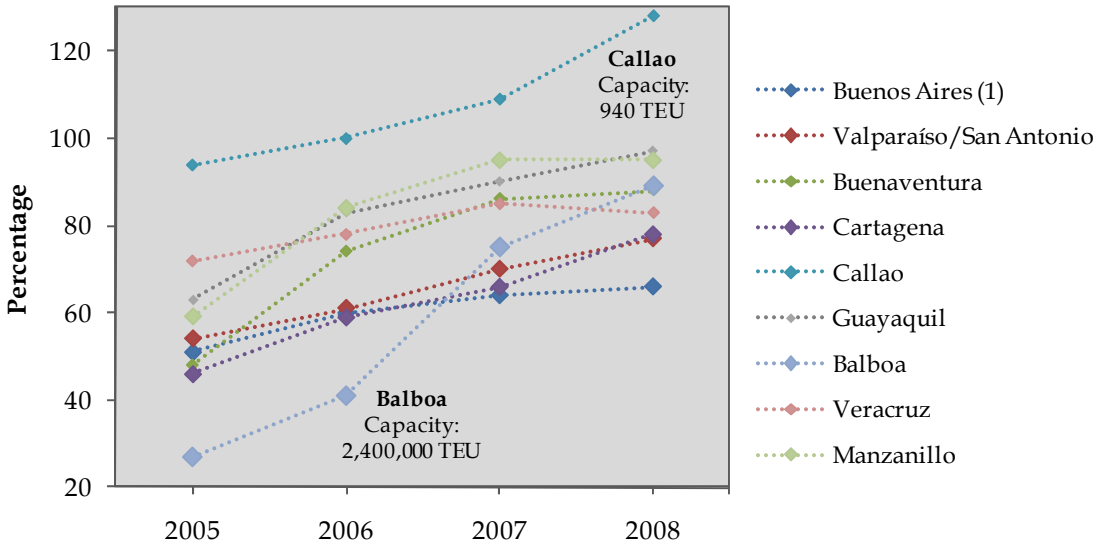


Note: TEU = Twenty– foot Equivalent Unit
Source: Maritime Profile, UNECLAC

Despite this rapid port expansion, growing evidence indicates that productivity increases alone will not be enough to meet mounting demand for port services, particularly in the medium and long terms.[5] As shown in Figure 7, some ports in the region already operate near capacity and signs of congestion are already ubiquitous. This is particularly the case for Brazilian ports where, before the onset of the financial crisis in late 2008, ships where facing an average delay of 7.4 days, which caused negative impacts on freight rates and storage and time costs.[6]

[5] See UNECLAC (2010) for a detailed discussion of these issues.
[6] In comparison, the average delay is 2.5 days in India and 0.75 in Colombia. See: http://www.g-ports.com/gp_Congestion.aspx.

Figure 7. Capacity Utilization of Select Container Ports in the Region



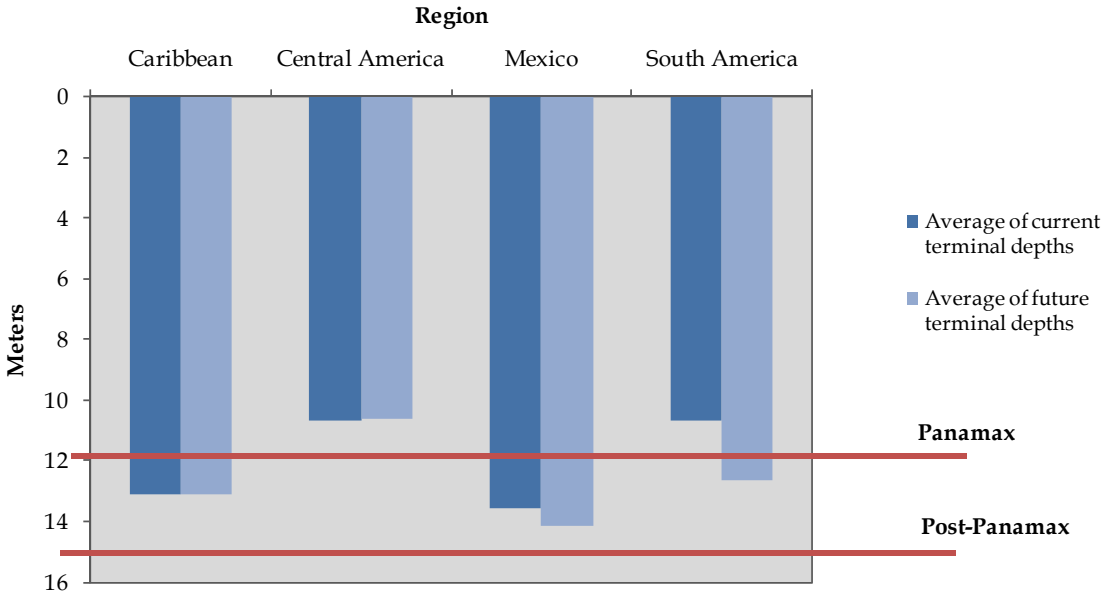
Note: (1) includes Exolgan; TEU = Twenty–foot Equivalent Unit
Source: Maritime Profile, UNECLAC

To meet this challenge, countries in the region have not only begun to invest in new ports and terminals, but also to improve services and infrastructure needed to make efficient connections with the interior. However, slow progress in this area has resulted in occasional logistical breakdowns, delays, and restrictions on the normal flow of cargo through the terminals.

Work is also needed in other important areas. One is to improve maritime access to ports, since many ports in the region lack channels that can accomodate large ships with drafts over 10 meters. Restrictions on large ships hamper LAC's ability to benefit from ocean shipping economies of scale. Dredging becomes particularly important in the face of the ongoing expansion of the Panama Canal, which would permit even larger vessels to serve the region.

A recent survey being carried out by the World Bank that looks at current dredging practices of LAC's ports finds that dredging work is being carried out in 42 percent of the region's ports. However, this problem is not being tackled in all countries in the region. In Central America, which has the shallowest ports in LAC (see Figure 8), no dredging is being carryied out to meet the requirement of the Post-Panamax vessels.

Figure 8. Current Versus Planned Terminal Depths, by Region



Note: "Caribbean" = Caribbean transshipment ports
Source: World Bank Surveying of Regional Ports, LCSSD Economics Unit (2010)

The growing need to deepen LAC's ports will have several knock-on effects of importance to policy makers in the region. These include:

- Massive landside investments—from Post-Panamax cranes to larger storage facilities—in order to take advantage of new vessel capacities.

- Transport network planning that consolidates cargo at the newly deepened ports so that calls of larger and more costly vessels are amortized by more containers or tonnage.

- Environmental management requirements to mitigate the massive coastal zone impacts of dredging and spoils disposal. Which is the primary cost and concern for port management in OECD countries.

- Clarification of city-port relations, as separation of vehicle and cargo traffic, will become increasingly important to improve competitiveness and as cities built around secondary ports may see declining business in the face of consolidation of cargo at larger ports.

In a related issue, a major area of work concerns improvements in the secondary ocean and river ports, which, for the most part, have not benefited so far from the same investment and reforms implemented in the major ports. This modernization gap has been hampering the development of a comprehensive system of cabotage that could promote a more efficient domestic and regional transport matrix as well as improved access to major ports from the interior. An important complement to these reforms is the removal of any legislation that restricts competition in cabotage, which is a common feature of the region's regulatory framework that prevents the most efficient operator from prevailing and, therefore, from offering the lowest shipping rates.

Finally, as suggested by the decomposition exercise in Section I and confirmed by empirical work elsewhere (Sanchez and Wilmsmeier, 2009), the region has a lot to gain by promoting competition not only in cabotage, but in all shipping services. This can be done by using fiscal or financial incentives to promote the entry of new operators or by drafting legislation to reduce anticompetitive practices by carriers and shipping lines across the region.

Air Transport: Scale, Efficiency and Competition

Regulations regarding air transportation lie at the heart of the region's challenges. Air transport regulations in LAC are mostly based on bilateral agreements with very dissimilar degrees of liberalization. While some country pairs have fully liberalized air transport services, many have placed stringent limitations on market access. For instance, many countries limit competition by allowing only one carrier per country, leaving little room for new players entering the market. The frequencies are also often granted for all types of traffic, meaning they must be shared between passenger and cargo flights.

In general, regulation of air transport services in the region has failed to move in tandem with liberalization efforts in other parts of the world, which have been mostly undertaken through "open skies" agreements. These agreements reduce the costs of air transportation significantly (see Micco and Serebrisky, 2006) and consequently, the price of delivered goods. A multilateral Open Skies agreement, for instance, would effectively eliminate those aspects of the bilateral air service agreements that currently prevent open and unrestricted market access. Open Skies would help improve the regulatory structure of the air cargo market and foster its development and growth.

Alternatively, bilateral agreements that do not allow unlimited capacity should be modified to at least allocate dedicated frequencies for cargo services, while fifth freedom rights should be more widespread and unrestricted.

Additionally, the air cargo market in LAC would benefit from increased availability of competitively priced ancillary services. With the exception of a few operational services, such as meteorological services, most commercial and handling operations can be exposed to competitive forces. In this regard, necessary policy actions are related to the current regulatory framework, specifically, the need to ensure that ancillary services are provided under competitive conditions by a minimum number of providers. Indeed, to promote airport efficiency, the traditional public ownership model that existed in most of the world until the mid-1980s has gradually been replaced by various privatization schemes and concession contracts. But the privatization trend has been significantly slower in Latin America than in many other parts of the world, particularly in industrialized countries or in the Asia-Pacific region. A related issue has to do with the access charges or royalties that the airport operator is allowed to levy on service providers. These types of charges need to be examined, since they are passed on to the airlines and subsequently to customers (importers/exporters).

Finally, the sector's policies should aim at eliminating the soft constraints, such as those related to information and telecommunication (IT) systems, customs, and security issues, so as to lower

operating costs of air cargo. Specific examples of policy actions to be implemented include improvements in airport security systems and streamlining customs inspection processes.

Customs and Border Crossings: Infrastructure and Regulatory Issues

As analyzed by Schwartz *et al*. (2009), the effect of delays in customs clearance are significant across the region, resulting in an increase in transport costs by between 4 and 12 percent. At the same time, the increase in physical distance—even as much as by 100 percent—raises transport costs only by between 8.5 and 18.7 percent. Customs burdens are significant also at the region's ocean ports, substantially adding to the already high share of overall logistics costs in the final price of delivered goods. According to estimates for the Port of Santos, for example, reduction in customs processing time by four days would have the effect of as much as a 16 percent reduction in the total logistics cost, an aggregate that captures the various separate costs along the entire supply chain. Border crossings thus represent an important factor for taking full advantage of regional road integration projects that are key for improving the use of existing infrastructure and the perception of its quality by users.

Border crossings in LAC do not seem to present a significant physical limitation. However, much could be improved in terms of document processing, exchange of data between similar organizations to ensure the integrity of the controls, management control, and integration of control mechanisms between each pair of countries sharing a border. Steps towards such improvements have been made, for instance, at the border crossing of Ciudad del Este, Paraguay, and Foz de Iguazu, Brazil, where a new international bridge and management measures have been proposed to ensure a more fluid movement through the existing border crossing facilities. The outlook for bi-national integration of border crossing procedures in LAC is generally encouraging, although the pace of implementation in some cases has been delayed by institutional, social, and political obstacles. Several examples demonstrate that the region's governments are growing increasingly certain that adopting common processes will reduce the share of border crossing costs in the overall cost of transport.[7]

Although progress has been made in the integration of controls at several border crossing points in the region, these advances still do not ensure the fluidity necessary for increased intra-regional trade. For example, in some areas of South America, the integration of border crossing procedures has not yet been formalized and the many national agencies have not yet been brought together under an integrated National Border Service. This slowness can be explained by

[7] For example, Peru and Chile have developed a pilot project for bi-national integration at the Step Santa Rosa-Chacalluta border crossing, testing an information system that increases interdependence among similar agencies in the two countries. Also noteworthy are the advances made by Argentina at the Pehuenche Passage and by Bolivia and Chile, for example, at the Tambo Quemado-Chungara border crossing, whose full integration will be completed within two years after completion of the complex. Lastly, at the Christ the Redeemer Complex in Argentina, a major transit point for South America's intra-regional trade, significant improvements have been made in technology adaptation, facility refurbishment, and the adoption of a single header for loading controls, all of which are contributing to increased bi-national integration and information sharing. In Central America, improvements at border crossings have seen significant progress in the Framework of the Modernization of Customs and Border Crossings, with reductions of up to 75 percent in transit time at the El Salvador-Honduras border crossing of Amatillo through the application of the Mesoamerican Procedure for International Transit of Goods. Physical improvements of the border crossing infrastructure in Central America have also been carried out as part of the Mesoamerica Project.

political and institutional factors as well as by limited ability to implement changes in the respective regulatory frameworks, such as at the borders between Ecuador and Colombia, Colombia and Venezuela, and to a lesser extent, Peru and Ecuador.

VI - The Benefits of a Seamless Latin America and the Caribbean

As pointed out earlier, the logistics costs incurred in bringing products to markets currently present the main obstacle to trade and integration in LAC. It was also shown that these costs are significantly higher than those in the developed countries, suggesting that policymakers have considerable room to make improvements. But what exactly are the potential benefits? How do they compare with the payoff of policies that remain focused only on traditional trade barriers?

Answering such counterfactual questions is not easy, the more so because hard data on freight rates and other components of the logistics costs in the region are hard to find. However, an ongoing research effort by both the IDB and the World Bank has made it possible to arrive at a number of reliable estimates drawn from different methodologies. This body of evidence overwhelmingly suggests that the trade gains of addressing these logistics constraints are not only substantial, but go well beyond what can be obtained by further trade liberalization.

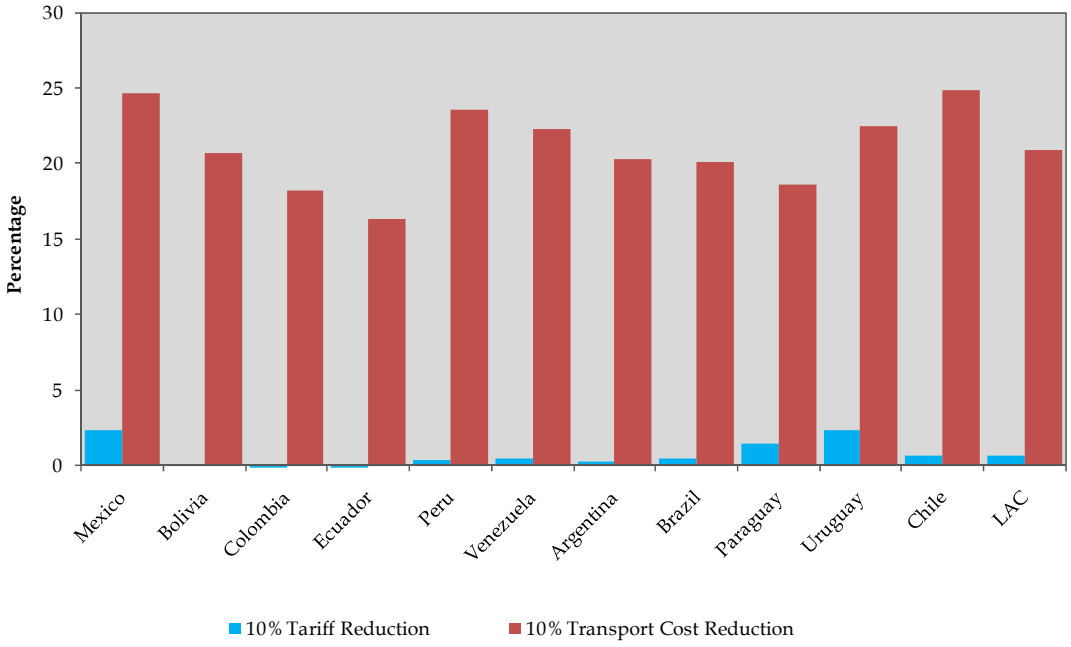
The Economy-wide View

The first group of estimates is drawn from an exercise using the IDB-INT computable general equilibrium model (CGE), a standard tool of empirical analysis widely used to analyze the impact on trade, output, and welfare of changes in trade policies that are transmitted through multiple markets (Giordano, Guzmán and Watanuki, 2010).[8] The current specification covers 11 countries in LAC where it was possible to obtain disaggregated data on import tariffs and the international freight rates of importing and exporting goods. The freight data come from the Latin American Association of Foreign Trade (ALADI); the benchmark year is 2008.

The counterfactual exercise looks at how a relatively modest cut in freight rates fares against a similar cut in import tariffs in terms of their impact on intra-LAC trade. The results, summarized in Figure 9, lead to two main conclusions. First, the positive impact of even a modest 10 percent reduction in transport costs is substantial, raising LAC's intra-regional exports by as much as 21 percent. Second, the intra-regional trade gains of a 10-percent cut in freight rates exceed those of a similar cut in tariffs by a huge margin.

[8] See Giordano, Guzmán and Watanuki (2010) for the technical specification of the model and additional results.

Figure 9. Response of Exports to Ten Percent Reduction in Tariffs and Transport Costs



Source: Giordano, Guzmán and Watanuki (2010)

The results vary somewhat across the countries in the sample, but the message remains the same: the payoff of policies that can effectively bring logistics costs down is likely to be substantial and significantly higher than that of traditional trade liberalization. This point becomes even clearer if the model is used to answer the following related counterfactual question: How much do transport costs have to fall to match the gains of full trade liberalization? If tariffs were completely eliminated among countries in the sample, intraregional exports would expand 7.7 percent. To match these gains, transport costs would have to fall by only 4.3 percent.

The Partial Equilibrium View

The second group of estimates arises from gravity models, another econometric tool used for assessing the impact of trade frictions—such as tariffs and freight rates—on bilateral trade flows.[9] The basic approach is used here in two different but complementary exercises, offering a different perspective on the counterfactual questions asked above.

[9] Gravity models are not as sophisticated and comprehensive as CGEs in that they focus only on trade flows and do not take into account interrelationships among all markets. Nonetheless, they are less data-intensive, easier to interpret and have been very successful in explaining empirically the bulk of trade between countries. Gravity models are built on the assumption that bilateral trade flows are directly proportional to the size of countries and inversely proportional to the distance between them. This basic set-up may then be augmented to include other variables of interest such as the adjacency of two countries, tariffs, and freight rates, which allows researchers to assess the relative importance of the many factors that make up trade costs. In addition, the distance factor can be adjusted for other factors such as time and cost to reflect the true sources of friction in the physical movement of goods. Because of the comparisons between Central America and EU15—two regions with very different cost structures for trucking—time has been used in this paper to adjust for distance.

The first exercise focuses on South America to answer the same question discussed in the CGE exercise, but with an added dimension: export diversification.[10] The exercise examines the impact on the volume and diversification of intra-regional exports of a 10 percent cut in either tariffs or freight rates.

The results, presented in Figures 10 and 11, clearly show that across countries, the median sectoral gains of a 10 percent cut in transport costs are substantial in both volume and number of products exported, and exceed those of a similar cut in tariffs by an average factor of five for export volumes and by an average factor of nine for the number of products exported.

Figure 10. Impact on Export Volume of Reduction in Tariffs and Freights

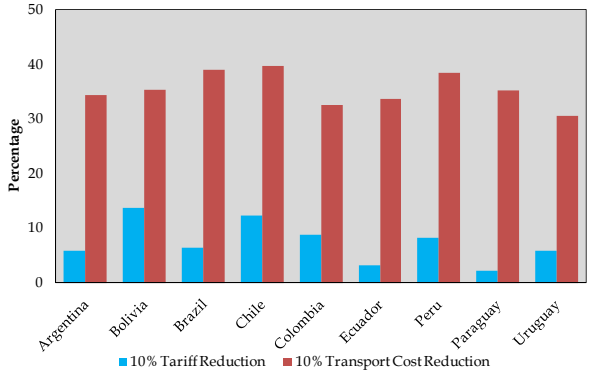
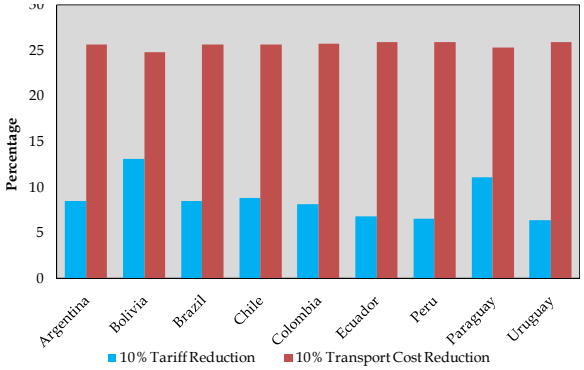


Figure 11. Impact on Export Diversification of Reduction in Tariffs and Freights



Note: The figures show the median predicted percentage change of exports across sectors (Figure 10), and of products exported across trade partners (Figure 11), as consequence of a 10 percent reduction in transport costs and tariffs for selected Latin American countries.
Source: Moreira, Volpe and Blyde (2008)

The second gravity exercise concentrates on Central America, a subregion overlooked by both the CGE and the previous gravity exercise for the lack of reliable data on freight rates.[11] To work around these data constraints, the analysis focuses on the behaviour of two of the standard variables of a typical gravity model: distance between trade partners and the existence of common borders (adjacency), whose impact on bilateral trade flows, in the absence of specific information, tends to capture trade costs such as freight rates.

The results for the impact of both distance and common border on trade flows suggest that intra-regional trade in Central America faces unusually high logistics costs. The negative impact of distance—adjusted to reflect the time it take to ship from country to country—on regional trade in Central America is 60 percent higher than that of Europe, an outcome that is driven by the greater difficulty of transporting goods using Central American roads and transportation services

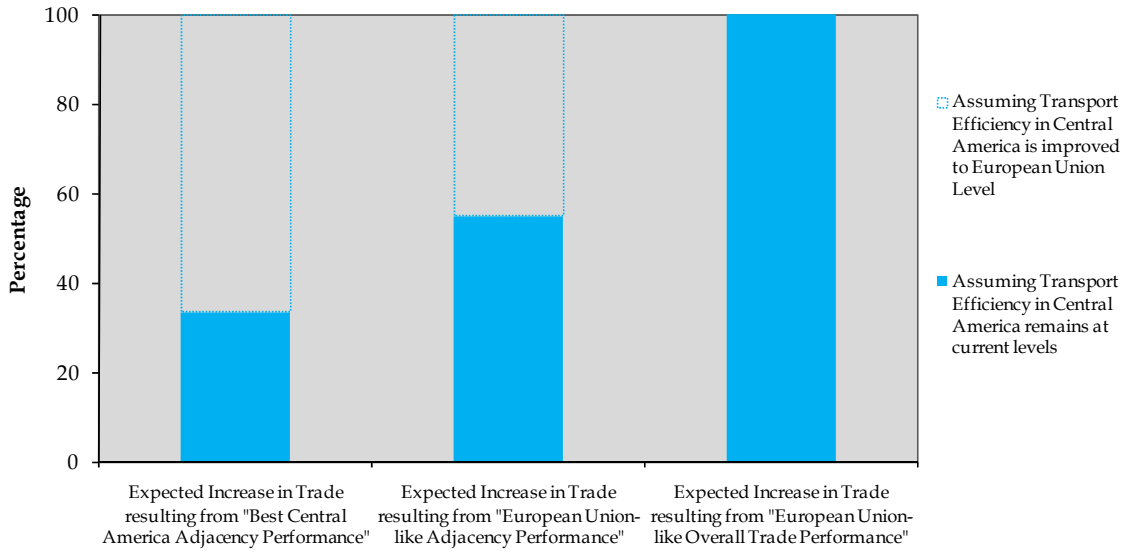
[10] The model is run for 2000-2005 by country and sector. The estimates cover nine of the 11 LAC countries included in the CGE model and share the same ALADI data on tariffs and international freight rates. See Mesquita Moreira, Volpe and Blyde (2008) for details.
[11] The model is run for 2000-2008 for both Central America and the EU-15, with the latter being used as benchmark. See Schwartz *et al.* (2009) for a full specification of the model and detailed results interpretation.

than those of the EU-15, as well as to the excessive paperwork involved in bilateral border crossings.

The most striking result, though, comes from the estimated impact of common borders. One would assume that countries sharing common borders are likely to trade more because of the possibility of land transportation and because they avoid the transaction costs of having to cross multiple borders. Yet, in sharp contrast with the result obtained for Europe and usually obtained for other regions of the world, Central America's "adjacency effect" is estimated to be negative, again raising concerns about the region's land transportation and border crossing management.

To illustrate how binding these constraints are likely to be, Figure 12 presents the results of an exercise that uses the results of the model to estimate the impact on intra-regional trade if Central America's key infrastructure integration and efficiency indicators ("distance and adjacency" effects) were to improve either to the level of the region's best performer or to the level of the EU-15. It shows that trade could be 33 percent higher if the effect of adjacency between each pair of the six Central American countries were to improve to the level of the region's best performer. If, however, the improvement in adjacency performance attained the level of EU-15, the potential increase would be as much as 55 percent. On the other hand, intra-regional exports would nearly double if Central America were to become fully spatially integrated, i.e., if all of its key infrastructure integration and efficiency indicators were to improve to the level of EU-15.

Figure 12. Projected Percentage Increase in Overall Intra-Regional Trade in Central America



Source: Schwartz *et al*. (2009) based on trade flows data from WITS, LCSSD Economics Unit (2010)

VII - Institutional Challenges to Regional Project Design and Implementation

LAC's high integration costs result not only from bottlenecks in regional physical infrastructure (the integration hardware), limited policy and regulatory coordination, and an unfinished agenda of trade liberalization and facilitation (the integration software), but also from specific institutional and operational factors that limit investment opportunities in regional projects (the integration technology).

Regional projects are crucial to promote integration and reduce trade costs. Their purpose is to develop regional public goods or coordinate the provision of services that countries cannot effectively deliver on their own due to regional externalities that arise when the action of one country spills over the border. Regional coordination and cooperation also allow scale economies in the provision of national public goods, particularly in smaller economies unable to achieve a minimum efficiency scale (Estevadeordal *et. al.*, 2004).

However, regional operations require greater coordination, command higher transaction costs, and may generate benefits that are distributed asymmetrically among regional partners. Therefore, both demand for regional investment operations and the supply of instruments to finance them is sub-optimal, despite their potential of generating high rates of returns on investment and development effectiveness (World Bank, 2007).

Sub-optimal Demand for Regional Programs

Limited financial, human, and institutional resources for development projects present countries with opportunity costs and a tendency to prioritize national projects over regional operations. Because integration projects often require immediate expenditures but deliver benefits over the longer term, national projects are often preferred for their more visible cost-benefit balance. Lowering the relative cost of regional projects may help to correct this bias.

The costs and benefits of regional cooperation may also accrue asymmetrically to different countries. There may be free-riding issues when one party benefits from regional collective action even if it does not participate in sharing its costs. It is therefore crucial to ensure equitable distribution of costs and benefits of regional operations and incentives to participate in regional coordination initiatives.

The returns of regional action depend on the speed and diligence with which each party implements its share of duties. Each country needs to trust that others will meet agreed obligations, and effective coordination mechanisms must ensure information sharing and cross-border project execution monitoring. Incentives to promote compliance and enforcement mechanisms to curb uncooperative behaviors are therefore crucial as they affect the expected rate of return on regional investment.

Supply-side Constraints in Regional Project Financing

Unlike national projects that are pre-identified in countries' development strategies, then prioritized by finance ministries, and often submitted for funding to donors, regional projects face more challenging project cycles. At the strategic stage, external institutions may support the design of the integration agendas with knowledge generation and policy dialogue facilitation. At the prioritization stage, international financial institutions (IFIs) can facilitate countries' coordination and fund project identification and design. The allocation of adequate resources for originating and programming regional projects is critical for implementing viable projects that would not otherwise be prioritized.

LAC regional integration institutions, such as the secretariats of trade agreements, have traditionally supported the negotiation and enforcement of regional policy frameworks (software), but do not cover all dimensions of modern integration agendas and are not designed to execute regional investment projects (hardware). Initiatives such as the IIRSA, the Mesoamerica Project, or the Investment and Financing Plan for Central America and the Dominican Republic (PIFCARD) are facilitating the identification of cross border physical integration investments. But they rarely overcome the crucial limitation of the lack of juridical personality that restricts multi-country lending. Multilateral funding may help to build regional institutions that are able to undertake project execution or can support the alignment of national executing agencies.

Regional projects also entail additional costs for IFIs at the origination, design, and execution and monitoring stages. The definition of higher priorities for cross-border projects and adequate incentives that compensate higher regional operational costs may help to increase the supply of regional development finance.

Despite the existence of some pioneering innovations, such as the IDB Regional Public Goods Program, IFIs serving LAC lack dedicated financial and non-financial instruments sufficient to support clients' integration agendas. The development of a new integration operational compact may help to overcome these demand and supply constraints.

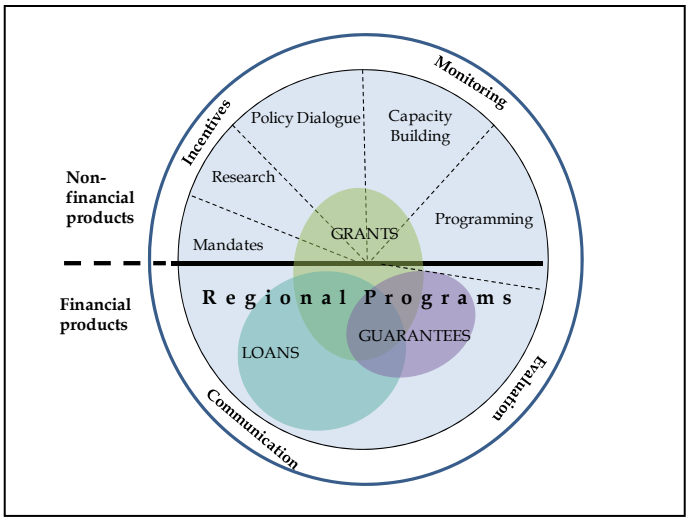
An Enhanced Compact of Regional Instruments

Coordinating support for investments in physical infrastructure and cross-border regulatory frameworks is emerging as a priority that can generate high returns and demonstration effects. At the same time there is a need to act simultaneously on the identified bottlenecks that limit the demand for regional interventions and the supply of regional development finance.

Providing support to a new generation of integration projects requires a supply of financial and non-financial products, the provision of incentives for countries to articulate and express demand for regional interventions, and monitoring and evaluation mechanisms to ensure accountability and development effectiveness (Figure 13). Thus, the need to upgrade and deploy existing instruments differently and complement them with new ones. The implementation of this strategic compact may also require adjustments to internal policies, procedures, allocation of

resources, and IFI coordination to ensure that the instrument mix is used in a more efficient manner.

Figure 13. An Enhanced Strategic Compact to Support Integration



Source: IDB (2010)

Ongoing IDB work to develop a new institutional strategy to support global and regional integration (IDB, 2010) recommends that two complementary actions be carried out simultaneously, as follows:

- **Non-financial products.** Specific recommendations include: (a) support the generation of regional mandates emanating from client countries; (b) strengthen, upgrade, and expand policy research and information systems to address an encompassing set of issues that are emerging on the LAC integration agenda; (c) earmark grant resources to support high-level policy dialogues and operational platforms; (d) develop a capacity building initiative that raises the awareness of integration issues among a critical mass of public and private actors; and (e) enhance the programming cycle of regional operations while strengthening the link between regional and country strategies.

- **Financial products.** On the operational side, the IDB strategy suggests the following: (a) heighten the capacity of IFIs to design and implement regional programs; (b) pool existing grant resources and mobilize new ones to increase availability of grant funding for regional projects; (c) establish blending mechanisms to create incentives to overcome the higher costs of regional investments; and (c) develop regional non-sovereign facilities for private sector operations.

Once implemented, the proposed instrument compact may help to overcome some of the constraints that currently prevent the implementation of regional investments. The result would be a new generation of integration projects that could help the region to reduce trade costs, deepen integration, and ultimately improve its competitive position in the global marketplace.

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