

# Can Latin America Tap the Globalization Upside?

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## Abstract

This paper discusses the theoretical arguments in favor of and against economic globalization and, with a view to ascertaining whether Latin America may be able to capture the globalization upside, examines the trends and salient features of Latin America's globalization as compared with that of Southeast Asia. The paper focuses on trade and financial integration as well as the aggregate demand structures (domestic demand-driven versus external demand-driven) that underpin the globalization process. It finds that Latin America is mitigating some bad side effects of financial globalization by moving toward a safer form of international financial integration

and improving its macro-financial policy frameworks. Nonetheless, Latin America's progress in raising the quality of its international trade integration has been scant. The region's commodity-heavy trade structures and relatively poor quality of trade connectivity can hinder growth potential to the extent that they are less conducive to technology and learning spillovers. Moreover, Latin America's domestic demand-driven growth pattern (a reflection of relatively low domestic savings) may become an additional drag to growth by accentuating the risk of a low savings-low external competitiveness trap.

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## 1. Introduction

The world economy is not what it used to be twenty years ago. For most of the 20th century, the world economy was characterized by high-income (North) countries acting as “center” to a “periphery” of developing (South) countries. Think in this regard of the United States’ influence on Latin America and the Caribbean (LAC), for example. Europe and Japan also played such a role for a number of peripheral developing countries in the post WWII period. However, the recent rise of emerging economies clearly suggests the need to go beyond this center-periphery dichotomy. The previous North-South dynamics are diversifying and changing, suggesting the rise of a much more multipolar world economy. In particular, the traditional overlap between “center” and “North” versus “periphery” and “South” is eroding as some emerging countries are becoming large players in the world economic landscape.

A few statistics shed light on the magnitude and speed of these changes. Back in 1980, the gross domestic product (GDP) in current dollars of the South (defined as all the countries outside of the G7 and Western Europe) was around 30 percent of the world GDP. By 2011, the South reached almost the same nominal GDP as the North, capturing nearly 50 percent of the global GDP. The South's expansion is as striking in trade and financial flows. South countries accounted for about 30 percent of global trade flows in 1980, whereas in 2011, they represented around 55 percent. Similarly, South countries captured around 25 percent of global capital inflows in 1980; by 2011, they received more than 60 percent of the total. They also became more representative as source countries, sending almost 64 percent of global capital outflows in 2011, up from 22 percent in 1980.

This tectonic re-configuration of the global economic landscape—particularly the move away from the traditional pattern of high-income countries at the center and developing countries at the periphery—has brought about significant changes to LAC. In fact, since the early 2000s both trend and cyclical growth in LAC seems increasingly tied to developments in other South countries.<sup>1</sup> For example, prior to the 2000s, the co-movement in economic activity between LAC and China was virtually non-existent. Over the last decade, however, such co-movement has been rising for several countries in LAC, particularly in South America. In contrast, co-movement with the United States (with the notable exception of Mexico) and the European Union has been on a downward trend since the late 1990s. These patterns of growth co-movement between LAC countries and the rest of the world were put temporarily on hold during the 2008-2009 global crisis, when economic activity across countries fell in tandem with the epicenter of the crisis. Nonetheless, LAC along with other South countries have resumed their higher pre-crisis growth rates and converged more quickly than the advanced world (De la Torre, Calderon, and Didier, 2010; Didier, Hevia, and Schmukler, 2012), suggesting that their increased growth co-movement is persistent. These growing economic linkages are driven to a significant extent by the trade channel (Calderon, Chong, and Stein, 2007) and are associated with a significant reconfiguration of the geographic and product structure of LAC’s trade.

At the same time as LAC’s direct trade linkages have mutated, high commodity prices have been observed for most of the 2000s, configuring a commodity price boom that has been

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<sup>1</sup> See for example De la Torre, Didier, and Pienknagura (2012b).

not just the longest but also the most comprehensive since the 1960s—affecting almost all commodities relevant to LAC. The strong tail winds coming from the high commodity prices along with large volumes of capital inflows, driven at least in part by low interest rates in advanced economies and a widespread search for yield among international investors, have resulted in appreciated currencies across the LAC region for most of the 2000s. The fast expansion of the services sector observed in a number of LAC countries may in fact be a reflection of LAC’s real exchange trends and evolving external connections. In this context and unsurprisingly so, many have raised concerns about the long-term development prospects for LAC within this new multipolar world.

This paper focuses on the nature and the implications for the economic development of LAC that the emergence of this new multipolar world economy entails. Latin America is an increasingly globalized region and its economic future depends a great deal on the quality of its external connections. That is, LAC’s future growth will be affected not only by the quantitative incidence of the evolving international trade and finance linkages, but also by the qualitative nature of such linkages. To shed light on these issues, in Section 2 we start by contrasting the performance and globalization patterns of LAC vis-à-vis the Southeast Asian economies, particularly the so-called Asian Tigers. In Section 3, we revise the theoretical arguments on the costs and benefits of various dimensions of globalization. In Section 4, we explore the nature of trade connections and other macroeconomic aspects that may affect the globalization-growth nexus. We conclude in Section 5.

## **2. LAC vs. the Southeast Asian Tigers: A case for globalization?**

For development economists, the ultimate test of the benefits of globalization has to be economic convergence—that is, the convergence of the per capita income of the less advanced economies towards the per capita income levels of the more advanced economies. In fact, a case for globalization would rest convincingly before the profession if one could show that the per capita income for a developing country converges consistently and sustainably towards that of the advanced economies as a consequence of the country’s persistent increase in its degree of international trade and financial integration. The state of our theory and evidence does not allow us to make that claim categorically, however. To be sure, there is a strong tendency among economists in favor of a causal connection going from trade openness to growth, although it is far from being a consensus.<sup>2</sup> The growth effects of international financial integration command even less agreement and the views in this regard are rather tilted towards the negative.<sup>3</sup> In all, and not least because of the changing nature of globalization (Lane and Milesi-Ferretti, 2008; Baldwin and Lopez-Gonzalez, 2013) as well as the endogeneity challenges facing empirical work, the growth enhancing effects of rising globalization have not yet been fully established—

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<sup>2</sup> The seminal article of Frankel and Romer (1999) showed (using data for 1985) that differences in trade openness across countries were positively associated with higher levels of GDP per capita. Others have argued, however, that when institutional differences across countries are taken into account, there is a lack of statistical significance on the coefficient linking trade to growth (see for instance Acemoglu et al., 2001; and Rodrik et al., 2004). The debate has not been settled yet and a number of papers keep pondering on the question of whether trade causes growth. See for example Dollar and Kraay (2002), Alcalá and Ciccione (2004), and Noguer and Siscart (2005).

<sup>3</sup> See for example Prasad, Rajan and Subramanian (2007), Aizenman and Sushko (2011), and Aizenman, Jinjarak, and Park (2013) for recent empirical analysis of the links between financial globalization and growth.

i.e., in a compellingly well-identified, predictable, systematic, and robust manner—and this likely explains why the debate between globalizers and anti-globalizers within the economics profession remains as heated as ever.<sup>4</sup>

Be that as it may, if there is one place where the proponents of economic globalization can find evidence in their favor, it is in the contrasting growth experiences of LAC and the Southeast Asian Tigers (Hong Kong SAR, China; Singapore; the Republic of Korea; and Taiwan, China) during the 60 years or so of the post-World War II period. The impressive convergence of the Tigers towards the standards of living of the U.S. in this period was indeed accompanied by a pronounced rise in their degree of international trade and financial integration. By contrast, LAC failed to converge even as it displayed a comparatively low, albeit increasing, degree of trade and financial globalization. Let us take a closer look at these facts.

Figure 1 depicts the contrast in growth convergence between these two sets of countries. In the early 1950s the (PPP-adjusted) per capita income of the Asian Tigers was merely 12 percent of that of the U.S.—only about one-third of LAC’s per capita income. It subsequently closed the gap steadily and dramatically, catching up with LAC’s per capita income around 1980 and then continuing to rise steeply to reach the equivalent of about 80 percent of the U.S. per capita income by 2012. In contrast, LAC’s per capita income growth relative to the U.S. over the same period was, overall, one of stagnation. If anything, LAC’s income per capita declined relative to that of the U.S. since the 1950s: it started at around 30 percent of that of the U.S. during the phase of import substituting industrialization (1950-1980), lost considerable ground relative during the “lost decade” of the 1980s, and continued to lose ground, albeit less pronouncedly, during the Washington Consensus decade of the 1990s, so that by the end of the 1990s its per capita income stood at around 20 percent of that of the U.S.. LAC did begin a convergence process in the 2000s but hardly managed to bring its per capita income back to the level it had in the early 1950s.

LAC’s lack of convergence is not just the result of averaging. To be sure, important heterogeneity is observed when individual LAC countries are considered. However, as shown in Figure 2, the failure to converge is a widespread phenomenon in the region. The per capita income of most of the smaller- and medium-sized LAC countries relative to the U.S. per capita income has displayed a flat line-type behavior, stagnating in the 15-20 percent range, for the last 60 years (Panel A). Brazil, Mexico, Panama, and Peru constitute a group marked by high fluctuations—the visible convergence process registered during the import substitution period was reversed through the 1980s and 1990s, and then followed by another bout of partial convergence since the early 2000s, which has been especially strong in the case of Panama and Peru (Panel B). A few LAC countries (notably Argentina, Uruguay, and Venezuela) actually diverged over most of the period, falling from a per capita income ratio of 50 percent or more in the early 1950s to around 30 percent by the late 1990s, although Argentina and Uruguay recovered a significant part of the lost ground in the last decade or so (Panel C). Chile is arguably the only country in LAC that has been on a steady convergence path for a quarter of a century, since the mid-1980s, a major turnaround that followed a long period of divergence (1950-1985) but that nonetheless pales when compared to the convergence experience of the

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<sup>4</sup> See for example Borensztein, De Gregorio, and Lee (1998), Rodrik (1998), Collier and Dollar (2002), Fischer (2003), Stiglitz (2003), and Kose, Prasad, Rogoff and Wei (2006), among many others.

Asian Tigers (Panel D). In sum, the within region heterogeneity is not sufficient to alter the thrust of the overall story, namely, that LAC looks like a convergence failure when compared to the incredible convergence success of the Asian Tigers.

Let us now turn to the contrast between LAC and the Tigers in terms of their degree of international trade integration, which is depicted in Figure 3. The Tigers' trade globalization (as measured by the sum exports and imports of goods and services relative to GDP) rose continuously from about 100 percent of GDP in the 1960 to over 300 percent by 2010 even as their convergence process was unleashed. In contrast, LAC shows a comparatively low degree of trade openness, albeit a rising one over the same period. In the case of the LAC-7 (Argentina, Brazil, Chile, Colombia, Mexico, Peru, and Uruguay), trade openness rose from only around 25 percent in the 1960s and 1970s to nearly 50 percent by 2010.

These patterns are similar to those of financial globalization. During the late 1980s and early 1990s LAC was particularly aggressive in implementing financial liberalization policies (as gauged by an index that combines measures of liberalization of the capital account, the domestic financial sector, and the stock market), reaching levels comparable to those in the advanced economies and somewhat above those in Southeast Asia, as shown in Figure 4. Nonetheless, the Asian Tigers vastly exceed LAC—both in terms of levels and rates of increase—when measures of actual international financial integration are considered (Figure 5). Thus, international financial integration (as measured by the sum of foreign assets and liabilities as a percent of GDP) in the case of the Tigers was already hovering at a high level, around 300 percent, in the 1980s and then rose steeply to nearly 900 percent in the first decade of the 2000s. In contrast, LAC-7 countries go from an average of about 80 percent in the 1980s and 1990s to around 130 percent in the first decade of the 2000s.

So, what can we make of the contrasts between LAC and the Asian Tigers documented above? For starters, there is clearly a very high correlation between a remarkable process of economic convergence and an equally remarkable process of economic globalization in the case of the Tigers. *Prima facie*, this is strongly suggestive of self-reinforcing dynamics between economic globalization and growth, particularly when contrasted with LAC's failure to converge in the context of comparatively low degrees on trade and financial integration.

However, the same data yield mixed suggestions when LAC's experience over time is considered by itself. During the 1950-1980 period of LAC's inward-looking import substitution development strategy, the data show a positive association between relatively low levels of international integration (consistent with the inward orientation) and the lack of clear economic convergence. Since the 1980s, however, LAC's degree of economic globalization has been on the rise—albeit from low levels in comparison to the Tigers—but this was associated with economic divergence (rather than convergence) during the 1980s and 1990s and with modest economic convergence during the last decade.

In all, while the contrasting experience of LAC and the Asian Tigers during the post-World War II period can in several respects be used to build a case for economic globalization, it is far from being a slam dunk. Particularly when LAC's experience is examined by itself over time, the links between globalization and growth become elusive. One possible implication is

that, more than just on quantitative measures of international economic integration, there is a need to focus on the nature and quality of such integration. To unpack this idea better, in the next section we briefly review the conceptual arguments for and against globalization.

### **3. The theoretical pros and cons of globalization**

Globalization has bright sides (it can enhance growth and convergence) as well as dark sides (it can handicap growth). Whether the bright sides dominate the dark sides in actuality depends on a number of factors, such as initial conditions, non-policy related structural features (including geography and natural endowments), and policy frameworks (including their relation to institutional configurations and institutional changes), as well as the interactions and interdependencies among these factors and between these factors and the evolving nature of globalization. The key is, therefore, to distinguish the more beneficial forms of globalization from the less beneficial ones and identify the conditions under which the upsides of globalization can be seized and maximized and the downsides minimized or avoided entirely. This much is clear from a brief review of the literature on the pros and cons of globalization that follows in the rest of this section. The review focuses on the bright and dark sides of economic globalization along three dimensions that seem to matter for growth and have the potential of explaining much of the contrasting growth experiences of LAC and the Asian Tigers: (a) international trade integration; (b) international financial integration; and (c) the contrasting macroeconomic features associated with the Tigers' external demand-driven growth versus LAC's domestic demand-driven growth.

#### ***(a) International trade integration***

Consider first the bright sides of international trade integration. The main arguments may be classified in three groups. The first concerns the benefits arising from the larger markets that become accessible as international trade rises. This can enable the classical static efficiency gains from trade via specialization in line with comparative advantages and relative endowments (Ricardo, 1817; Heckscher, 1919; Ohlin, 1933). It can also facilitate the capturing of scale economies and Marshallian-type positive externalities that may be unavailable within a small local market and can lead to dynamic efficiency gains (Marshall, 1879, 1890; Caballero and Lyons 1989, 1990, 1992; Chan, Chen and Cheung, 1995; Segoura, 1996). In addition, international trade can facilitate access to better functioning input markets for producers, while consumers can gain from access to greater product variety and higher product quality (Dixit and Stiglitz, 1977; Krugman, 1980; Lancaster, 1990; Romer, 1990; Grossman and Helpman, 1991).

The second group of arguments hinges on the monopoly-busting, efficiency-enhancing effects of competition, whose role can deepen and widen as a country engages in international trade. Competition from abroad can enhance resource allocation, among other factors by improving the signal to noise ratio in relative prices and by raising the incentives for firms to continuously optimize production, management, and marketing practices, so as to avoid falling behind the competition, remain profitable, and keep or expand market share. Contestability

stemming from foreign competitors might also spur innovation by local firms, especially if these firms are not too far from the technological frontier.<sup>5</sup>

The third group of arguments focuses on the technological diffusion and learning spillovers that can arise from integration into the international markets for goods, services and finance. Learning can happen by importing, as imports embody knowledge and technology. For instance, when imports of advanced equipment are put to use in production processes, the importer can benefit from a various forms of support, training, and advice provided by the supplier. Learning can of course also happen by exporting, not least through the upgrading needed to meet international product quality standards and certification requirements. Exporters can also learn a great deal from the feedback provided by their global buyers, including on how to innovate and improve practices and processes so to better satisfy demand niches, consistently attain high quality, and more ably adapt to changing circumstances. The quality and intensity of feedback, moreover, may multiply when exporters are inserted into international production chains as both buyers and sellers. These productivity enhancing effects can be further boosted where trading is at least in part grounded on FDI, which is itself a potentially major conduit of technology diffusion and learning spillovers.

It has been increasingly argued that the intensity of learning and innovation effects vary with the type or manner of production and commercialization activities involved in international trade. Hausmann and his coauthors (2007, 2009, 2011), for example, place the emphasis on *what* countries produce in order to trade. They liken the product network or the “product space” to a forest, and argue that economies located in the denser parts of the forest are more likely to experience greater learning spillovers and hence productivity growth. This is presumably because the complexity of their traded products is higher, and the economic distance between products shorter in the denser areas. Economic distance, in turn, depends on the similarity of the needed production capabilities, including labor skills, policy design and implementation capacity, judicial and contract enforcement ability, etc. A short distance between products makes it easier for firms to learn faster on how to enter into new proximate business activities by jumping, so to speak, like monkeys in the forest, from one product (tree) to another.<sup>6</sup>

Others, such as Lederman and Maloney (2012), place the emphasis not so much on what is produced but on how it is produced. The underlying notion in this case is that the same production process in two different firm and country setups may entail very different degrees of technology diffusion and learning spillovers—for example, the assembling of the same type of computer in a Taiwanese firm vs. a Mexican firm. This point of view questions the tendency to

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<sup>5</sup> Aghion et al. (2005) develop a growth model in which product market competition may raise the profits from innovating (“escape-competition” effect) but it may also reduce innovation incentives especially for “laggards” as its rewards to catching up are lowered (“Schumpeterian” effect). The model predicts an inverted U-shaped relationship between competition and innovation. When competition is low, an increase in competition will raise innovation through an “escape-competition” effect, but when it becomes intense enough it may lower innovation through the Schumpeterian effect on “laggards.” The reason why one effect dominates when competition is low and the other when competition is high is the composition effect on the steady-state distribution of technology gaps.

<sup>6</sup> Hausmann, Hwang, and Rodrik (2007) develop an index of complexity (based on the basket of goods that are commonly exported by higher-income countries) to rank countries’ export baskets. They find a statistically significant association between complexity and growth—i.e., countries whose export baskets rank high in their complexity index also tend to grow faster.

unduly attribute special growth-enhancing virtues to certain type of goods (say, high-tech manufactures) over others (say, mineral commodities or services). In fact, these researchers argue—and provide copious evidence to back their case—against the popular Sachs-Warner (1995) “natural resource curse” claim that, on average, commodity-reliant countries systematically grow less. They argue instead that natural resources are not destiny—whether they turn into an actual blessing (by propelling long-term growth) or a curse (by stifling growth) is not pre-determined, but it is rather mediated by institutions and policies which, when adequate, can help maximize the dynamic upsides and minimize the dynamic downsides of natural resources.<sup>7</sup> It is these underlying fundamentals, rather than the product itself, which help explain the contrast between, say, oil-rich Venezuela trapped in rent-seeking dynamics and mineral-rich yet prosperous Australia.

A complementary way of grasping the scope for international trade-related learning spillovers and technology diffusion is to focus on global value chains. These are part of the ongoing mutation of globalization and reflect the greater modularity of production processes that has been facilitated by the recent wave of technological revolution, especially in such areas as information, communications, and inventory management. As discussed in Baldwin (2011), this new globalization pattern involves the offshoring of certain activities—say, of back office functions such as accounting and customer support—as well as the distribution of production internationally (with the associated increase in trade in parts and components). Globalization of this type is arguably driven more by the dynamic of firms’ global strategies than by traditional, country-based comparative advantages; in fact, the ongoing cross-border firm dynamics tend to turn comparative advantage into a multi-country process and call for a finer resolution analysis of trade patterns that goes beyond the traditional focus on broad sectors and skill categories. Again, the underlying notion here is that the more the economic activities of a country are connected to global value chains—particularly to the middle range of such chains—the more the productivity-enhancing learning and innovation effects (Didier and Pinat, 2014).

International trade integration, however, is not free from dark sides. Latin America is the place where these have arguably been most studied, particularly during the 1950s, 1960s and 1970s under the Latin American structuralism (associated with the ECLAC school of thought led by Raul Prebisch) and dependency theory (a Latin American version of Marxism cum structuralist thinking represented by, for instance, the writings of Cardoso, Faletto, and Sunkel).<sup>8</sup> One strand in this regard highlights the pitfalls associated with *enclave-type* extraction and production modes for mineral commodities and *plantation-type* production modes for agricultural commodities. These modalities of production generate little or no learning spillovers and technology transfers and may, instead, facilitate the pillaging of resources that leave the local economy durably damaged. They may also reinforce exploitative local institutions and boost inequality in the distribution of income, wealth, and political power.

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<sup>7</sup> For a broad discussion of the links between commodities and economic growth and development in the case of Latin America, see Sinnott, Nash, and De la Torre (2010).

<sup>8</sup> As started in Cardoso and Faletto (1979), “a real process of dependent development does exist in some Latin American countries. By development, in this context, we mean 'capitalist development.' This form of development, in the periphery as well as in the center, produces as it evolves, in a cyclical way, wealth and poverty, accumulation and shortage of capital, employment for some and unemployment for others. So, we do not mean by the notion of 'development' the achievement of a more egalitarian or more just society. These are not the consequences expected from capitalist development, especially in peripheral economies.”

Another strand, and arguably one of the most enduring ones, focuses on the “natural resource curse”. Much effort has gone into carefully testing and re-testing this thesis and there can be no denying that commodity reliance carries significant downside risks that can materialize into the so-called “curse.” While not destiny, the threat of a commodity curse can, in practice, materialize and undercut growth through various channels. Sinnott et al. (2010) highlight three possible channels: volatility, reduced scope for productivity-enhancing externalities, and institutional degradation driven by rent seeking.

Consider the first channel—volatility. Large commodity windfalls, by inducing a significant appreciation of the real exchange rate, can hinder the expansion and diversification of non-commodity tradable activities (exportables and importables). In turn, the concentration of exports in a few commodities raises a country’s vulnerability to commodity price volatility (i.e., to adverse terms of trade shocks). The severity of this effect will be larger the greater the reliance of the fiscal accounts on commodity export proceeds, unless such revenue stream is buffered by insurance schemes, including self-insurance via stabilization funds.

The second channel also can stem from lack of diversification. The argument is that a commodity-dominated export structure is inherently less capable, compared to, say, high-tech manufactures, of creating linkages, positive spillovers, and incentives to upgrade to more differentiated, higher value-added products. Commodities cannot easily serve as “launching pads” into industries that are friendlier to productivity growth, along the lines of Hausmann, Hwang, and Rodrik (2007). In addition, commodity exports are not best suited to facilitate the insertion into the knowledge- and technology-intensive sections of global value chains.

The third channel may be activated inasmuch as a high fiscal and external dependence on commodities can promote rent seeking behavior. These can end up corroding democratic governance and public institutions, exacerbating the inequality of wealth and political power. All of this may, in turn, hinder growth. This at the same time suggests that the downside risks would be higher where the quality of institutions is lower at the outset of a commodity boom.

Beyond the threat of a “curse”, another dark side of globalization that used to worry dependency theorists is that, when done prematurely, trade liberalization, rather than enhancing competition, may strengthen foreign monopoly power and destroy local industries that may otherwise be viable. More recently, Rodrik (2005) has resurrected this sort of argument by noting that the Washington Consensus period substantially raised competition from abroad without offsetting policies that would have made it easier for entrepreneurs to appropriate the benefits of new ideas and initiatives. As a result, innovation was discouraged and growth during the 1990s in LAC dipped below that obtained in the previous decades of import substitution when, presumably, the opposite may have occurred, that is, policies promoted local infant industry creation but incentives were insufficiently disciplined by competition.

### ***(b) International financial integration***

Several arguments can support the bright sides (potential benefits for convergence) of international financial integration. It can lead to greater access to capital at lower cost for

profitable projects that can lift growth. In the case of debt finance, the materialization of benefits requires that currency and rollover risks are appropriately hedged, which implies that access to foreign finance can be particularly beneficial when it involves long-term finance and where currency hedges exist or, if not, if external finance goes mainly to exporting endeavors that can match their dollar liabilities to dollar earning streams. Financial globalization can also yield growth benefits by widening the opportunities for portfolio diversification, both through an increased presence of foreign investors and financial intermediaries in local markets and through the use by local issuers and investors of international financial intermediaries and markets located outside the country.<sup>9</sup> Growth-friendly learning spillovers may take place, in particular, through the presence of blue-chip international banks in local markets, as these banks can presumably facilitate the diffusion of innovative lending technologies and first-rate managerial practices, including with respect to risk management. Finally, financial globalization can increase market discipline and this, even if costly and painful in the short run, can spur reform, thereby enhancing stability and growth potential, over the long run.<sup>10</sup>

Much ink has gone, however, into exploring the dark sides of financial globalization which, by potentially generating long-lasting losses via socially excessive systemic financial instability and crises, can undercut convergence. This may be the result of wrong sequencing. That is, the aggressive pursuit of financial market liberalization (including the de-regulation of the domestic financial system as well as its integration into international capital markets) takes place *before* a minimum threshold of institutional and local market strength is achieved in terms of the legal framework, the regulatory system, the supervisory capacity, the accounting and disclosure standards, the credibility and robustness of the exchange rate system, the development of local-currency debt markets, among other factors.<sup>11</sup> Weak local currencies and banking systems have indeed been found, time and again, to be ill-prepared to deal with and intermediate prudently the surges in capital inflows, which can eventually lead to currency attacks or credit bubbles followed by credit busts with long-lasting damage.<sup>12</sup> These problems are most acute in the context of generalized currency and maturity mismatches in the balance sheets of debtors.<sup>13</sup> These concerns are also related to the “original sin” literature (the inability of emerging economy sovereigns and corporates to issue long-term domestic currency-denominated debt), to the extent that the vulnerability to crisis can increase if financial globalization proceeds before a market for domestic currency-denominated debt has been established (Eichengreen, Hausmann, and Panizza, 2005).

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<sup>9</sup> Examples include the investments abroad of part of Latin American pension funds and the listing and trading of the shares of Latin American companies abroad.

<sup>10</sup> Consistent with this hypothesis, Kaminsky and Schmukler (2003) find that financial liberalization is associated with more pronounced boom-bust cycles in the short run but leads to more stable financial markets in the long run.

<sup>11</sup> A number of theoretical papers show that financial liberalization may be associated with crises (see, for example, ; McKinnon and Pill, 1997; Allen and Gale, 2000; Bacchetta and van Wincoop, 2000; and Calvo and Mendoza, 2000). Empirically, several papers have found links between financial deregulation, boom-bust cycles, and banking and balance of payments crises (see, for example, Corsetti, Pesenti, and Roubini, 1999; Demirgüç-Kunt and Detragiache, 1999; Kaminsky and Reinhart, 1999; and Tornell and Westermann, 2005).

<sup>12</sup> See Hausmann and Gavin (1996) for an excellent analysis of the macroeconomic roots of banking crises.

<sup>13</sup> Calvo et al. (2004), for instance, show that the probability of “sudden stops” in capital inflows rises with the degree to which liabilities are dollarized.

However, the dark sides of financial globalization can take place not only because of weaknesses in the local financial systems, but also because of significant imperfections of international financial markets themselves. Large fluctuations in capital flows that are optimal and rational from the point of view of individual asset and bank managers can be “excessive,” and even lethal, from the social point of view if driven by significant un-internalized externalities, whether pecuniary, informational, behavioral, or interconnectedness externalities.<sup>14</sup> Excessive volatility of international financial flows can also arise as a result of non-rational mood swings driven by momentum (noise) traders in a context where rational arbitrageurs are unable to offset them due to, say, collateral constraints or coordination failures. To the extent that this sort of maladies obtain, the process of financial globalization may be unfriendly to systemic stability and convergence.<sup>15</sup>

### *(c) External demand versus domestic demand driven growth*

The discussion in Sections 3a and 3b above implies that the East Asian Tigers may have been able to achieve a greater degree of convergence in large part because they managed to maximize the bright sides of globalization while minimizing its dark sides. In contrast, LAC’s institutional and policy frameworks tended to open too much scope for the dark sides of globalization. A complementary way of looking at the international economic integration is to focus on whether such globalization process is underpinned by certain domestic macroeconomic features—such as an external demand-driven growth model vs. a domestic demand-driven one—that may constrain the potential upsides or amplify the likelihood of the downsides of globalization. This is the focus of this section.

Under an approach that takes into account the aggregate demand structure, even if globalization were managed so as to mitigate its downsides, it may not yield significant growth dividends, especially for the smaller economies, unless supported by an export-led growth model, at least during a significant part of the development process. This argument is reminiscent of the debate launched by Dooley, Folkerts-Landau, and Garber (2004) on “Bretton Woods II” and the discussion of currency undervaluation as a driver of growth. The authors argue that the development strategy for the countries in the periphery goes through an export-led growth supported by undervalued exchange rates, capital controls and accumulation of financial claims on the center. In a related vein, Rodrik (2008) argues that maintaining a competitive real exchange rate is tantamount to a policy of across-the-board protection in favor of tradable activities, the expansion of which is beneficial to growth due to positive externalities that are not present in non-tradable activities. Similarly, Levy Yeyati et al. (2013) focus on exchange intervention policy geared at keeping or enhancing external competitiveness and find that such

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<sup>14</sup> For a comprehensive analysis of market imperfections and frictions that can lead to constrained inefficient systemic financial instability, see De la Torre and Ize (2010).

<sup>15</sup> Imperfections of international financial markets call attention to gaps in the international financial architecture. For a discussion of reform issues concerning the international financial architecture see Eichengreen (1999). In addition to insufficient standardization of regulation and supervision across countries, salient gaps in the international financial architecture are found in such crucial areas as contagion—i.e., the absence of an international liquidity facility to mitigate ripple effects unwarranted by fundamentals in the markets for sovereign bonds (see Calvo, 2001), and default—i.e., the lack of a functional framework for dealing efficiently with sovereign debt defaults (see Krueger, 2001).

policy is associated with better growth performance, although the transmission channel between the exchange rate and growth is via higher investment, rather than via increased exports.

De la Torre and Ize (2014) develop this type of argument more formally by linking savings, the real exchange rate, and growth. The core of the argument is as follows: an external demand-driven growth pattern is manifested in systematic current account surpluses, as the production of tradables (i.e., the production of exports and import substitutes) reduces the need for imports and leads to an excess of exports over actual imports. Such surpluses are the other side of the coin of high domestic savings, which constitute a fundamental factor that creates a bias in favor of more competitive real exchange rate than otherwise. A competitive real exchange rate, in turn, tilts production incentives in favor of tradables which, compared to nontradables, may be more conducive to learning spillovers and technology diffusion effects. Hence, an external demand-driven growth model (such as the one that characterized the growth miracle of the East Asian Tigers) is friendlier to productivity growth than a domestic demand-driven growth (such as the one that has characterized LAC, and not just during the import-substitution period).

#### **4. LAC's changing patterns of globalization**

The previous section surveyed the conceptual arguments that link economic globalization to growth. The underlying thesis was that what matters for growth is not so much the quantitative degree of globalization *per se* but rather the type and quality of globalization. Some forms of international economic integration may be more beneficial to per capita income convergence than others. In this section, we compare and contrast LAC to the Asian Tigers along various proxy measures of globalization quality. By better characterizing the nature of LAC's economic globalization process, this comparison should help frame the question of this paper, namely, whether LAC is becoming better able to tap the globalization upside. Of course, empirically assessing the quality of globalization is intrinsically hard, not least because of lack of data. Hence, our assessment is subject to significant limitations and caveats. We hope to sketch, nonetheless, salient features of the evolving nature of LAC's economic globalization, using the Asian Tigers as well as four Southeast Asian middle-income countries (Indonesia, Malaysia, Philippines, and Thailand) as a benchmark. The result is a nuanced—and perhaps less pessimistic than many may expect—view of where LAC stands.

This section is divided into three subsections. The first examines LAC progression towards a more robust and resilient form of international financial integration. The second characterizes the evolving nature of LAC's international trade linkages. The third explores some dimensions of LAC's domestic demand-driven growth pattern in contrast with the Asian external-demand driven growth model.

##### ***(a) A more robust form of financial globalization***

Broadly stated, the main claim of this subsection is that, while the volatility of capital flows remains high (and may be actually increasingly under the influence of global factors, i.e., factors beyond the control of domestic policies in LAC), LAC has been evolving over the past decade or so towards a much safer form of international financial integration. Let us elaborate on the main ingredients of this claim.

Consider first two key features in the evolving nature of international financial integration. One is the rising dominance of gross capital flows, not just among advanced economies, but also to and from emerging markets (Broner et al, 2013). Net capital flows can be decomposed into the gross flows by foreign (non-resident) investors and the gross flows by domestic residents. The cases of Brazil and Chile are shown in Figure 6. It is clear from that figure that there is a threshold year (2002 in the case of Brazil and 1993 in the case of Chile) after which net capital flows decouple substantially from the flows driven by either foreign or domestic investors. Both gross flows grow in absolute size and tend to move in opposite directions when measured as inflows, so that net capital flows remain relatively stable. Prior to the threshold year, net capital flows tracked closely the flows driven by foreigners. Indeed, foreign investors ran most of the show as capital flow movements by residents were relatively small.<sup>16</sup> After the threshold year, by contrast, financial globalization became a two-way street, with residents augmenting their investments abroad, not only reflecting the accumulation of international reserves but also private investments abroad, and this happens even as foreigners increase their presence in local markets, especially through foreign direct investments (FDI). The size of gross flows now swamps that of net flows in most of the financially globalized emerging markets, including a number of LAC countries, with the additional complication that fluctuations in gross flows are much larger than those in net flows.

The second feature is the rising role of the international asset management industry (particularly mutual funds, pension funds, and hedge funds) relative to that of banks in moving portfolio (non-FDI) capital flows across borders. For the LAC-7 countries, bank-intermediated flows, which used to represent around 50 percent of total inflows by foreigners in the 1980s, represented only about 12 percent during the 2003-2011 period. The rising relevance of asset managers (non-banks) in cross border flows is a phenomenon that has been amply documented and studied elsewhere.<sup>17</sup> A notable trait of this phenomenon is that capital market-based (as opposed to bank-based) flows has not reduced financial volatility—as many had initially hoped—but has rather amplified the pro-cyclicality of financial flows to emerging markets. This reflects to some extent a complex set of market imperfections and incentives that tend to tilt international financial intermediation towards herd behavior focused on short-term horizons and where being able to exit rapidly from emerging market exposure dominates over patient analysis of fundamentals.

Partly as a reflection of the features discussed above, internationally integrated financial markets are increasingly responding to global rather than country-specific factors.<sup>18</sup> The troublesome implication of this being, of course, that in addition to coping with possibly

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<sup>16</sup> When data for a greater set of LAC countries are examined, however, prior to the respective threshold years and in times of domestic stress or crises, the flight capital engineered by domestic residents tended to join the retrenchment by foreigner investors.

<sup>17</sup> De la Torre, Ize, and Schmukler (2011) and Didier and Schmukler (2014) document that there has been a transition in LAC from mostly bank-based financial systems to more diverse and interconnected ones, where capital markets have gained space, institutional investors (such as mutual and hedge funds) have played a more central role, and the number and sophistication of participants has increased.

<sup>18</sup> This point is argued and documented in, for instance, in Kose, Otrok, and Prasad (2008) and De la Torre, Didier, and Pienknagura (2012a).

heightened inherent volatility in capital flows, an emerging economy that is immersed in international financial markets has to deal with the fact that the quality of its domestic policies carries less weight (relative to global factors) in determining how investors treat that country, especially in times of global turmoil. Figure 7 illustrates this point. It shows in the first panel, that, over the past decade, global factors have accounted for an increasing fraction of the returns to emerging market assets (equities, currencies, and sovereign bonds), especially during turbulent times. Moreover, as shown in the second panel, the contribution of global risk aversion (as measured by the VIX) to LAC's equity price movements has tended to rise sharply relative to other common factors (such as the movements in the S&P Index) during periods of stress, as was the case during the peak of the global financial crisis in late 2008 and early 2009.

Notwithstanding the rising relevance of global factors and the seemingly greater inherent volatility in cross border flows (particularly portfolio flows), the good news is that LAC has been steadily strengthening its capacity to deal with volatile capital flows. This has been basically due to a fundamental improvement—a veritable silent revolution—in the region's "macro-financial immune system", whereby what used to be shock amplifiers (weak currencies, weak fiscal processes, and weak banking systems) have been turned into shock absorbers (credible and flexible currencies, more resilient fiscal processes, better regulated and stronger banking systems).<sup>19</sup>

In fact, in LAC's not too distant past, financial crises were to a large extent self-inflicted—the result of weak fiscal and monetary policy frameworks amplified by internationally integrated but fragile domestic financial systems.<sup>20</sup> Even when the initial disturbance was exogenous—as was, for instance, the 1998 Russian crisis—LAC's macroeconomic and financial vulnerabilities were such that the domestic ripple effects of the external disturbance were substantially magnified. The scope for macro policy maneuvering was heavily constrained and policy responses tended to be pro-cyclical. For instance, the fear of letting the exchange rate depreciate reflected the constraints imposed by the widespread debt dollarization, and consequently, the resulting lack of exchange rate flexibility implied that central bankers had to raise interest rates in bad times in an effort to contain capital flight. The amplification phenomenon was thus a sort of trap: domestic weaknesses magnified external shocks and capital flows tended to react pro-cyclically in the face of such weaknesses; the interplay of these factors further induced macroeconomic policies to respond pro-cyclically, which in turn exacerbated the initial magnification effects.

Over the past fifteen years or so, however, and partly in response to the painful lessons learned through the recurrent crises suffered in the 1980s and 1990s, a number of LAC countries have moved towards a safer form of international financial integration while implementing a silent revolution in their macro-financial frameworks. Consider first the overall form of international financial integration, as depicted in Figure 8. The figure shows that LAC has switched the structure of its external net liability positions from debt to equity, becoming more

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<sup>19</sup> Using a short-run growth model with quarterly data for LAC-7 countries, Corbo and Schmidt-Hebbel (2010) find that whereas domestic fiscal and monetary policies amplified the recession experienced in the late-1990s, they actually softened the recession experienced in 2008-2009.

<sup>20</sup> A discussion and review of the literature on the unequal blessings of safe versus unsafe forms of financial globalization, see De la Torre, Levy Yeyati and Schmukler (2002).

Asia-like in this regard. More specifically, LAC has gone from being a large net debtor to becoming a net creditor vis-à-vis the rest of the world in debt contracts. This reflects a dual process of external deleveraging—whereby external debt, mainly of the public sector, has been reduced or replaced by domestic and local currency-denominated debt—and accumulation of international reserves. The region has thus been able to significantly reduce aggregate rollover risk and the threat of a spiral of exchange rate depreciations and capital flight.<sup>21</sup> Instead, a depreciation of the currency now actually produces capital gains for LAC, at least for its sovereigns (Didier, Hevia, and Schmukler 2012; De la Torre, Levy Yeyati, and Pienknagura, 2013b). Even as the region became a net creditor to the rest of the world in debt contracts, it has also become a more active user of foreign equity finance, which has led to a rising net debtor position in risk-sharing equity contracts (particularly FDI) vis-à-vis the rest of the world.

At the same time, several of the larger LAC countries moved towards more resilient macro-financial policy frameworks. For starters, fiscal institutions improved and the fiscal process became more viable (even if it has not become frankly counter-cyclical), as reflected in improved primary balances, lower debt-to-GDP ratios, and a less risky composition of debt.<sup>22</sup> Also, the soundness of banking systems have improved—they exhibit profitability, regulatory standards, and capital, provisions and liquidity buffers that are stronger than in comparable middle-income regions.<sup>23</sup>

By far, however, the greatest improvement in LAC's macro-financial immune system took place in the monetary policy field, where much more robust policy frameworks have been established and grounded on credible and professionally managed central banks. In particular, inflation-targeting regimes that feature flexible exchange rates have consolidated in Brazil, Chile, Colombia, Mexico, and Peru, and are being implemented in other countries (e.g., Uruguay, Guatemala). In fact, with nearly 80 percent of LAC's GDP now located in countries with monetary policy frameworks based on inflation targeting (Figure 9). These countries are able to not only keep low and stable inflation more effectively, but also enjoy a wider scope for using monetary policy counter-cyclically—to stimulate (dampen) aggregate demand when output falls behind (expands above) its potential. This was clearly evidenced during the 2007-2012 period, where policy interest rates in LAC moved to dampen the domestic business cycles, which were for much of the period decoupled from the business cycles of the advanced economies. In contrast, as shown in Figure 10, interest rates moved in a pro-cyclical fashion in times of adversity during the 1990s. The counter-cyclical use of the monetary policy interest rate during the mentioned period represents for LAC a break with its history.

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<sup>21</sup> See De la Torre, Calderon, and Didier (2010), Gourinchas, Govillot, and Rey (2010), Didier, Hevia, and Schmukler (2012), and Gourinchas, Rey, and Truempler (2012).

<sup>22</sup> Greater discipline in fiscal policy, along with enhanced debt management systems, contributed to reductions in government debt burdens in LAC and improvements in the currency, interest rate, and term structure of such debts, with salutary collateral effects on the deepening of local currency debt markets. In fact, many economies in the region had improved their over fiscal stance previous to the global crisis and had thus acquired fiscal space to design and implement packages to counteract the contraction in the world economy. See De la Torre, Calderón, and Didier (2010) and Didier, Hevia, and Schmukler (2012) for greater details on these developments.

<sup>23</sup> See De la Torre, Ize and Schmukler (2011) for a detailed analysis of the improvements in LAC banking systems' stability and regulatory and supervisory standards. While LAC countries seem to have mitigated the downsides of financial integration (instability), it is unclear whether the region is tapping its upside effects (development).

Moreover, having overcome to a significant extent the fear of exchange rate depreciation, inflation-targeting countries in LAC are better prepared to savor—arguably for the first time in their history—the complementary shock-absorption benefits of exchange rate flexibility.<sup>24</sup> These benefits could not be fully seized during the 2008-2009 crisis because of its globally systemic nature (there was nowhere to export the recession to, despite the sharp currency depreciations) but may be seized going forward to the extent that external demand is not contracting. In particular, a depreciation of the currency can, in the face of shrinking capital inflows, help to keep the external current account under control and, at the same time, boost domestic output and employment counter-cyclically, by not just encouraging exports but also the production of goods and services for the local market. Whether the elasticity of supply in the region is strong enough for these positive effects to significantly materialize is, of course, yet to be seen and some room for doubt is warranted. In addition, a depreciation of the currency can, by quickly adjusting the relative values of foreign and domestic assets, mitigate capital outflows, including by promoting “bargain hunting” inflows.

Two fundamental changes explain why inflation-targeting LAC countries can now embrace currency depreciations without fear in times of cyclical downturns. The first is the de-dollarization of financial contracts, depicted in Figure 11, which has substantially reduced the adverse (solvency) effects of currency depreciations on the balance sheets of debtors (households, firms, government). The second, depicted in Figure 12, is the substantial decline in the so called “exchange rate pass through”, a decline that reflects a more credible monetary policy that is better able to coordinate expectations in a forward looking manner—i.e., around the inflation target pre-announced by the central bank—thereby breaking the old tendency for prices and wages to be set in a backward looking manner—i.e., indexed to past inflation and devaluation.

Given this fundamentally changed macro-financial policy setup, the depreciations of LAC currencies should no longer be interpreted as a sign of financial distress and harbinger of a crisis. They should rather be seen, at least for the inflation-targeting LAC countries, as a salutary part of a more efficient and employment-friendly process of macroeconomic adjustment to a downturn induced by adverse external developments. Indeed, a case can be made that externally-driven economic slowdowns or recessions in the region will increasingly look more like the down phases of run-of-the-mill business cycles typical of advanced economies. In this sense, the tendency to analyze LAC’s macro-financial vulnerability today using categories that were applicable to the LAC of the 1990s is flawed, for it ignores the institutional and policy reconfiguration that led to a much improved macro-financial immune system.<sup>25</sup>

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<sup>24</sup> Inflation-targeting central banks in LAC do intervene in foreign exchange markets, which may raise doubts as to whether currencies are truly flexible. But the nature of such interventions has radically changed. Much of the intervention is to mitigate excess exchange rate volatility. This is a crucial change relative to the past, when interventions tended to defend the indefensible—central banks forced to buy dear dollars that they foolishly sold cheap in a futile effort to sustain an unviable peg. Inflation-targeting central bankers now intervene not to fight against fundamentals but mainly to mitigate excess volatility—they buy dollars (accumulate international reserves) when the exchange rate is deemed overvalued relative to its equilibrium level, and sell dollars (draw down international reserves) when it is undervalued (De la Torre, Levy-Yeyati, and Pienknagura, 2013b).

<sup>25</sup> Of course, not all, not even most, countries in the region partake of the improved macro-financial resiliency described in this section. While inflation targeting LAC countries jointly account for 70-80 percent of LAC’s

In sum, a safer integration into the global financial system, underpinned by the consolidation of sound macro-financial policy frameworks and the associated build-up of buffers, has been at the core of LAC's financial globalization patterns, reducing the vulnerabilities associated with the downside of greater financial globalization.

### ***(b) Trade quality and globalization***

LAC's trade structure and patterns have undergone significant transformations over the past decades, partly reflecting the trade liberalization processes of the late 1980s and 1990s and a series of free trade agreements (such as NAFTA, CAFTA, and Mercosur). Most recently, the rising role of China and other emerging countries in the global economy has been arguably an important driving force at the margin of changes in LAC international trade patterns. The question for this paper is whether such changes are evolving in the direction of greater trade quality—that is, in the type of trade that goes beyond the generation of static efficiency gains (associated with the comparative advantages grounded on relative factor endowments) and is more likely to deliver dynamic gains, particularly via learning spillovers and technology diffusion, thereby lifting the long-run of per capita income.

Measuring trade quality is an inherently difficult task, which is in practice aggravated by the dearth in adequate data. This section, nonetheless, aims at providing a first approximation in this direction. It explores the evolving nature of LAC's international trade integration by presenting evidence that may be linked, albeit indirectly, to trade quality—including measures of concentration (lack of diversity), complexity, degree of intra-industry trade, and connectivity to international trade networks and value chains. Throughout the discussion and where feasible, we highlight the contrast between Southeast Asia and LAC.

There has been a clear trend in the region since the early 2000s towards greater concentration of exports in commodities. This reverses the trend of the previous four decades, where the basket of LAC exports was becoming more diversified (Figure 13). The rise in concentration is not surprising inasmuch as it reflects the super-cycle of (mineral and agricultural) commodity prices and the commodity-intensive growth pattern in China and other emerging economies, on the one hand, and LAC's natural resource abundance, on the other. Therefore, at its core, the recent re-primarization of LAC's export structure is a manifestation of specialization according to comparative advantage forces. Whichever gains such specialization delivered, they were dramatically boosted by the sharp increase in the purchasing power of LAC's output driven by an unusually strong and long lasting improvement in terms of trade.<sup>26</sup> This said, the fact remains that—to put it in terms commonly used by CEPAL economists—LAC has been joining the global trade system of 21<sup>st</sup> century with an export structure (commodity-based) of the 19<sup>th</sup> century, and this has given rise to the concern about the potential

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population and GDP, they represent only a small fraction of the total number of countries in the region. Non-inflation targeting countries have a much reduced capacity to adverse external shocks, including those stemming from capital flow volatility.

<sup>26</sup> Sinnott et al. (2010) show that the recent boom in commodity prices has been the longest and most comprehensive one—it virtually covers all the commodities that matter to LAC—since the 1960s.

materialization of the dark sides (as discussed in Section 3a above) of a commodity-dependent growth model.

One worry with this commodity-driven trend towards greater export product concentration (away from export diversification) is that the commodity bonanza may be tilting LAC's productive structure further in the direction of lower complexity, thereby potentially hindering productivity growth. As noted earlier, while complexity is fiendishly difficult to gauge, Hausmann and his coauthors have provided a measure of a country's economic complexity which, while fraught with problems, is suggestive and allows for consistent international comparisons.<sup>27</sup> This index puts LAC at the bottom in comparison to the Southeast Asian emerging economies over the last decade. Moreover, it indicates that economic complexity has been declining in LAC during the recent period of commodity bonanza, though it has been increasing in East Asia (Figure 14).

Another worry is that the region's recent reliance on high commodity prices may have engendered Dutch Disease-type symptoms, whereby an appreciation of the real exchange rate has been stifling the diversification of tradable production activities, again with adverse implications for long-term growth. The trend towards concentration in export baskets shown in Figure 13 certainly suggests that something of this sort may be at work, although caveats are needed in at least three respects. First, Figure 13 most likely overstates the degree to which export product concentration has risen because it is not calculated on the basis of volumes but in terms of constant-dollar values.<sup>28</sup> As a result, it does not eliminate relative price (terms of trade) effects. Second, heterogeneity is significant within LAC countries. As argued by Hausmann (2003), there is a major difference between Venezuela, on the one hand, where oil exports are, so to speak, the only game in town, and countries like Brazil and Colombia, which have experienced substantial terms of trade gains and yet display a significantly greater degree of export diversification. Beyond these latter countries lies Mexico, an oil exporter that also has one of the highest index of export product diversification in the region. Third, the rise in export concentration during the recent commodity bonanza, however, has not led to a reduction of the number of exports. As shown in Table 1, the number of exports for most of the larger LAC countries has not only not declined, but it has increased in some cases. Moreover, the LAC countries reported in Table 1 export a surprisingly high number of goods, relative to the potential maximum number of products as classified by the Standard International Trade Classification Revision 3 at the 6-digit level.

Be that as it may, another worry about LAC's trade comes from the fact that there is little evidence suggesting that intra-industry trade (IIT) has been playing a significant growth-enhancing role for LAC. As suggested by many in the literature, the degree of IIT between two countries can be used as a proxy for technology diffusion and knowledge spillovers.<sup>29</sup> In Figure

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<sup>27</sup> The measure of complexity in Hausmann et al (2011) takes into account, among other things, the number of products a country exports ("diversity") and the number of countries that export those products ("ubiquity"). Japan and Germany, at the top of the complexity ranking, export many goods that are of low ubiquity and that are produced by highly diversified countries.

<sup>28</sup> Data on trade volumes are not available in sufficient disaggregated detail to calculate export product concentration indices.

<sup>29</sup> See, for example, Bernstein and Nadiri (1988), Helpman and Krugman (1989), and Badinger and Egger (2010).

15 we measure IIT using the adjusted Grubel-Lloyd Index, which ranges from zero (pure inter-industry trade) and one (pure intra-industry trade).<sup>30</sup> While the share of IIT has risen in most LAC countries over the past 20 years, it is still substantially below that observed in the Southeast Asian economies.<sup>31</sup> Moreover, the gap has not systematically declined, although Mexico appears as an important exception. Within LAC, the Caribbean and Central American countries typically show a higher degree of IIT than South American countries. Nonetheless, the countries in LAC that exhibit a relatively high degree of trade openness are the ones with relatively lower levels of IIT.

By contrast, the growth miracle of the East Asian Tigers (Hong Kong SAR, China; the Republic of Korea; Singapore; and Taiwan, China) was associated high degrees of intra-industry trade. Indeed, Urata (1993) stresses that vertical intra-industry trade in particular characterized to a large extent the trade dynamics in certain sectors, and especially so for machinery. This type of development came at later stages for other Southeast Asian middle-income countries (Indonesia, Malaysia, Philippines, and Thailand). Underlying this LAC-East Asia contrast is, of course, the difference in overall composition of exports and imports. The LAC-7 countries (Argentina, Brazil, Chile, Colombia, Mexico, Peru, and Venezuela) typically export natural resource-intensive goods and import manufacturing goods, mostly non-natural resource intensive ones. The majority of East Asian economies, on the other hand, import and export manufactured goods.

A different yet related way to gauge the quality of international trade focuses on the manner and extent to which a country is inserted into global value chains (GVCs). Such insertion may have important positive spillover effects. UNCTAD's 2011 World Investment Report emphasizes that, in addition to being an important driver of trade flows around the world, GVCs chains can bring direct benefits (employment generation, direct local value added, and export generation) as well as, and perhaps more importantly, indirect benefits. These can not only catalyze technology and knowledge enhancement but also capacity building and economic development more widely, thus having the potential to lead to virtuous circles.

As insertion in GVCs is done via firms, we present comparative data on multinational corporations (MNCs) with headquarters in Latin America (the so-called "multilatinas") and those from Southeast Asian countries in Figure 16. The main message of this figure is that the activity of Latin American MNCs abroad tends to be mainly of a "horizontal" nature—that is, they cross borders mainly to set up subsidiaries that sell the same product that the parent company sells at home. This suggests that the key motives for LAC MNCs to move abroad are either to diversify country risk or to take advantage of larger markets for their products. MNCs from the Southeast Asian middle-income economies, in contrast, tend to move operations abroad mainly to build or join GVCs, by going either upstream or downstream. This may be of greater significance considering the results in Didier and Pinat (2014) that suggest that countries that have stronger

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<sup>30</sup> This measure is adjusted by the overall trade balance. In order to capture the degree of IIT at a more vertical level, a rough classification of industries, at the 2-digit sector level, is used. For further details, see Grubel-Lloyd (1975).

<sup>31</sup> For an early discussion of intra-industry trade in the context of the rising connections between LAC and China, see De la Torre, Didier, and Pienknagura (2012b).

export linkages to GVCs—particularly to the intermediate regions of such chains—tend to display stronger growth performance.

As a final approximation to the nature and quality of LAC’s evolving pattern of international trade integration we present novel results from an ongoing research program at the Chief Economist Office of Latin America and the Caribbean at the World Bank which uses network approach.<sup>32</sup> Figure 17 shows the density map in the trade networks of East Asia Pacific (EAP) and LAC. The density of a node in this map depends positively on the number of neighboring countries and the economic distance between countries. The node density is translated into colors using a red-green-blue scheme (from the highest to the lowest density). It is worth pointing out that the sample countries included in the density map affects the density of maps themselves, making it harder to directly compare node density across different graphs.<sup>33</sup> Still, some features are still comparable across maps as highlighted below.

For starters, the differences between the two regions are remarkable. The trade network of East Asia is much denser than that of LAC. While all countries are fully connected with all other countries within the East Asian cluster (as indicated by a network density measure of 1.0 for this cluster), countries in the LAC cluster are not as fully integrated with each other (the network density measure for this cluster is 0.87). The graphs also suggest that whereas trade connections within the East Asia Pacific are multidirectional and intense in every direction, those within the LAC network tend to be mainly bi-directional, especially with the US. In other words, triads of trade connections are typically observed at higher frequency in the East Asian than in the LAC network. These type of connectivity observed in the East Asian network suggests strong feedback effects, whereby the strong trade within the East Asian region boosts the strength of trading with the global trade centers and vice versa. LAC countries, by contrast, do not seem significantly to leverage intra-regional trade to boost their connections to the global trade network or vice versa. The proximity of the nodes—a proxy of the extent of clustering effects in the networks—indicate that trade interconnectivity and neighborhood-type effects in the EAP network involves most countries within the region (a visual depiction of the so-called “Asia Factory”) *and* other central players (China, Japan and the US). In the case of LAC, clustering effects are weaker. The only clear clustering is around the US and, to a lesser extent, around the South Cone, with China appearing in this neighborhood.

Another interesting contrast in these two networks is the relative importance of different countries. In the EAP network, not only are all countries connected among themselves but virtually all the countries (and not just the US, Japan, and China) in the network appear as equally central players (as dense nodes where density rises as the color goes from green to yellow to orange and to red). In contrast, aside from the US, there are no other dense nodes in the LAC network, with the modest exception of Brazil. China appears as part of the LAC network in 2011 with a relatively weak density, comparable to that of Japan. Interestingly, European

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<sup>32</sup> This research will be featured in the 2015 World Bank LCR Regional Flagship Report. More details available at [www.worldbank.org/laceconomist](http://www.worldbank.org/laceconomist).

<sup>33</sup> The countries in each of the two trade networks (LAC and EAP) in Figure 17 include all countries of each region as well as such central players in the global trade network—USA, China, Japan—and in the case of Latin America, some Western European countries (proxied by Germany, UK, and France) that are also important players in these regional trade networks.

countries are not as strong players in the LAC trade network as may be expected. In fact, the dispersion from a measure of network centrality is zero in the EAP cluster and much higher, 0.17, in the LAC cluster.

The evidence discussed above lead to a rather disheartening assessment: Latin America as a whole does not seem to sufficiently progressing toward greater trade quality—i.e., a type or international trade that, by maximizing technology diffusion and learning spillovers, is supportive of long-term per capita income convergence. Nonetheless, it would be an exaggeration to conclude that there are no bright spots. There are some, in fact, in at least two respects. First, the quality of institutions in many (not all) of the major commodity exporters in LAC has been on an improving trend, which significantly raises the odds that the most egregious manifestations of commodity-related rent seeking behavior can be held in check. The caveat in this regard is, however, that deepening of fiscal decentralization in many LAC countries may complicate collective action around strategic national objectives in the management of commodity wealth.

Second, there is some evidence that certain commodity sectors are benefiting from technological innovation and generating linkages, value upgrading and employment. For instance, there is evidence of increases in value-added, clustering effects, and cross-sectoral linkages in the agricultural sector in Argentina, Chile, and Uruguay, as well as the salmon farming in Chile.<sup>34</sup> A recent case study of metal commodities also suggests some positive spillovers and upgrading in the metal commodity industries in the region. The share of LAC in metal global trade has expanded over time due to both inter-product upgrade and intra-product quality improvement.<sup>35</sup> A study of Peruvian gold mines found rather extensive linkages to local areas with the use of local labor and other inputs.<sup>36</sup> Anecdotal evidence suggests strong clustering effects around CODELCO, the copper mining giant in Chile. In sum, there is spotty but robust evidence that LAC has been not only moving towards the production of more sophisticated and higher-valued-added products within its natural resource based industries but clustering and production chains are being developed.

### *(c) External versus internal demand-based globalization patterns*

In this section we explore evidence related to issue discussed in Section 3c, namely, the contrasting aggregate demand structures that have underpinned the economic globalization processes in LAC and Southeast Asia. This is of interest to the extent that an external demand-driven pattern may have some virtues vis-à-vis a domestic demand-driven one when it comes to fostering long-term growth. That would be the case if the relatively high domestic saving rate that is necessarily associated to an external demand-reliant pattern fosters growth, in particular, by sustaining a relatively more competitive real exchange rate. While this section does not establish the actual domestic savings-real exchange rate-growth causal links, it shows comparative data for LAC-SAM (South America and Mexico) and the four Southeast Asian

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<sup>34</sup> See Valdes and Foster (2003), Regunaga (2010), and O’Ryan et al. (2011).

<sup>35</sup> See Mandel (2009).

<sup>36</sup> See Aragón and Rud (2009).

emerging economies (Indonesia, Malaysia, Philippines, and Thailand) to document that the two regions show in effect a sharp contrast in these key variables.

Figure 18 shows the marked difference in the structure of aggregate demand, which is clearly tilted in favor of domestic demand in the case of Mexico and South American countries (LAC-SAM) and much more reliant on external demand in the East Asian emerging economies.<sup>37</sup> Domestic demand is not only much higher in LAC-SAM but it has been on the rise over the past decade and is at present around 105 percent of GDP. In the Southeast Asian middle-income countries, by contrast, it has been low and stable over the same period, at below 95 percent of GDP. The persistence of this structural feature in spite of the commodity export bonanza indicates that LAC systematically metabolizes favorable external conditions into domestic demand dynamics. LAC's globalization and growth patterns are clearly not like those in East Asia and are unlikely to become more Asian-like in the foreseeable future. If anything, it is more likely for the structure of aggregate demand in East Asian emerging economies to become more LAC-like as per-capita income and consumption in the former rises.<sup>38</sup>

However, contrary to popular belief, the strong expansion of domestic demand in LAC over the last decade was not an overriding consumption story. Real investment grew faster than private consumption and significantly in excess of real GDP in the LAC-SAM countries (Figure 19). Real investment LAC-SAM is now around 24 percent of GDP, compared to around 25 percent in the Southeast Asian economies. And as the second panel in Figure 19 shows, the closing of the traditional investment gap has been a feature of many LAC-SAM countries, with the notable exceptions of Brazil and Bolivia. While the sustainability and quality of these higher investment rates in LAC are a different matter that requires more analysis, it is worth stressing that investment dynamics played a larger role in LAC's growth in the past decade than commonly believed.

The flipside of LAC-SAM's domestic demand-led growth is a tendency toward current account deficits, which started to emerge, following modest surpluses, already in 2008, despite the continued commodity export bonanza (Figure 20). For all of the debate about the commodity boom in the 2000s, the fact is that the current account surpluses in LAC's commodity exporters was in most cases rather short lived—the surpluses were virtually gone by mid-2008 and only temporarily recovered in 2009 as an undesired consequence of the global trade collapse. By 2011, only Bolivia and Venezuela (2 out of the 11 Latin American commodity exporters) displayed a current account balance in positive territory. This said, however, LAC's current account deficits in the recent past have been mainly financed by FDI and have hence been driven by relatively large factor payments abroad, mainly dividend payments (i.e., the trade

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<sup>37</sup> We use real values for GDP as well as for its components, in which each component is deflated by its respective deflator. Since real variables are sensitive to the choice of base year, we use national accounts data collected by the U.N. Statistics Office and reported in the same base year, making real values comparable across countries. Working with these real values is essential to get an accurate picture of aggregate demand dynamics in times of significant changes in terms of trade. For example, when terms of trade rise, the share of investment to GDP will be underestimated by nominal variables because the denominator (GDP) contains exports, whose prices are rising fast, while the numerator (investment) will be typically intensive in imports, whose price are falling relative to the price of exports.

<sup>38</sup> For a more detailed discussion of the LAC versus EAP aggregate demand structures see De la Torre, Levy Yeyati, and Pienknagura (2013a).

balance has tended to be in surplus). The East Asian emerging economies, by contrast, consistently generate current account surpluses, while net FDI inflows tend to be comparatively small and so are factor payments abroad.

Behind these contrasts in aggregate demand and current account structures and trends is, of course, a marked difference in domestic savings rate. While East Asian countries have a domestic saving typically superior to 30% of GDP, LAC countries save well below this threshold, with the exception of Venezuela (Figure 21, Panel A). Ongoing research by De la Torre and Ize (2014) documents that, once appropriately benchmarked, most LAC countries suffer from a significant “domestic savings gap” while the East Asian economies tend to have “excess domestic savings”. That is, LAC countries save on average less than countries with similar structural characteristics (such as size, demographics, natural resource abundance), whereas East Asian countries have relatively larger domestic savings rates. Moreover, the authors argue, the low domestic savings rate in LAC is associated with an “external competitiveness gap” (that is, relatively more appreciated equilibrium real exchange rates), which, in turn, seems to be a non-trivial part of the story of the comparatively low productivity growth performance in the LAC region. The Economist’s Big Mac Index, shown in Panel B of Figure 21, provides clear evidence that currencies in Asia are notably depreciated, whereas currencies in LAC are notably appreciated, relative to what would be expected given their income per capita.<sup>39</sup>

During the last decade, the underlying drag on growth stemming from low domestic savings was offset by the commodity price bonanza and the backdrop of abundant international liquidity. These favorable tail winds enabled LAC to compensate for its historically low savings ratios and helped fuel growth. At the same time, however, the region’s low domestic savings rates offered little scope for attenuating upward pressures on the real exchange rate of the region’s commodity exporters, and thus their capacity to lean against the winds of commodity specialization was limited from a macroeconomic perspective. Domestic demand dynamics thus favored non-tradable over tradable production and, absent productivity-oriented structural reforms, this may weaken growth vigor in the years to come.

## **5. Concluding remarks**

The ultimate test of the benefits of economic globalization has to be per capita income convergence. Hopes that LAC’s growth prospects were finally changing for the better emerged before the global financial crisis. During 2002-2008, several LAC countries recorded Asian-style growth rates partly on the strength not just of favorable external conditions (low interest rates, abundant liquidity, and high commodity prices). Enabling and reinforcing this performance were several domestic factors, including a significant reduction in macro-financial vulnerability, important steps forward in the social equity agenda (i.e., significant poverty reduction, a decline in inequality, the rise of the middle class), and, with a few exceptions, further consolidation of

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<sup>39</sup> Figure 21 controls for GDP per capita to account for the well-known fact that the real exchange rate tends to be more appreciated as countries become richer. This likely reflects the Balassa-Samuelson effect, whereby, and to the extent that productivity rises faster in tradables than in non-tradables, the price level will be higher (and the real exchange rate more appreciated) in the more advanced, richer economies.

democratic institutions. However, since 2010 the uninspiring growth performance for much of the region has raised questions about the sustainability of the mentioned achievements.

In this paper we discussed the theoretical arguments and provided some empirical evidence on the pros and cons of an increasingly globalized LAC region. While LAC seems to have learned to deal with some bad side effects of financial globalization by moving towards a safer form of international financial integration and improving its macro-financial policy frameworks, progress towards increasing the quality of international trade integration has been scant. LAC remains a region with concentrated export baskets—South American countries in particular. LAC's commodity-heavy trade structures and relatively weak quality of trade connectivity may hinder growth potential to the extent that they are less conducive to technology and learning spillovers. Moreover, LAC's domestic demand-driven growth pattern (which reflects to some extent low domestic saving rates) may become an additional drag on long-term growth by accentuating the risk of a low savings-low external competitiveness trap.

Thus, the challenge for LAC is to decidedly undertake productivity-oriented reforms and, to the extent feasible, seek to reduce its domestic savings gap. LAC would need to put a premium on efforts to boost fiscal savings and maximize productivity gains. The overriding challenge in the growth front for LAC's policymakers is actually to harness the opportunities afforded by deeper and broader links to the global economy. This is essentially a question on how to best learn (to improve business processes, adopt new technologies, diversify and connect, etc.) through enhanced international trade and financial integration. Seizing the moment requires well-designed policies, adequately tailored to the circumstances of individual countries but not necessarily numerous or unduly complex, in order to ignite growth. Once ignited, growth would have to be sustained through perseverant and major reform efforts aimed at eliminating well-known obstacles that undercut efficient resource allocation.

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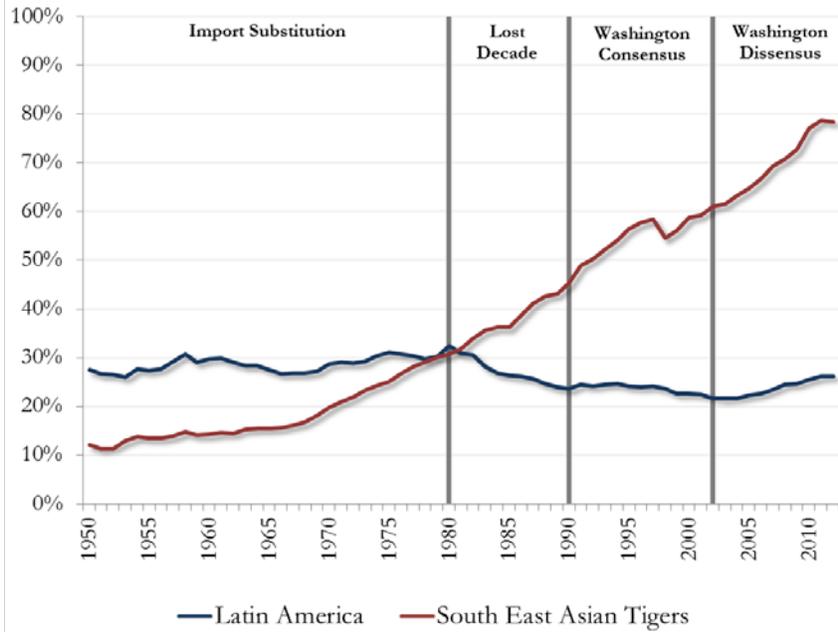
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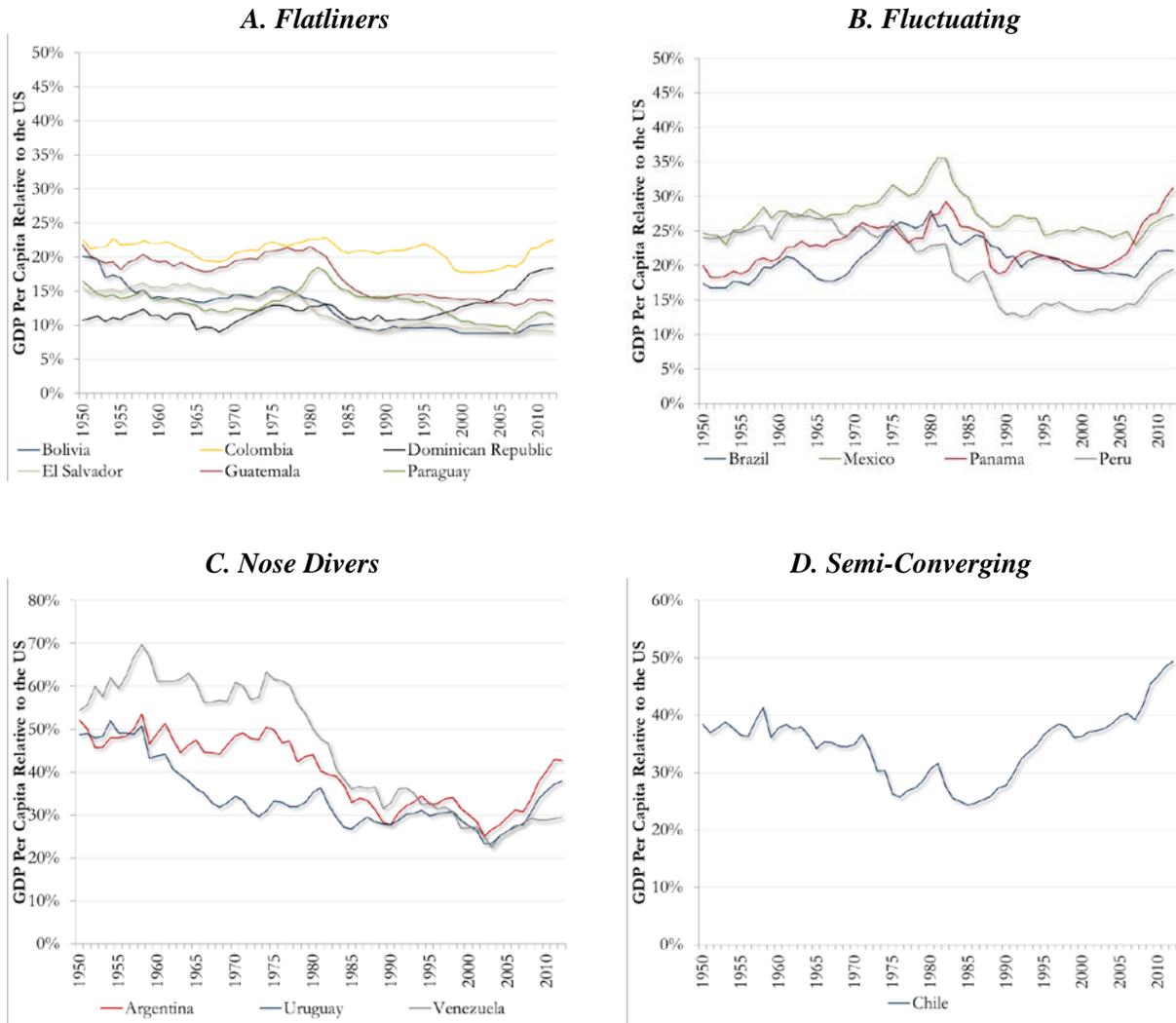
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**Figure 1: Contrasting Convergence Paths in LAC and Southeast Asia**



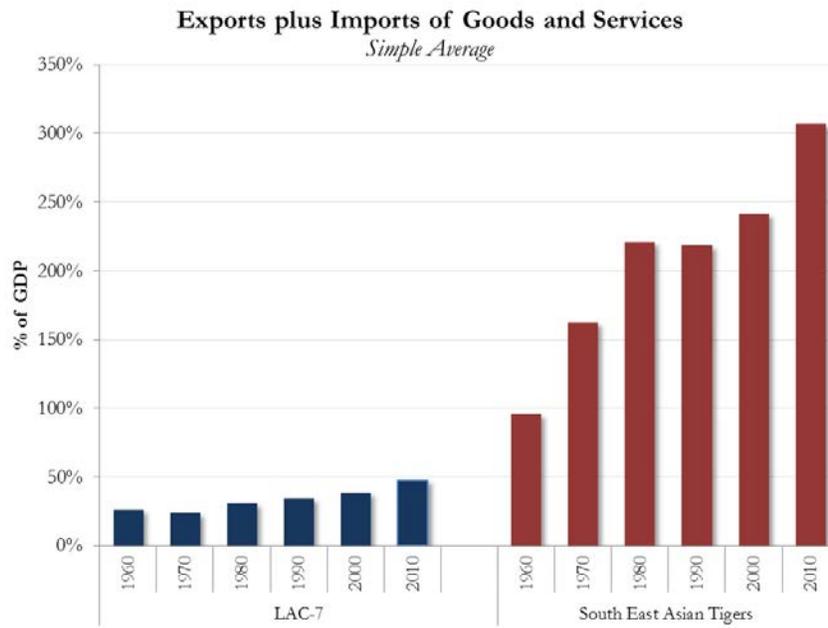
*Note: This figure shows the aggregated regional GDP per capita relative to that of the United States. The regional GDP is calculated as a weighted average of the per capita income of countries within each region. The Southeast Asian Tigers include Hong Kong SAR, China; Singapore; the Republic of Korea; and Taiwan, China. Sources: Authors' calculations based on Penn World Tables, WDI, and Maddison (2009).*

**Figure 2: Convergence within Latin America**



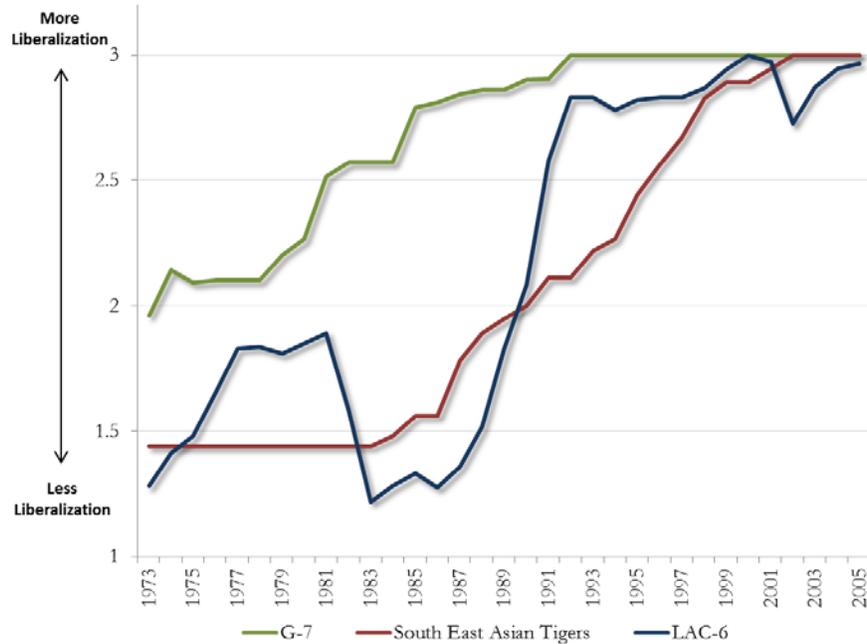
Sources: Authors' calculations based on Penn World Tables, WDI, and Maddison (2009).

**Figure 3: The Degree of Trade Openness**



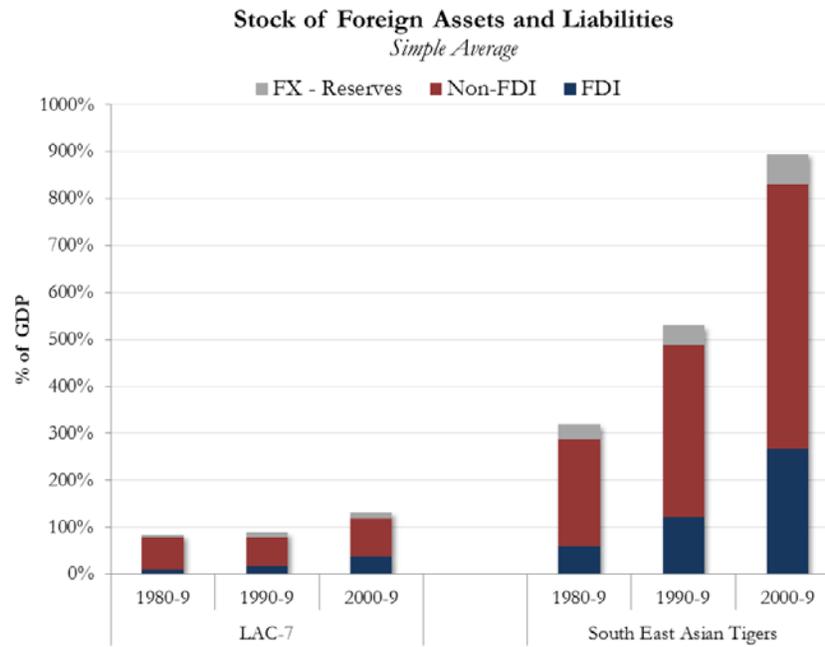
*Note: The Southeast Asian Tigers include Hong Kong SAR, China; Singapore; and the Republic of Korea. The LAC-7 countries include Argentina, Brazil, Chile, Colombia, Mexico, Peru, and Uruguay. Source: WDI.*

**Figure 4: The Degree of *De Jure* Financial Openness**



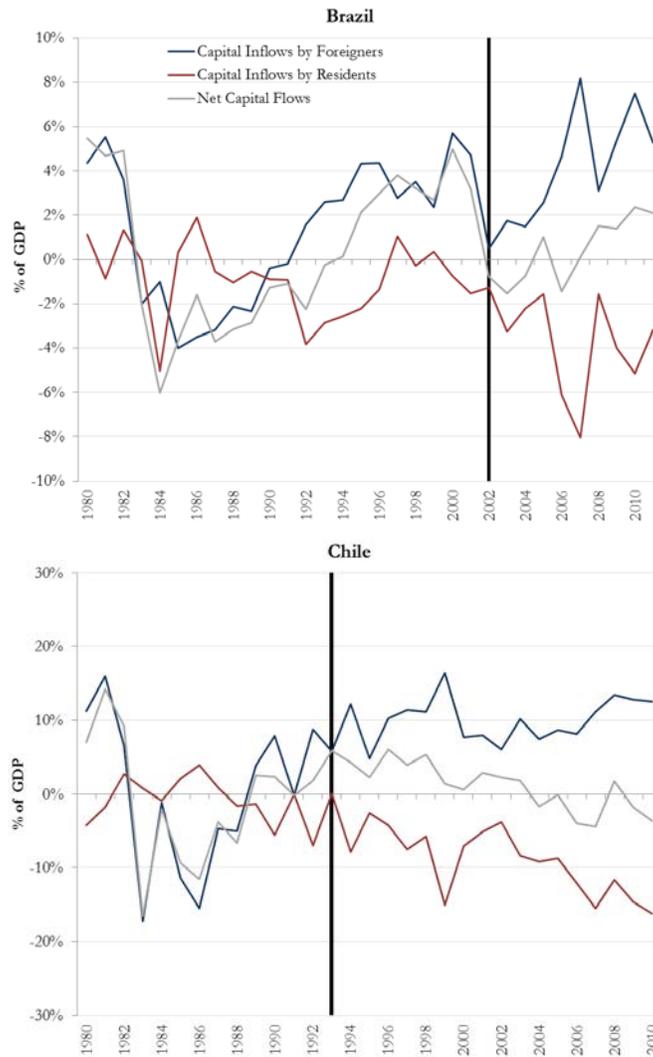
*Note: The de jure financial liberalization index is calculated as the simple average of three indices—degree liberalization of the capital account, domestic financial sector, and stock market—and it ranges between 1 (closed economy) and 3 (full liberalization). Southeast Asian Tigers includes Hong Kong SAR, China; the Republic of Korea; and Taiwan, China. LAC-6 includes Argentina, Brazil, Chile, Colombia, Mexico, and Peru. Sources: Kaminsky and Schmukler (2003) updated subsequently in de la Torre and Schmukler (2007).*

**Figure 5: The Degree of *De Facto* Financial Openness**



*Note: Southeast Asian Tigers includes Hong Kong SAR, China; Singapore; the Republic of Korea; and Taiwan, China. LAC-6 includes Argentina, Brazil, Chile, Colombia, Mexico, Peru, and Uruguay. Source: Authors' calculations based on Lane and Milesi-Ferretti (2007).*

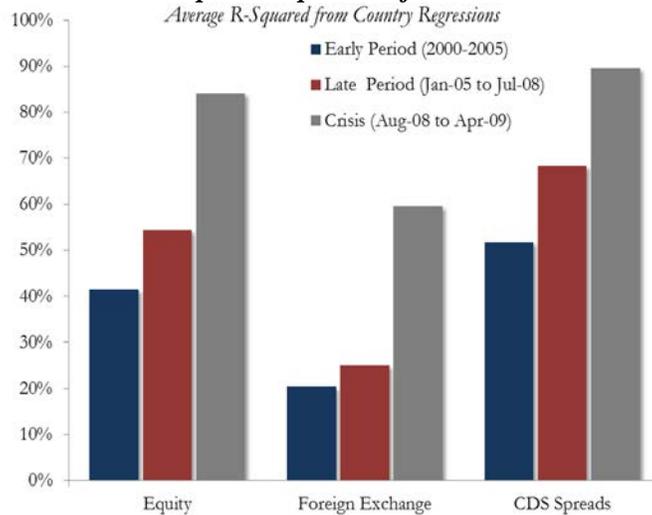
**Figure 6: Gross and Net Capital Flows in Brazil and Chile**



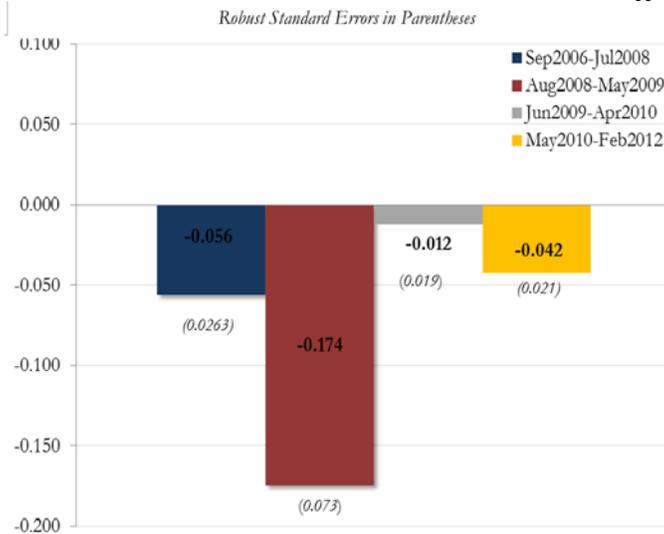
*Note: Capital inflows by residents include reserves. Source: Authors' calculations based on IMF's BOP Statistics.*

**Figure 7: The Role of Global Factors in Emerging Markets**

**Panel A. Principal Component of EM Assets Returns**



**Panel B. MSCI Latam w.r.t. VIX and S&P500: VIX Coefficient**



*Note: In Panel A, a principal component is estimated for the monthly returns on equities, foreign exchange spot contracts, and CDS sovereign spreads. Then, country-specific returns for each asset class are regressed on its associated first principal component in order to get an R-squared. The average R-squared across emerging economies is reported. In Panel B, we report the VIX coefficient from a regression of the MSCI Latam Index against the VIX and the S&P500 index. Source: de la Torre, Didier, and Pienknagura (2012).*

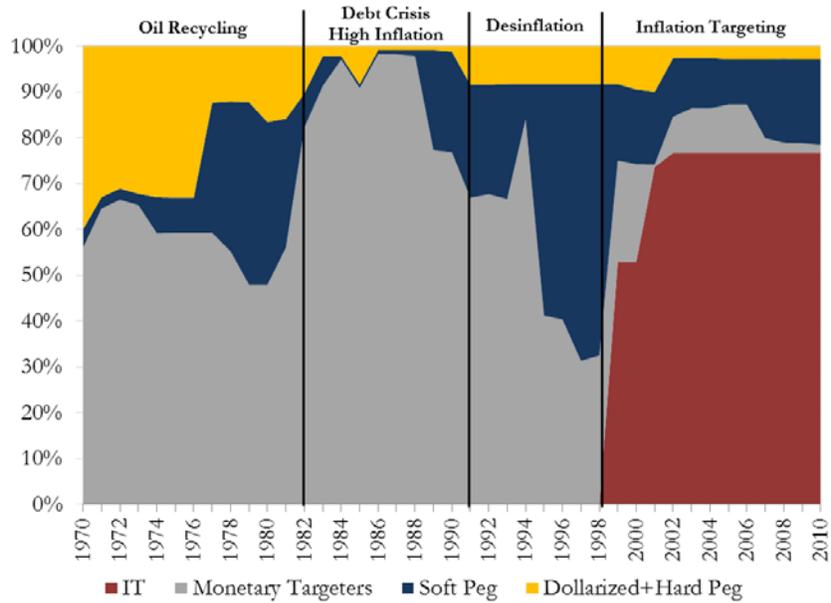
**Figure 8: Net Debt and Equity Positions vis-à-vis the Rest of the World**



*Note: The net equity position, vis-à-vis the rest of the world (ROW), is the sum of net foreign direct investment assets and net portfolio equity assets. The net debt position, vis-à-vis ROW, is the sum of debt assets and international reserves minus debt liabilities. These ratios have been calculated at the country level and then simple averages by region are reported. LAC-7 includes Argentina, Brazil, Chile, Colombia, Mexico, Peru, and Uruguay. The Southeast Asian MICs include Indonesia, Malaysia, Philippines, and Thailand. The Southeast Asian Tigers include Hong Kong SAR, China; Singapore; the Republic of Korea; and Taiwan, China. Source: Authors' calculations based on Lane and Milesi-Ferretti (2007).*

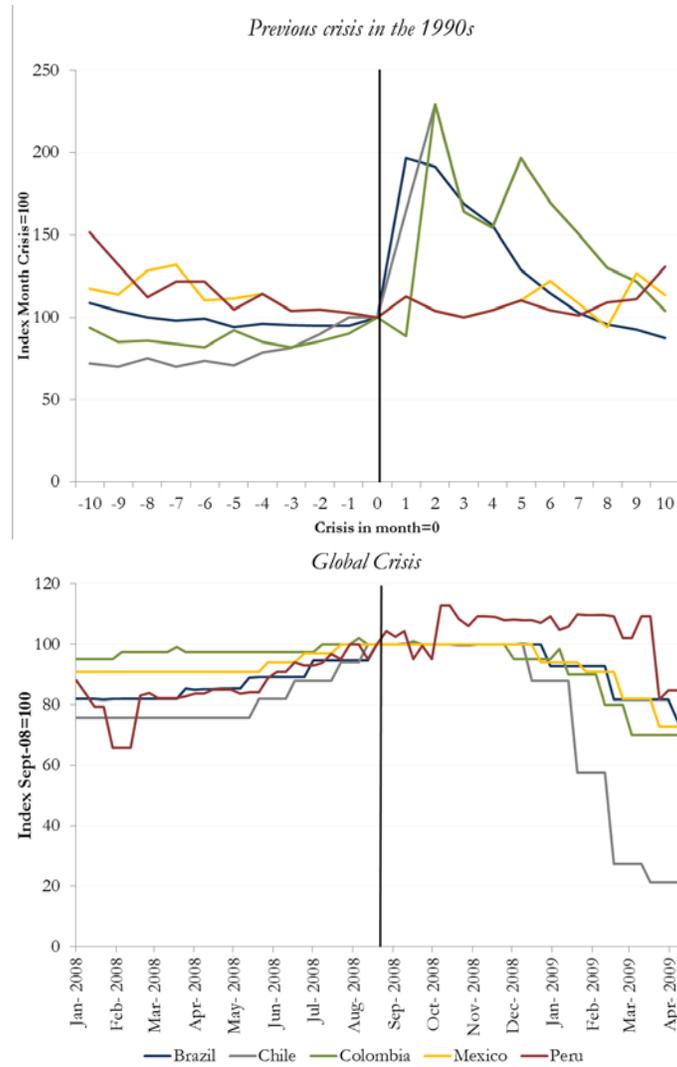
**Figure 9: Monetary Policy Regimes in LAC**

*Weighted by 2010 GDP Shares*



*Source: Authors' calculations based on Ilzetzki, Reinhart and Rogoff (2011).*

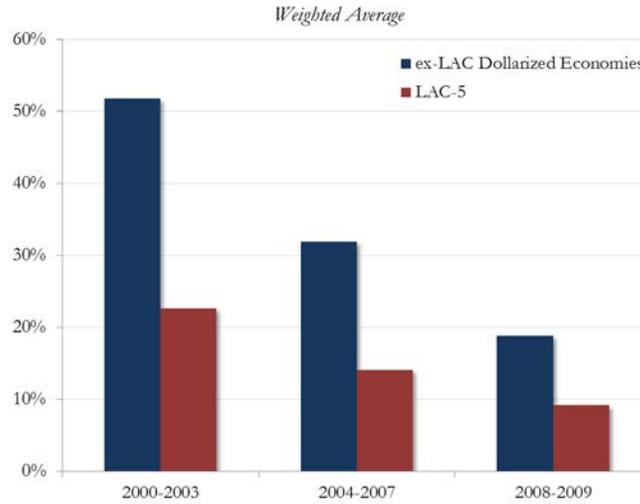
**Figure 10: Monetary Policy Rates in LAC's Main Inflation Targeters**



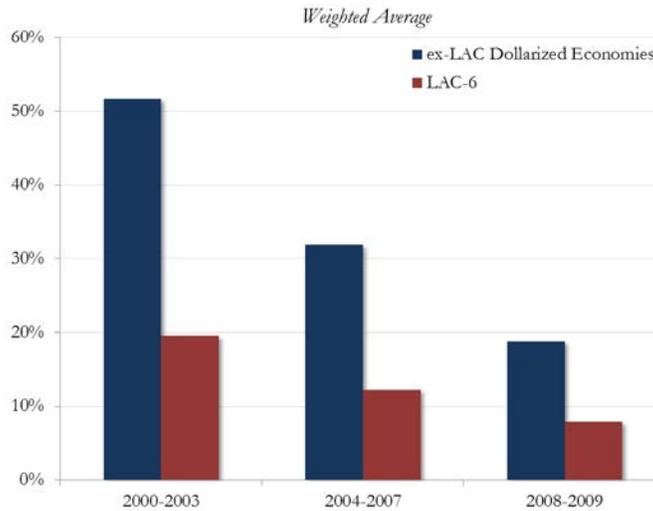
*Note: In the top panel, the money market rates are reported. The following crises episodes have been selected for Panel A: October 1997 (Brazil), April 1998 (Chile and Colombia), February 1995 (Mexico), and August 1998 (Peru). Source: Authors' calculations based on IFS and Bloomberg.*

**Figure 11: Loan and Deposit Dollarization in Latin America**

**Panel A. Loan Dollarization**

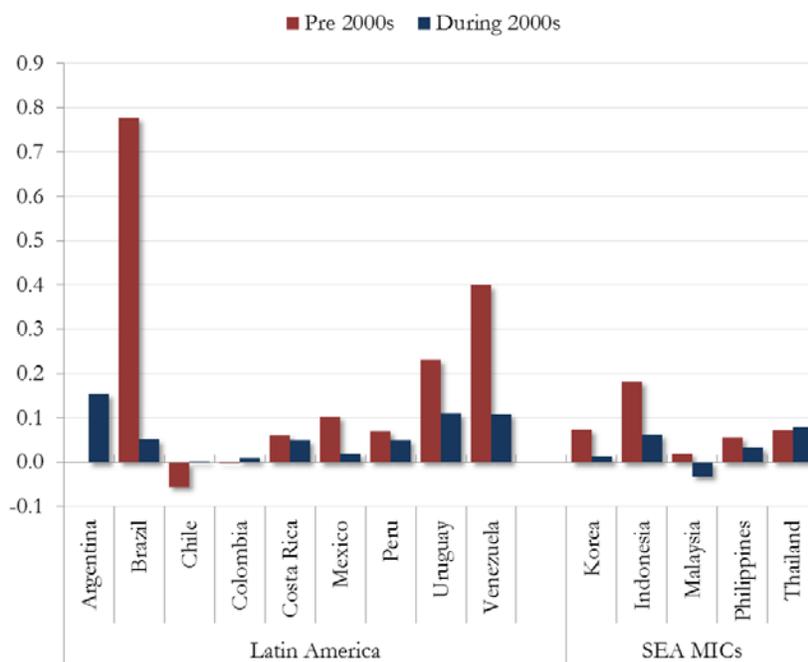


**Panel B. Deposit Dollarization**



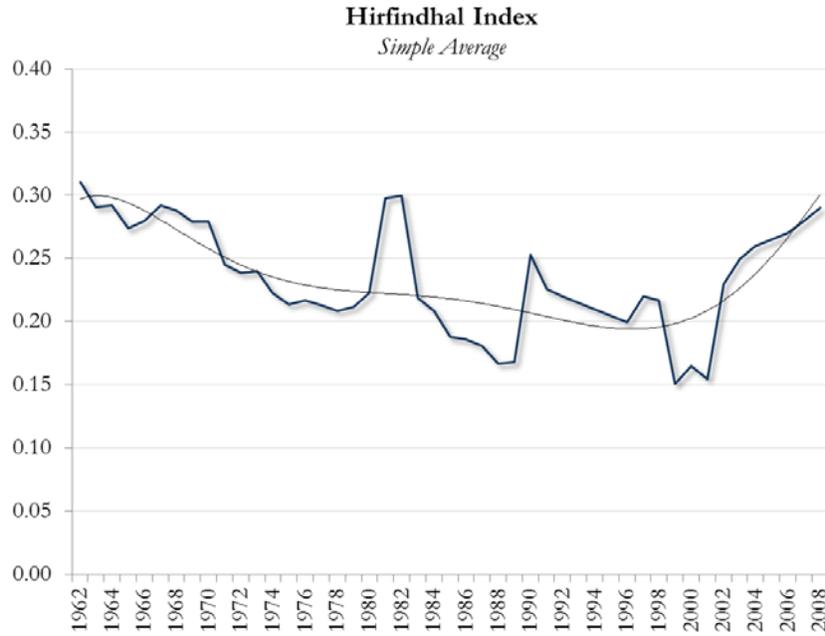
*Notes: Panel A shows foreign currency denominated loans as share of total loans between 2000 and 2009. Panel B shows the extent of deposit dollarization as share of total deposits averaged over the same period. Weighted averages using 2010 GDP are reported. In Panel A, LAC-5 includes Argentina, Chile, Mexico, Peru, and Uruguay; and Ex-LAC dollarized economies include Argentina, Bolivia, Costa Rica, Peru, and Uruguay. In Panel B, LAC-6 includes Argentina, Chile, Colombia, Mexico, Peru, and Uruguay, and Ex-LAC dollarized economies include Bolivia, Costa Rica, Peru, and Uruguay. Source: De la Torre, Levy-Yeyati, and Pienknagura (2013b) based on Levy-Yeyati (2006) and Didier and Schmukler (2014).*

**Figure 12: Exchange Rate Pass-Through Estimates for Selected Middle-Income Countries**



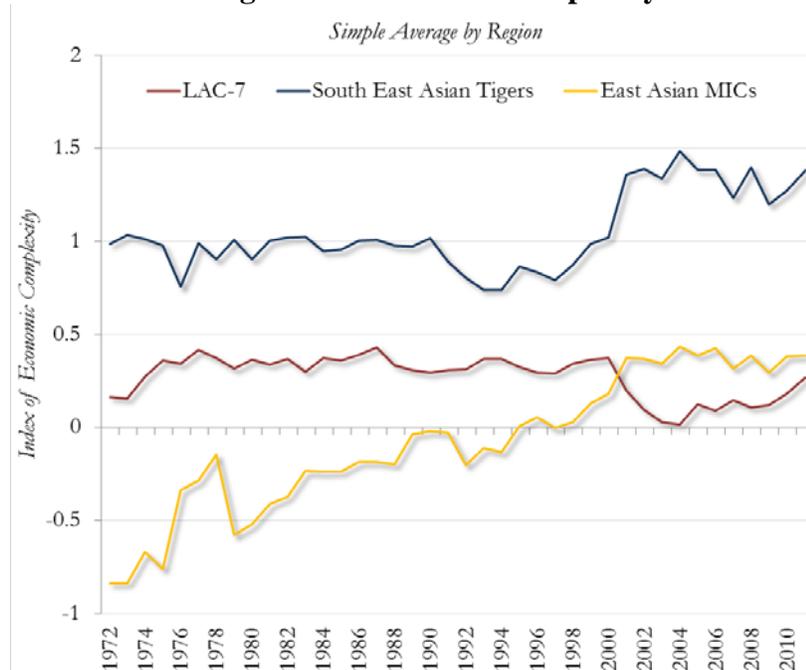
*Note: Pass-through coefficients were derived from country regressions of annual inflation as dependent variable on lagged inflation, annual change in the nominal effective exchange rate, and a measure of output gap. SEA MICs stands for Southeast Asia Middle Income countries. Source: de la Torre, Levy-Yeyati, and Pienknagura (2013b).*

**Figure 13: Export Product Concentration in LAC**



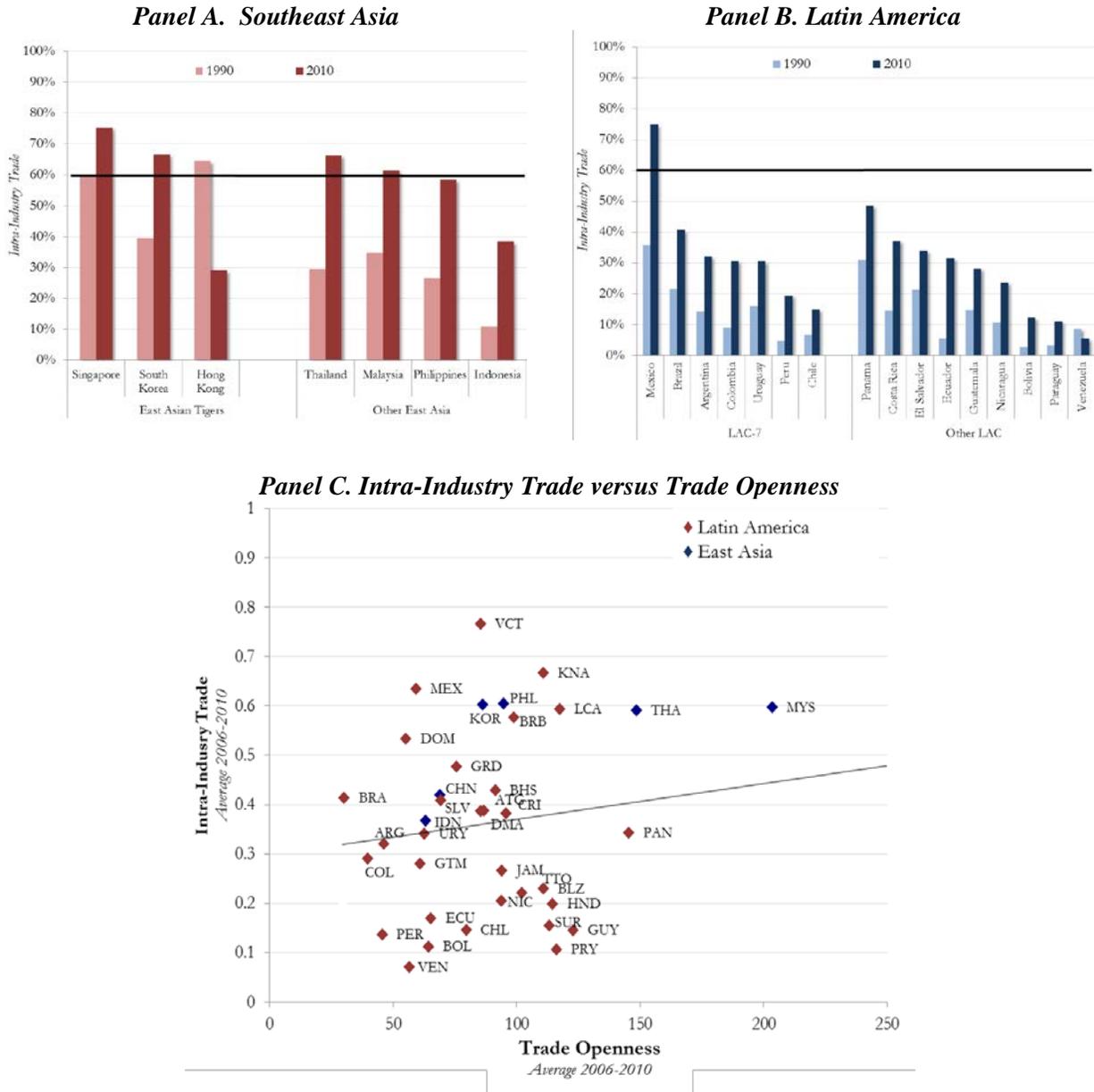
*Note: The following LAC countries are included in the regional average: Argentina, Brazil, Chile, Colombia, Mexico, Peru, and Venezuela. Source: Sinnott et al. (2009).*

**Figure 14: Economic Complexity**



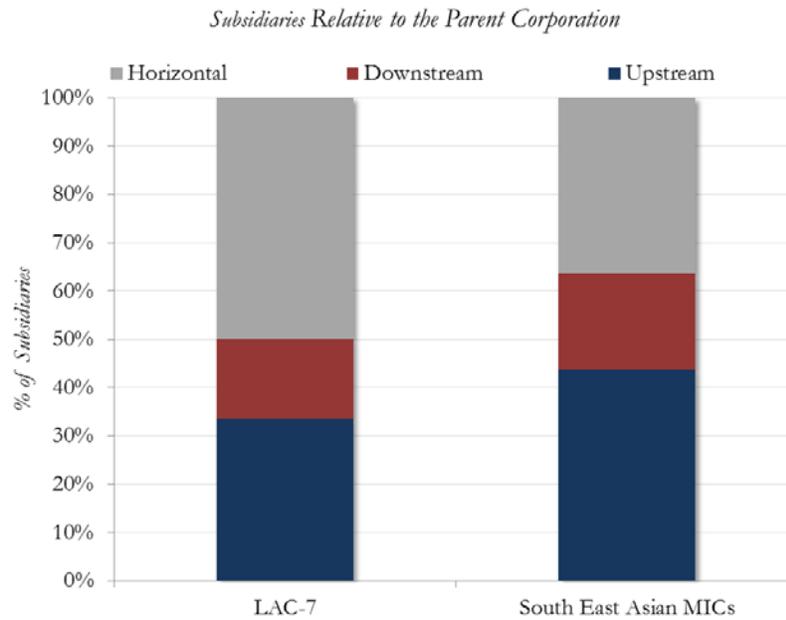
*Note: The Southeast Asian Tigers include Hong Kong SAR, China; the Republic of Korea; and Singapore; East Asian Middle Income Countries include Indonesia, Malaysia, Philippines, and Thailand; LAC-7 includes Argentina, Brazil, Chile, Colombia, Mexico, Peru, and Uruguay. Source: Hausmann et al. (2011).*

**Figure 15: The Degree of Inter-Industry Trade**



Note: The degree of intra-industry trade is measured with the Grubel-Lloyd Index, which ranges from zero (pure inter-industry trade) to one (pure intra-industry trade). In Panel C, the degree of trade openness is measured as exports plus imports as a ratio of GDP. Source: Authors' calculations based on Comtrade.

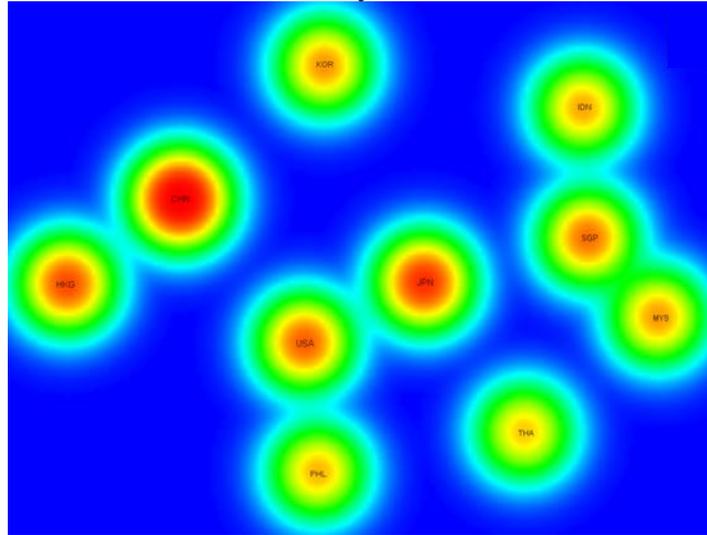
**Figure 16: Types of Subsidiaries of Multinational Corporations**



*Note: These statistics use the latest available information of multinational corporations in 2011. The classification into upstream, downstream, and horizontal subsidiaries relies on the input-output matrix for the United States. A subsidiary is defined as downstream if the parent company's sector is a net supplier of the subsidiary's sector. A subsidiary is defined as upstream if the subsidiary's sector is a net supplier of the parent company's sector. SEA MICs stands for Southeast Asian Middle Income countries and include Indonesia, Malaysia, Philippines, and Thailand. LAC-7 includes Argentina, Brazil, Chile, Colombia, Mexico, Peru, and Uruguay. Source: Lederman, Messina, Pienknagura, and Rigolini (2013).*

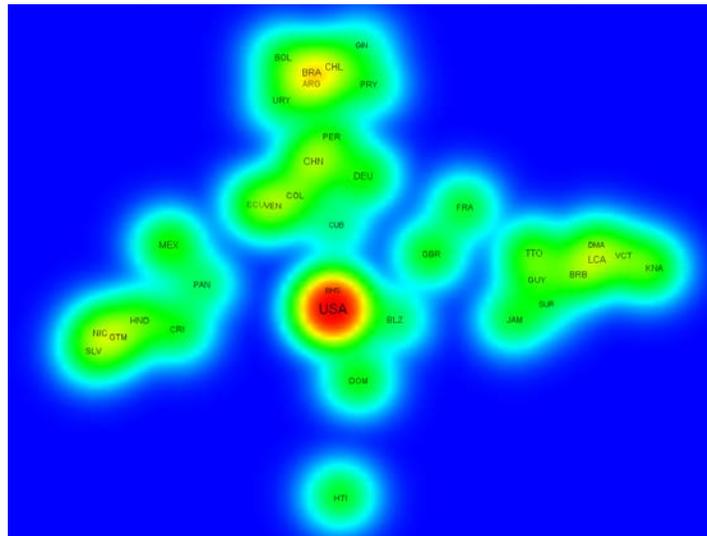
## Figure 17: International Trade Networks

*Panel A. East Asian Pacific Trade Cluster in 2011*



*Density = 1; Closure = 1; Dispersion of Centrality = 0*

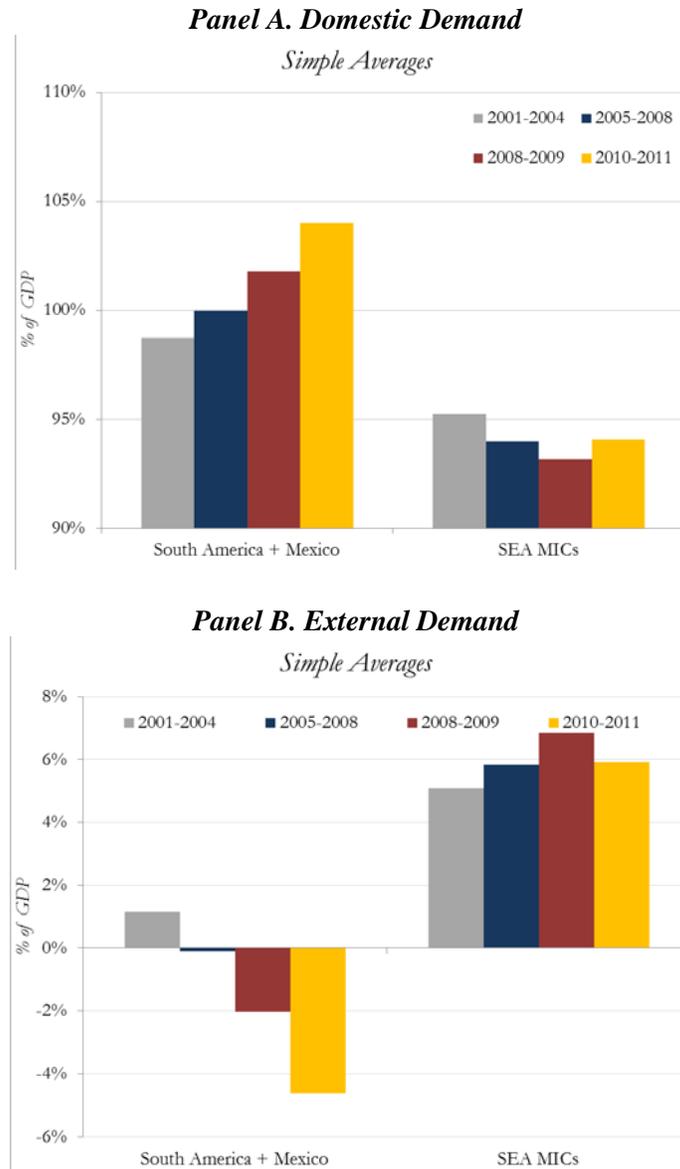
*Panel B. LAC Trade Cluster in 2011*



*Density = 0.87; Closure = 0.91; Dispersion of Centrality = 0.17*

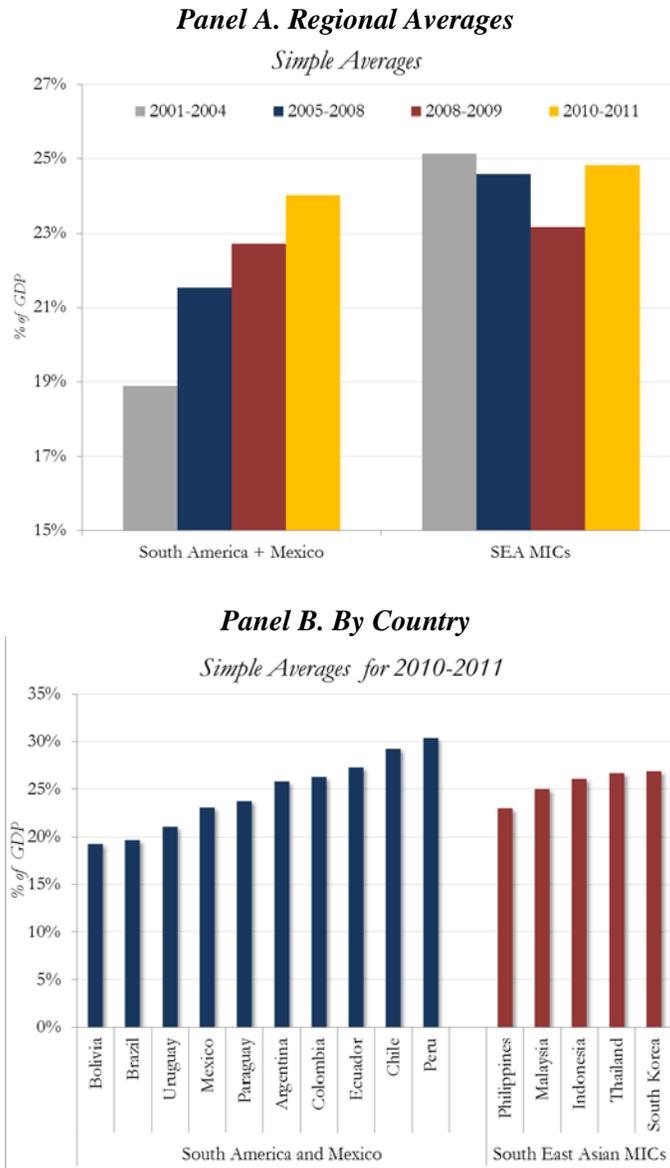
*Note: The density maps show the density of regional trade networks based on export data in 2011. The links correspond to exports from one country to another as a percentage of the source country's total exports. Below each map, some network measures characterize the network. Density is the number of links over the total number of connections possible; Closure is the number of triads in the network as a share of the maximum number of triads possible; and the Dispersion of Centrality is the standard deviation of the measure of Density. Source: Authors' calculations based on IMF's DOTS.*

**Figure 18: Composition of Demand**



*Note: The group of South American countries excludes Venezuela. SEA MICs stands for Southeast Asian Middle Income countries and include Indonesia, Malaysia, Philippines, Thailand, and the Republic of Korea. Sources: de la Torre, Levy-Yeyati, and Pienknagura (2013a).*

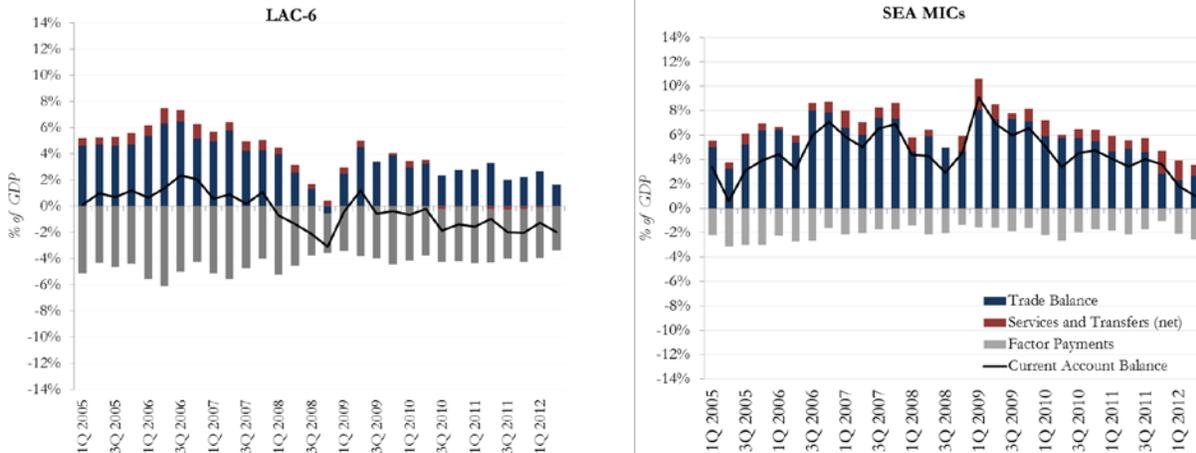
**Figure 19: Investment Rates**



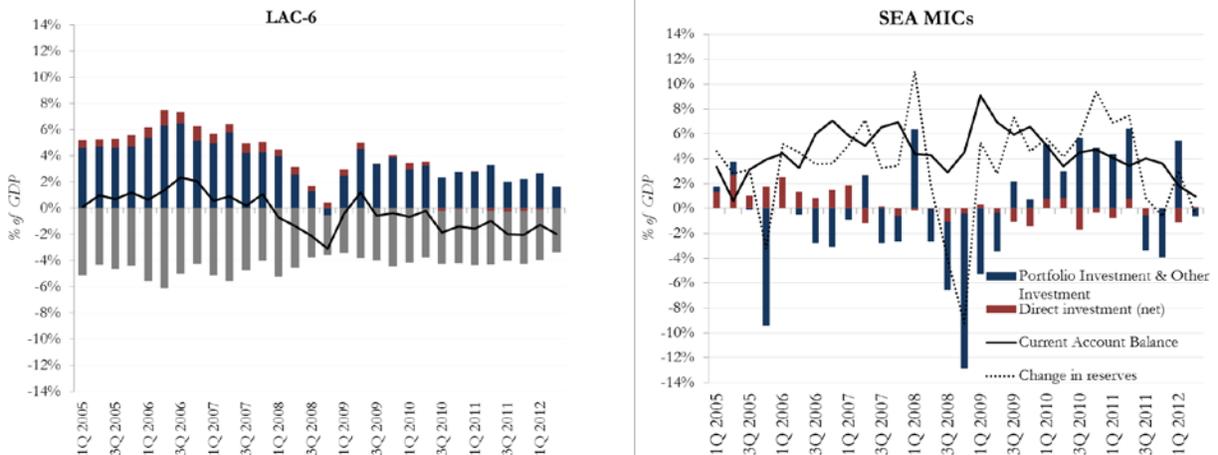
*Note: The group of South American countries excludes Venezuela. SEA MICs stands for Southeast Asian Middle Income countries and include Indonesia, Malaysia, Philippines, Thailand, and the Republic of Korea. Sources: de la Torre, Levy-Yeyati, and Pienknagura (2013a).*

**Figure 20: Composition and Financing of External Balances**

**Panel A. Composition of the Current Account**

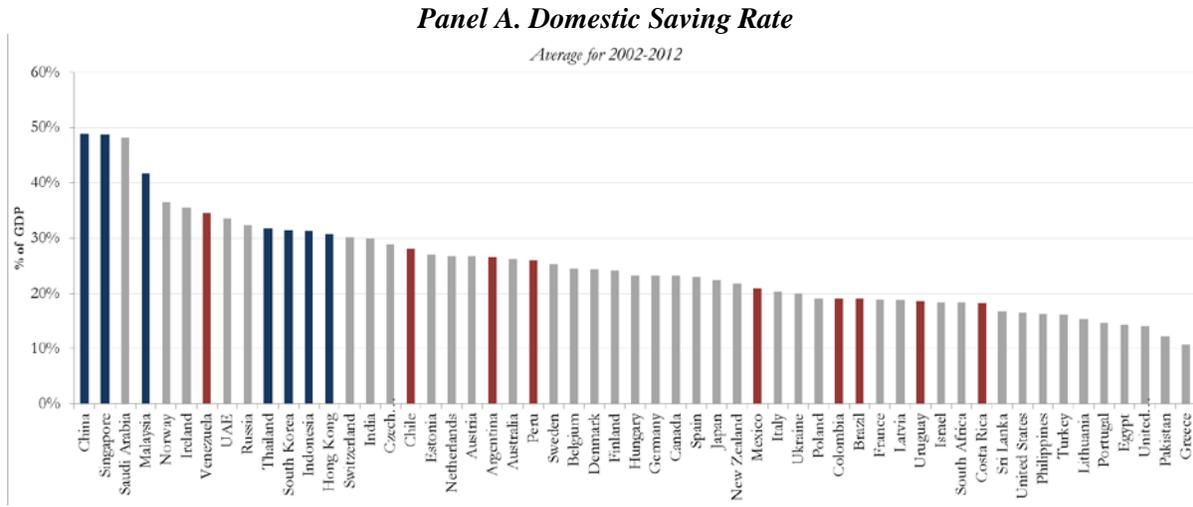


**Panel B. Financing of the Current Account**

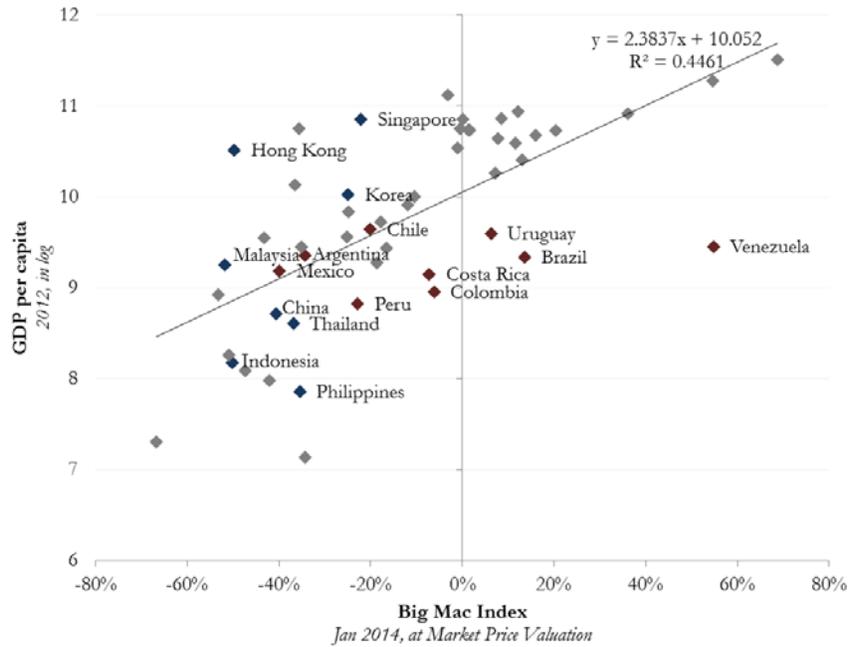


*Note: LAC-6 includes Argentina, Brazil, Chile, Colombia, Mexico, and Peru. SEA MICs includes Indonesia, the Republic of Korea, Malaysia, Philippines, and Thailand. Sources: de la Torre, Levy-Yeyati, and Pienknagura (2013a).*

**Figure 21: Domestic Saving and External Competitiveness**



**Panel B. The Economist's Big Mac Index and Per Capita Income**



Source: Authors' calculations based on WDI and the Economist Intelligence Unit.

**Table 1: Number of Exported Products by Selected LAC Countries**

*Out of a Maximum of 1033 Different Products*

	<b>2002</b>	<b>2012</b>
<i>Mexico</i>	974	983
<i>Brazil</i>	985	977
<i>Argentina</i>	965	930
<i>Colombia</i>	923	913
<i>Peru</i>	872	911
<i>Chile</i>	916	899
<i>Uruguay</i>	673	717
<b>Simple Average</b>	<b>901</b>	<b>904</b>

*Note: The statistics in this figure considers the maximum disaggregation of products at the SITC Rev. 3 6-digit level based on detailed trade data. Source: Authors' calculations based on Comtrade.*