

LATIN AMERICA AND THE RISING SOUTH

CHANGING WORLD, CHANGING PRIORITIES



AUGUSTO DE LA TORRE, TATIANA DIDIER,
ALAIN IZE, DANIEL LEDERMAN, SERGIO L. SCHMUKLER

OVERVIEW

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Latin America and the Rising South

Changing World, Changing Priorities

Augusto de la Torre, Tatiana Didier, Alain Ize,
Daniel Lederman, and Sergio L. Schmukler

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Foreword

The dynamics of the world economy have changed radically and the once immutable assumptions of the global trade and financial order no longer hold fast. In the last two decades alone, wealth has shifted so profoundly that the simple, old North-South hierarchy—where the North were the rich few and the South were the many poor countries of the world—is no longer a given. In fact, in 1990, the majority of the world population, 62 percent, lived in poor countries. As of 2010, 72 percent of the world’s population lived in middle-income countries.

Such tremendous transformation is the inspiration for the World Bank’s latest regional flagship report for Latin America and the Caribbean, *Latin America and the Rising South: Changing World, Changing Priorities*. As an in-depth look at the region’s expanding global connections in trade and finance, and a sober assessment of its promise and challenges, the report is an important contribution in and of itself; at the same time, as a report that tracks global trends, it also provides an invaluable analysis that the World Bank is uniquely positioned to undertake.

While these global trends were the inspiration, the motivation behind this report is the urgent need to disentangle the complicated knot of Latin America’s growth problem. For more

than 100 years, Latin America’s average income per capita has remained barely 30 percent of that of the United States. In other words, the region has been unable to narrow a gaping income disparity with its northern neighbor.

This is not to say that Latin America has been unable to grow. In fact, during the commodity boom of the 2000s, average growth rates reached nearly 5 percent. Moreover, income growth of the poorest 40 percent was higher in Latin America and the Caribbean than in any other region of the world, relative to the total population, making growth also equitable.

Global economic activity, however, has slowed and medium-term growth prospects have diminished. Latin America is now in its fourth year of growth deceleration, and it is expected to grow below 1 percent in 2015. This poses brand new challenges, particularly as the conditions that led to the good years of the 2000s are not with us anymore.

Current global conditions pose similar challenges to all middle-income countries, not only those in Latin America. Indeed, disappointing growth in major emerging economies around the world raises important concerns, particularly considering that two thirds of the extreme poor in the world still live in middle-income countries. For the World Bank Group, a global

institution committed to eradicate extreme poverty by 2030 and to boost prosperity for the bottom 40 percent of the population, these are crucial challenges.

The web of connections that have multiplied throughout the world from the North to the South, from the South to the North, and, perhaps more significantly, from the South to the South represents an important change over the

past two decades. It is therefore our hope that a profound look at the way Latin America—and the world—have been integrating will help shed a light on the way forward. In other words, our expectation is that a clearer understanding of how the South has been rising—and how it has not—will help those countries break out of their middle-income status and move closer to the group of rich nations.

Jorge Familiar
Vice President for Latin America and the Caribbean
The World Bank

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- 2** The Structure of Trade Linkages and Economic Growth
- 3** Big Emerging Markets, Big Labor Market Dislocations?
- 4** The Changing Patterns of Financial Integration in Latin America and the Caribbean
- 5** Ascending with the South Winds: Will Low Saving in Latin America and the Caribbean Be a Drag?

Abbreviations

EAP	East Asia and Pacific
ECA	Europe and Central Asia
ER	exchange rate
FDI	foreign direct investment
FVA	foreign value added
GDP	gross domestic product
GVC	global value chain
G-7	Group of Seven
IR	interest rate
LAC	Latin America and the Caribbean
M&A	mergers and acquisitions
MENA	Middle East and North Africa
SA	South Asia
SSA	Sub-Saharan Africa

Overview

The world economy is not what it used to be 30 or even 15 years ago. The rise of the South—that is, the growing economic influence of emerging economies—has changed the global economic landscape.¹ The changes have been deep and most likely permanent. They reflect not only the growing economic heft of the South, given its substantially higher growth rates with respect to the North (that is, the advanced economies), but also structural changes. The South has become a driver of global economic trends by playing a role that is qualitatively different from that of the North. At the epicenter of these changes has been China.

This report focuses on the restructuring of the global economy and its implications for the development and policy priorities of Latin America and the Caribbean (LAC). It examines how the global economy has changed, especially with regard to the patterns of international trade and financial integration as well as the differential roles played by the large emerging economies and the traditional economic powers. Some of these themes were explored, in a preliminary fashion, in the September 2011 issue of the LAC Region's semiannual report series, "Latin America and the Caribbean's Long-Term Growth:

Made in China?" (De la Torre and others 2011). While China was the sole focus then, the analysis here is deeper and broader, not least because it covers the evolving role of emerging economies more generally.

This report argues that as the world economy has irreversibly changed, LAC has been adjusting to the associated global economic shocks, both commercial and financial. The adjustment process has been conditioned by LAC's trade and financial structures and reflected in the observed patterns of structural change. Key challenges have emerged for the region, particularly because the changes may not have improved the region's prospects for long-term economic growth. Simply put, economic policy priorities in the region have evolved in response to worldwide changes even as these changes have exacerbated some of the region's long-standing development challenges, such as those associated with its dependence on mineral and agricultural commodities and its comparatively low saving rates. The debate in the region over public policy priorities in the context of a new global landscape will thus likely intensify, with the growth agenda at its core.

The rest of this overview addresses the "what," the "how," and the "so what"

questions associated with the rise of the South and its implications for LAC. The overview is organized in three main sections. The first documents salient features of the new global economic order by focusing on the rising prominence of emerging economies. It characterizes the tectonic shifts in the global economy, including by looking at the data through the lens of network analysis. It then examines the fundamental change in the role of the South in the global economy and highlights key dimensions of heterogeneity within the South.

The second section provides an economic interpretation of how the changes at the heart of the global economy are conditioning growth and employment prospects in LAC. This narrative posits that, from the point of view of LAC, the rise of the South manifested itself as a set of economic shocks working through commercial and financial channels. The impacts of these shocks varied across the region, depending on countries' initial trade structures, resource endowments, degree of financial globalization, and saving patterns, among other factors.

The third section assesses broad policy areas that, given the rising South phenomenon, should find their way to the top of the region's growth-oriented reform agenda. Among these areas are the structure of trade

and foreign investment as potential drivers of growth and productivity; labor market frictions, which make economic adjustments sluggish and thus reduce the potential gains from globalization; and the region's notoriously low national saving rates, which may hamper long-term growth by undermining external competitiveness.

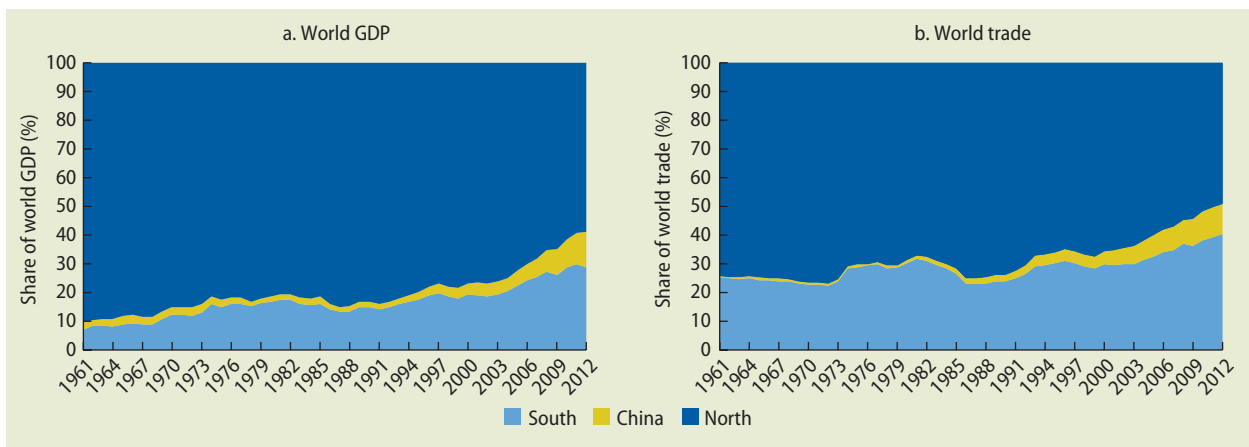
Changes at the center of the world economy

To fully understand the implications of the economic rise of the South, it is helpful to distinguish between the economic weight of emerging economies, the extent of trade and financial integration of these countries, and the different roles played by the North and South countries that are systemically important for the world economy.

Tectonic shifts in the global economic landscape

For most of the 20th century, global economic activity was concentrated in the developed North (composed of Canada, the United States, the Western Europe countries, and Japan, which joined the pack only after World War II). Since the dawn of the 21st century, the South (defined as all

FIGURE 1 The rise of the South



Sources: Calculations based on data from World Development Indicators (WDI) and Direction of Trade Statistics (DOTS).
 Note: The North includes the G-7 members and Western Europe countries. The South includes all other economies. G-7 = Group of Seven; GDP = gross domestic product.

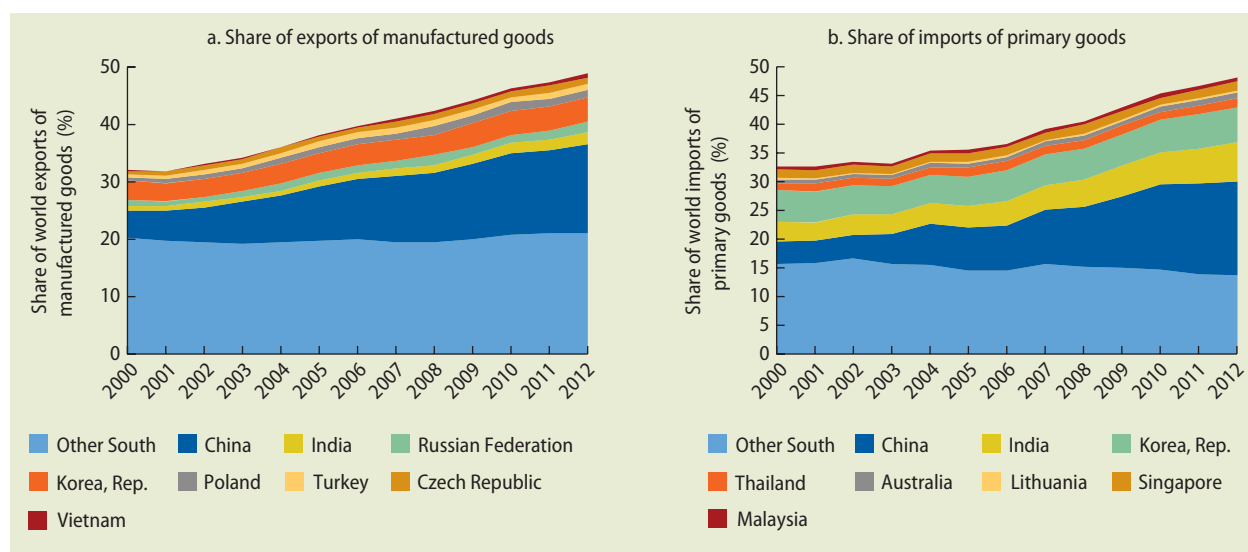
developing economies not in the North), led by China and other large emerging economies, has risen with surprising speed. In fact, several South countries have become major, systemically important players in the global economy. The gross domestic product (GDP) of the South, which represented about 20 percent of world GDP between the early 1970s and the late 1990s, doubled to about 40 percent by 2012, with China alone accounting for 12 percent of global GDP (figure 1, panel a).

The rising share of the South in global GDP was accompanied by increasing influence in international trade and finance. Indeed, although the secular process of globalization of the South had long been advancing, the 2000s saw a notable intensification of this process. The South's participation in global trade rose from 24 percent in 1970 to 35 percent in 2000 and 51 percent in 2012 (figure 1, panel b). This advance was associated with major transformations in the structure of world trade, as the weight of the South varied across sectors. Between 2000 and 2012, the South's share of global exports of manufactures increased from 32 percent to

48 percent (figure 2, panel a), and its share of global imports of primary (agricultural and mineral) goods expanded from 32 percent to 47 percent (figure 2, panel b). An acceleration of financial globalization accompanied the rise of the South in commercial flows. The South's share of global capital inflows (including foreign direct investment [FDI]) rose from about 18 percent in the 1970s to 25 percent in the 1990s and to more than 50 percent by 2012 (figure 3).

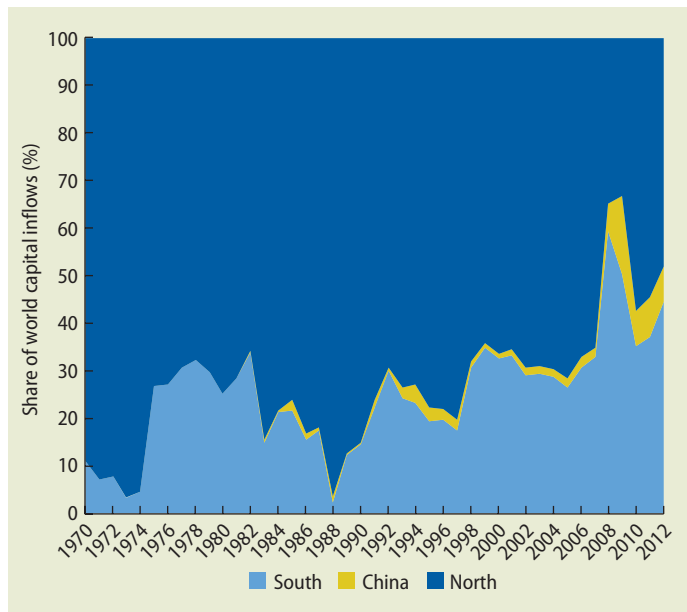
The increase in the economic weight of the South is likely here to stay: it is probably neither short lived nor reversible. Although long-term economic forecasts are notoriously uncertain, current projections suggest that the South will continue to gain importance in the world economy. According to the World Bank's 2013 *Global Development Horizons*, the share of the South in global GDP will reach 55 percent by 2025. A 2012 report by the U.S. National Intelligence Council projects this share to reach 70 percent by 2030. The Asian Development Bank forecasts that the share of exports from the South will rise to 64 percent of global exports by 2030 (Anderson and Strutt 2011). The 2013

FIGURE 2 The South's share of global trade flows



Source: Calculations based on data from Comtrade database.

Note: The eight South countries that gained the most in market share between 2000 and 2012 are shown separately from the rest of South countries. The North includes the G-7 members and Western Europe countries. The South includes all other economies. G-7= Group of Seven.

FIGURE 3 The South's share of global capital inflows

Source: Calculations based on data from Balance of Payments Statistics (BOPS).

Note: Gross capital inflows include portfolio, banking, and foreign direct investment flows. The North includes the G-7 members and Western Europe countries. The South includes all other economies. G-7= Group of Seven.

Global Development Horizons projects that by 2025 the South will account for 63 percent of world capital inflows and 80 percent of world capital outflows.

As the South gained weight in the global economy, the number of its bilateral economic connections proliferated. These ties increased in every direction, but new South-South connections rose more rapidly than North-South linkages in both trade and finance. In 1980, the number of active South-South trade connections was 40 percent of all possible connections (the number of connections that would exist if every South country were connected to every other South country). This figure rose to 46 percent in 1990 and 70 percent in 2012. Trade linkages between North and South countries expanded less rapidly (from 92 percent in 1980 to 96 percent in 1990 and 98 percent in 2012), at least in part because they had been almost fully exploited since the 1980s.² Similar trends are observed across different types of financial flows.³ To be sure, this process is far from mature, as a significant number of countries in the South

have yet to be linked to a wide set of other countries, especially in terms of financial connections. Indeed, only 18 percent of the potential South-South connections related to portfolio flows were active in 2011.⁴

The fundamental change in the global role of the South

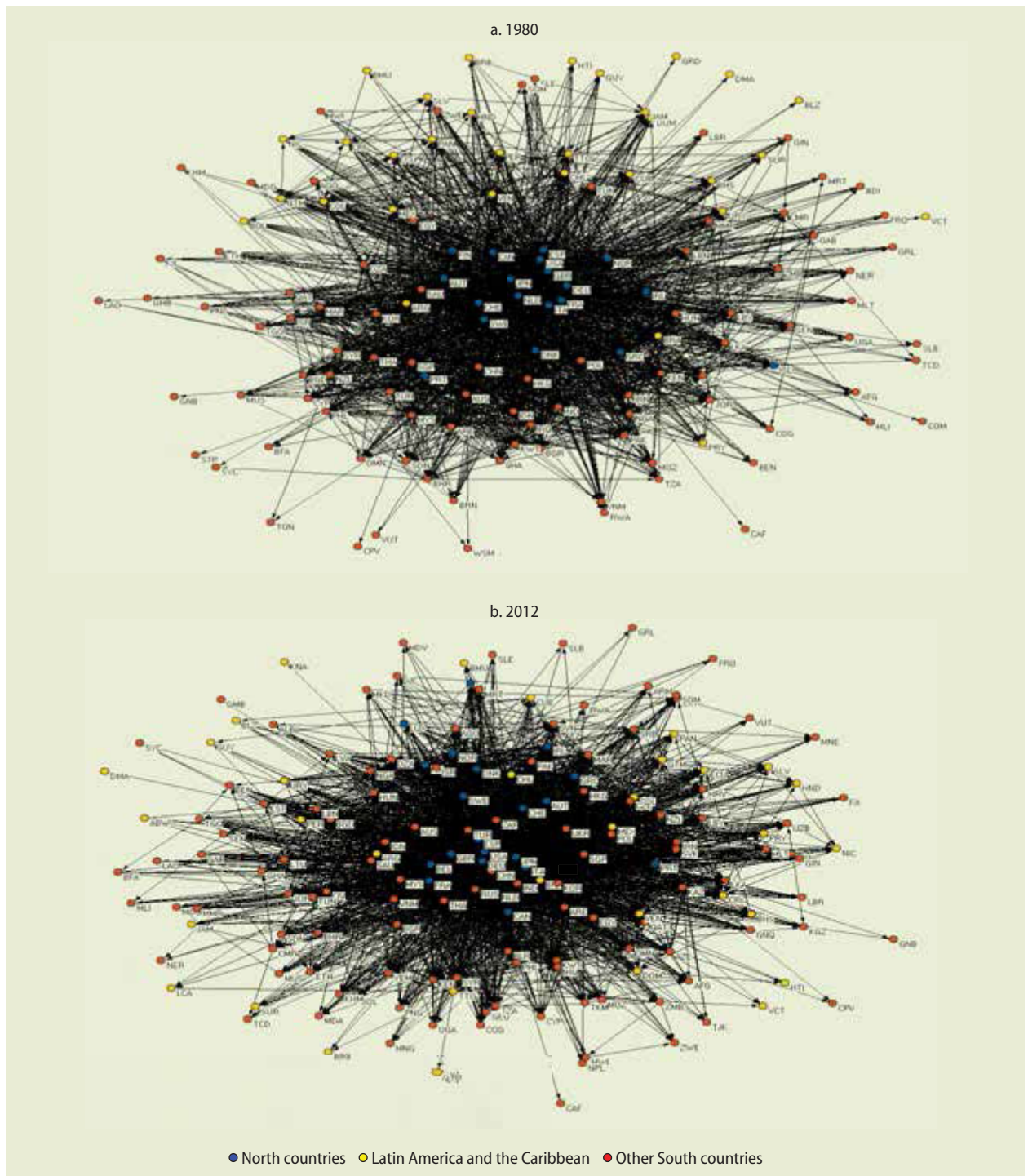
Changes in relative economic weight provide a bird's-eye view of the rise of the South. But, impressive as they are, they do not illustrate the full scale of the economic shifts in the global landscape. Further insights into the nature of the rise of the South emerge when trade and financial connections are viewed from a global network perspective. Four key stylized facts arise from this approach (for a more detailed analysis, see chapter 1 of this report).

First, *the North is no longer the center of the global trade network and the South is no longer its periphery*. Indeed, several economies from the South have become part of what can be empirically characterized as the “center” of global trade. This momentous change is highlighted in figure 4, which shows the global trade network in 1980 and 2012. Each node in the graphs represents a country, and each link corresponds to exports from one country to another (indicated by the arrows). Connections that are trivial in magnitude are not graphed, but once graphed, each connection has the same weight. The greater the number of its connections to other countries, the more centrally located a country is.

The change has been remarkable. In 1980, only a few North countries—the United States, some Western Europe countries, and Japan—stood at the center of the global trade network. In contrast, by 2012, several South countries—including not only China but also Brazil, India, the Russian Federation, South Africa, and Turkey—had moved to the center.

Second, *at the center of the global trade network, the role played by countries from the South and countries from the North differs*. This stylized fact is illustrated in figure 5, which shows the relative (rather than absolute) importance of each country

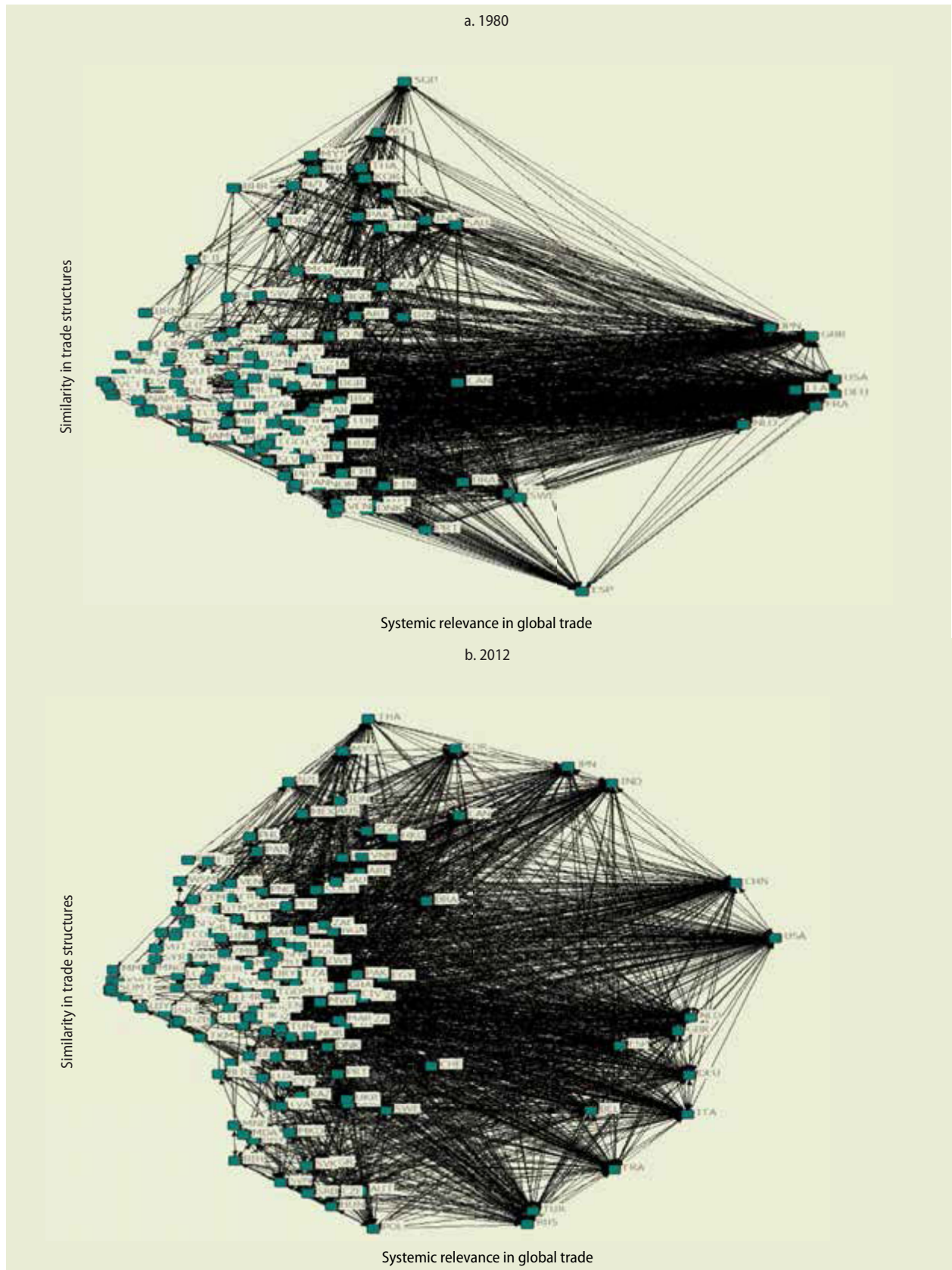
FIGURE 4 The global trade network



Source: Calculations based on data from DOTS.

Note: Networks are drawn using the Kamada-Kawai algorithm. Each node represents a country. Each link corresponds to an active connection between a pair of countries. Arrows indicate the direction of these connections. The North includes the G-7 members and Western Europe countries. Other South includes all other economies except Latin America and Caribbean countries. Only trade flows (exports) greater than \$10 million in 1980 or greater than \$100 million in 2012 are shown. The figure thus ignores very small countries. It would show similar results if these connections were reported. G-7 = Group of Seven.

FIGURE 5 Similarity and systemic importance in the global trade network



Source: Calculations based on data from DOTS.

Note: Each node represents a country. Each link corresponds to an active trade connection between a pair of countries. Arrows at the end of each link capture the direction of these connections. Trade connections are measured as exports as a share of total exports of the source country. Only shares greater than 1 percent are reported. The distance between countries reflects similarity in the structure of their trade connections: the closer countries are to one another, the more alike they are in terms of export shares. Countries capturing a larger share of other countries' exports and connected with a larger number of trading partners appear on the right-hand side of the figure (more systemically relevant countries in global trade). The smaller the distance between two countries along the vertical dimension, the more similar the structure of their trade connections across other members of the network.

in the global trade network. The vertical distance between countries in the figure reflects the degree of similarity in the structure of their trade connections, whereby more similar countries are grouped closer together.⁵ The farther to the right of the figure a country is located, the greater its importance to the global trade network.⁶

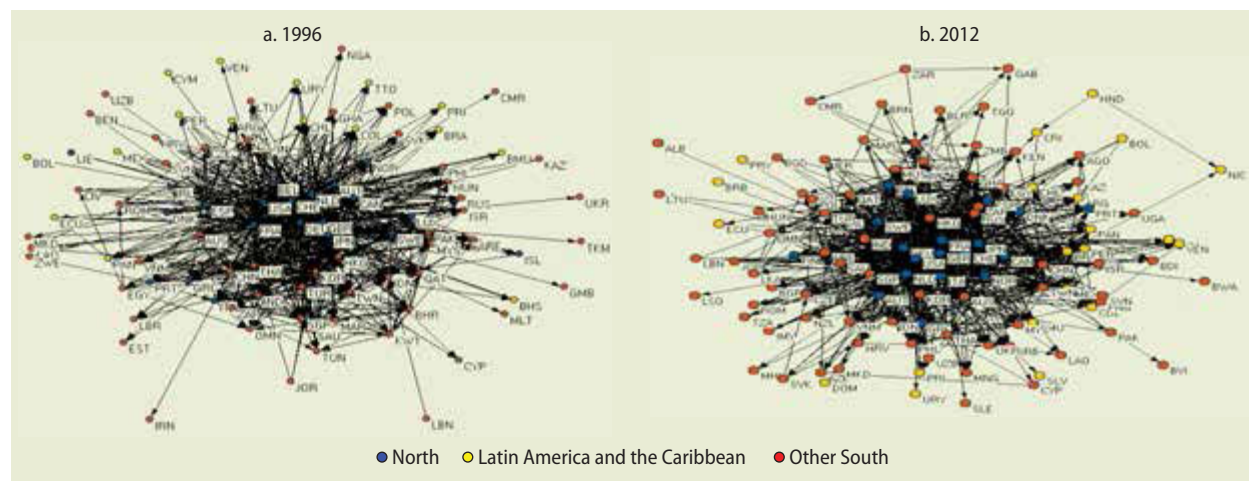
Panel a of figure 5 shows that in 1980 only North countries were clustered toward the right of the graph, thus indicating that they were of greatest systemic importance to the global trade network. In addition, these countries were very close to one another along the vertical dimension, reflecting a high degree of similarity in the structure of their trade connections with other countries in the network.

The global trade network in 2012 shifted dramatically (figure 5, panel b). Several countries from the South appeared on the right side of the figure, indicating their increased systemic relevance to world trade. However, they remained somewhat distant (along the vertical dimension) from the other (North) countries on the right side of the figure, reflecting differences in trade shares across

trading partners. The right side of the figure resembles a star, with small groups of central countries placed at a certain vertical distance from one another. The Russian Federation and Turkey, for example, are not located near any North core country from Europe, and Japan is not close to either China or the Republic of Korea. The implication is that systemically important South countries play a different role from the role played by North countries in the global trade network. These different roles seem to be inherently linked to fundamental differences in factor endowments, trade, production, and aggregate demand structures, as discussed below.

Third, *there is a notable asymmetry in the patterns of change in global trade and financial networks.* In the sphere of trade, the traditional overlap between the North and the “center” (and the South and the “periphery”) no longer holds. In contrast, in the sphere of finance, countries from the North still stand alone at the center, as illustrated in figure 6 for syndicated bank loans. A similar picture emerges for portfolio investments, mergers and acquisitions (M&A), and greenfield investment flows. Whether this asymmetry

FIGURE 6 The global financial network for syndicated bank loans



Source: Calculations based on data from SDC Platinum.

Note: Networks are drawn using the Kamada-Kawai algorithm. Each node represents a country. Each link corresponds to an active connection (a positive flow of investments) between a pair of countries. Arrows indicate the direction of these connections. The North includes the G-7 members and Western Europe countries. Other South includes all other economies except Latin America and Caribbean countries. G-7 = Group of Seven.

proves transitory is debatable, although most observers agree that it is unlikely to be dislodged soon, for several reasons. For starters, there is broad recognition that the U.S. dollar continues and will continue to have a stronghold as both the privileged currency for international contracts and the safe haven in times of global risk aversion. In addition, the scale and network effects associated with the dominance of the advanced financial centers (including New York, London, Frankfurt, Tokyo) will not be easy for the South to overcome. This trade-finance asymmetry in global networks stands in sharp contrast to broad historical developments since the Industrial Revolution and throughout most of the 20th century, when countries that became important trading powers also became important international financial centers.

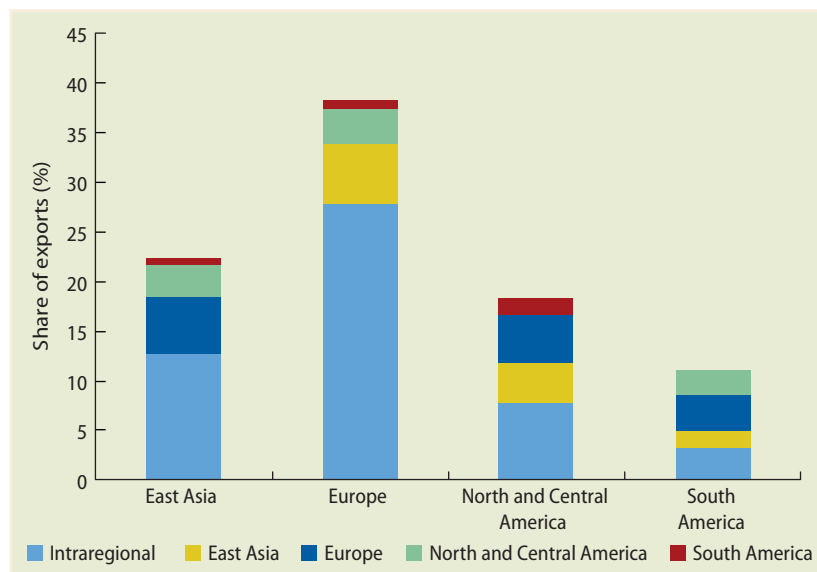
Fourth, despite an increase in the number of connections around the world, *there is a significant degree of regional (geographic) clustering within global trade and financial networks*. Underpinning these clustering patterns has arguably been the development of global value chains (GVCs)—the distribution

of production activities belonging to the same production processes across countries. As GVCs have gained prominence on the international trading scene, exports of final products have become increasingly composed of imports of intermediate inputs. To date, GVCs are mostly regional, not global. The foreign value added (FVA) content in exports typically originates in neighboring countries (figure 7).⁷ For example, about 56 percent of the FVA in the exports of East Asian countries come from other East Asian economies, and more than 72 percent of the FVA in the exports of European countries come from other European economies. There is also clustering—albeit less intense—across countries within LAC subregions. For instance, imports from other South American countries represent about 30 percent of the FVA in the exports of South America.

The heterogeneity of the South

The rise of the South in global economic affairs conceals important differences across South countries. Four types of heterogeneity are noteworthy. The first is *differences in the*

FIGURE 7 Regional clustering in global value chains, 2011



Sources: Calculations based on data from Eora MRIO and WDI.

Note: Figure shows the geographical composition of sources of foreign value added used in a country's exports, scaled by the country's exports.

changes in export and import shares of the South (recall figure 2). The rise of the South implied a growing share of the South (as a whole) in global manufacturing exports. But only a subgroup of South countries carried the load in this regard, with China the leader by a wide margin. China's share in global manufacturing exports increased by more than 10 percentage points, from slightly less than 5 percent in 2000 to more than 15 percent in 2012. In contrast, the other top 20 South countries in terms of their increases in global shares—a group that includes Brazil and Chile—increased their share of global manufacturing exports as a group by only about 8 percentage points. The shares of world manufacturing exports of several large South countries (for example, Malaysia, Mexico, and the Philippines) actually declined.

The rise of the South also featured a substantial increase in its share of trade (exports and imports) of primary (mineral and agricultural) products. But cross-country differences within the South are stark. In particular, the set of South countries whose shares in commodity exports rose most significantly has little overlap with the set of South countries whose shares of commodity imports rose. In contrast, the set of South countries whose shares of manufacturing exports rose significantly (virtually all of which are outside LAC) has greater overlap with the set of South countries whose shares of commodity imports rose. Australia, Brazil, and the Russian Federation jointly accounted for the largest gains in the shares of global primary exports (their share rose from 13 percent in 2000 to 23 percent in 2012). Other top 20 commodity-exporting countries from the South include Azerbaijan, India, Kazakhstan, and several LAC countries (Bolivia, Chile, Colombia, Ecuador, Peru, and Uruguay). China stands out as a giant commodity importer: its share of global imports of agricultural and mineral commodities rose from less than 4 percent in 2000 to more than 15 percent in 2012. All other South countries with rising manufacturing export shares that also increased their shares of imports of commodities (such as

India, Korea, Poland, and Turkey) are outside LAC. As such, LAC gained global relevance as a major commodity exporting region even though it lost relevance as a manufacturing exporter.

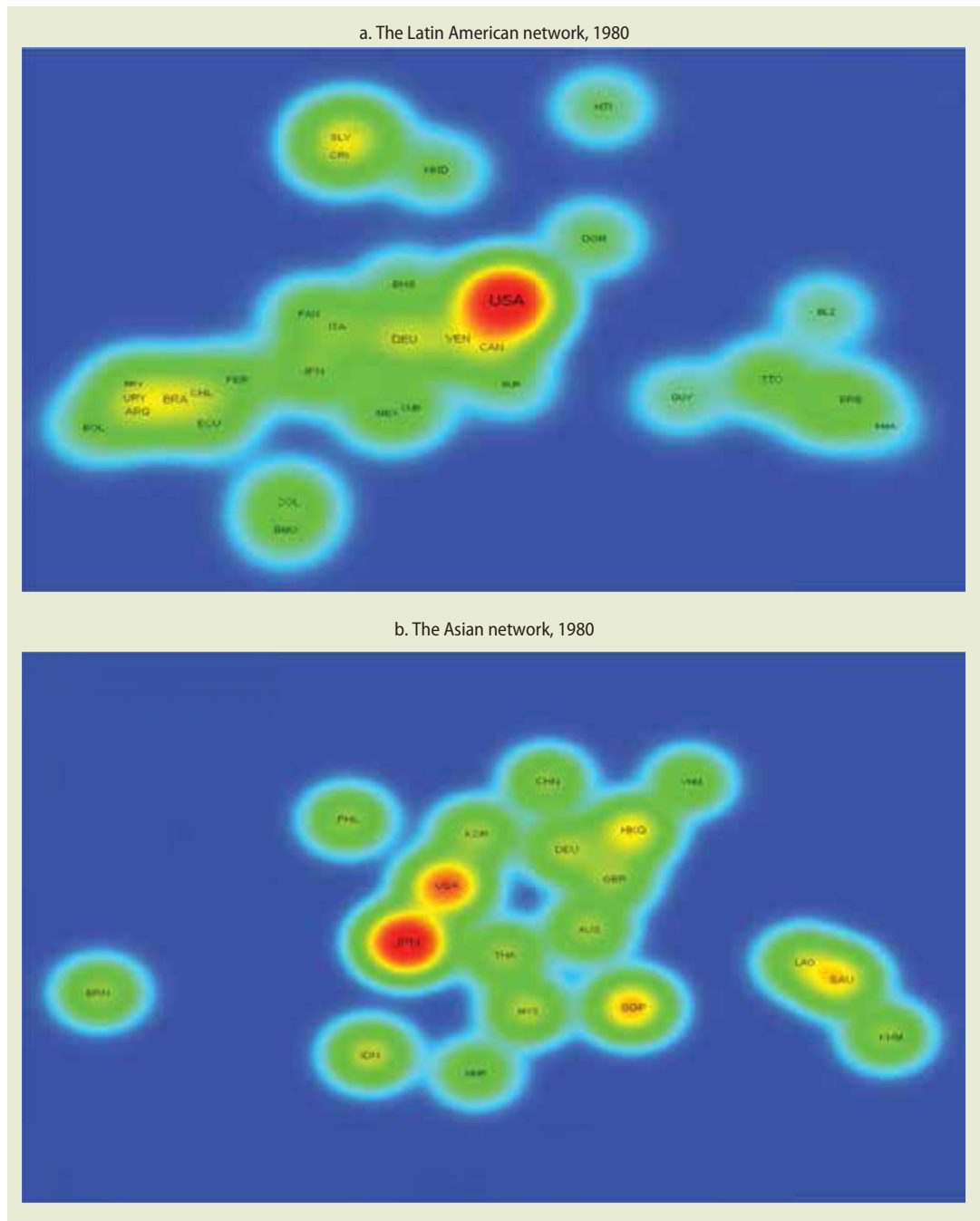
A second important dimension of heterogeneity within the South is *the contrast between LAC and the East Asian economies in terms of the density of their regional trade networks*. Figure 8 highlights this feature by providing snapshots of the regional trade networks of these two regions in 1980 and 2012. Each regional trade network includes (as nodes) all countries of the region plus the five countries from the rest of the world that are the largest trading partners for each regional network.⁸

In 1980 the trade networks of LAC and East Asia were similar: they were thin, unbalanced, and centered on a few dominant North economies. Japan and the United States were the only two dense nodes in the 1980 snapshot of the East Asian network, and the United States was the sole dense node in the 1980 LAC network.

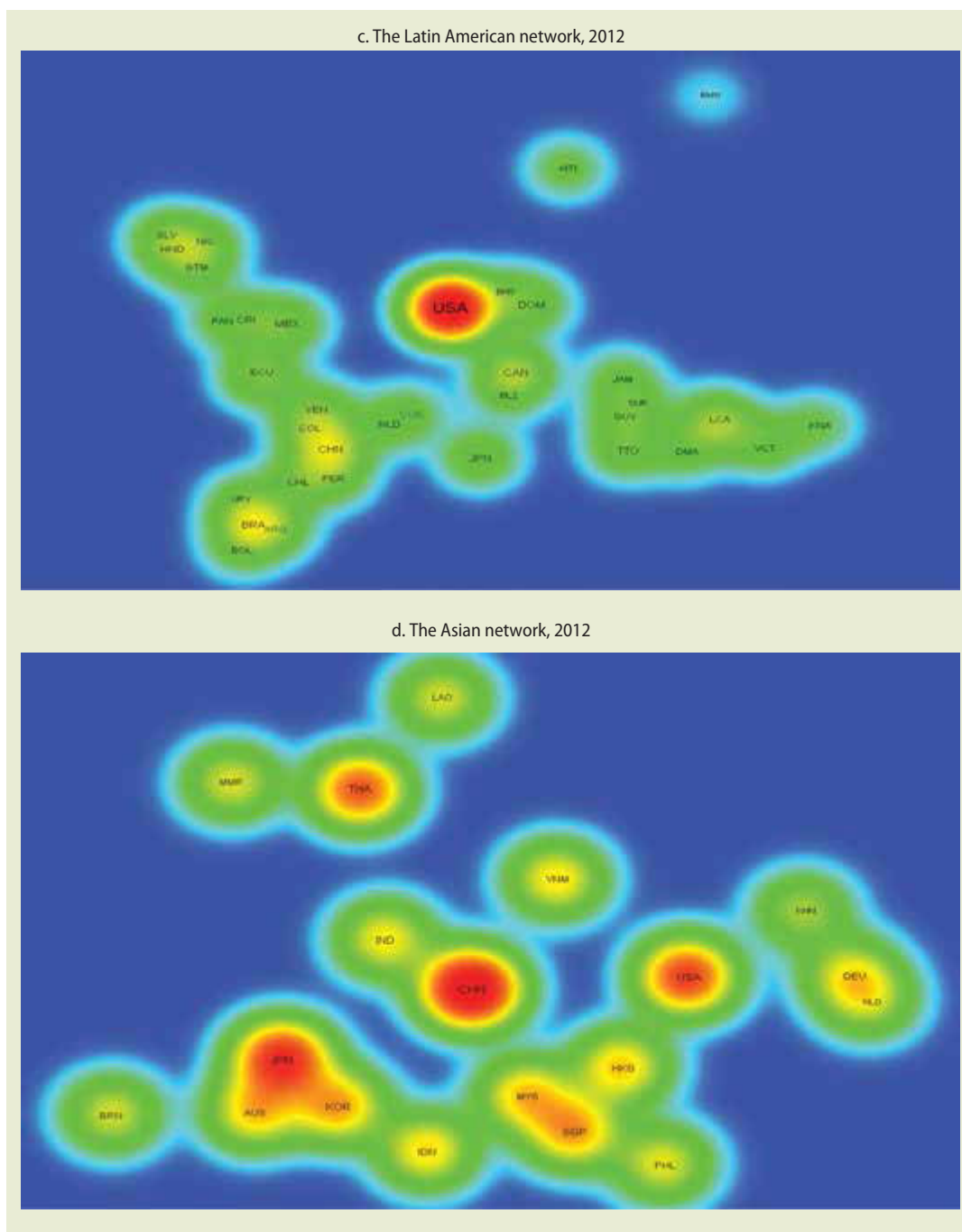
By 2012 the two regional networks had diverged. The East Asian network had become substantially denser and more balanced, with high-density connections distributed rather evenly across numerous countries (nodes), including not just Japan, the United States, and China but also Korea, Malaysia, Singapore, and Thailand. In contrast, the 2012 snapshot of the LAC trade network was almost as thin as it was in 1980, and it remained dominated by the United States, with Brazil a very distant second. A significant change between 1980 and 2012 was that China joined the LAC network, albeit at a comparatively low density.⁹

The large difference in regional network densities in 2012 reflects trade connections within East Asia that became multidirectional (that is, intense in the direction of virtually every country within the network). In contrast, connections within the LAC network have remained largely bi-directional, linking LAC countries mainly with the United States and secondarily with China (and, within the South America subregion,

FIGURE 8 Density maps of regional trade networks



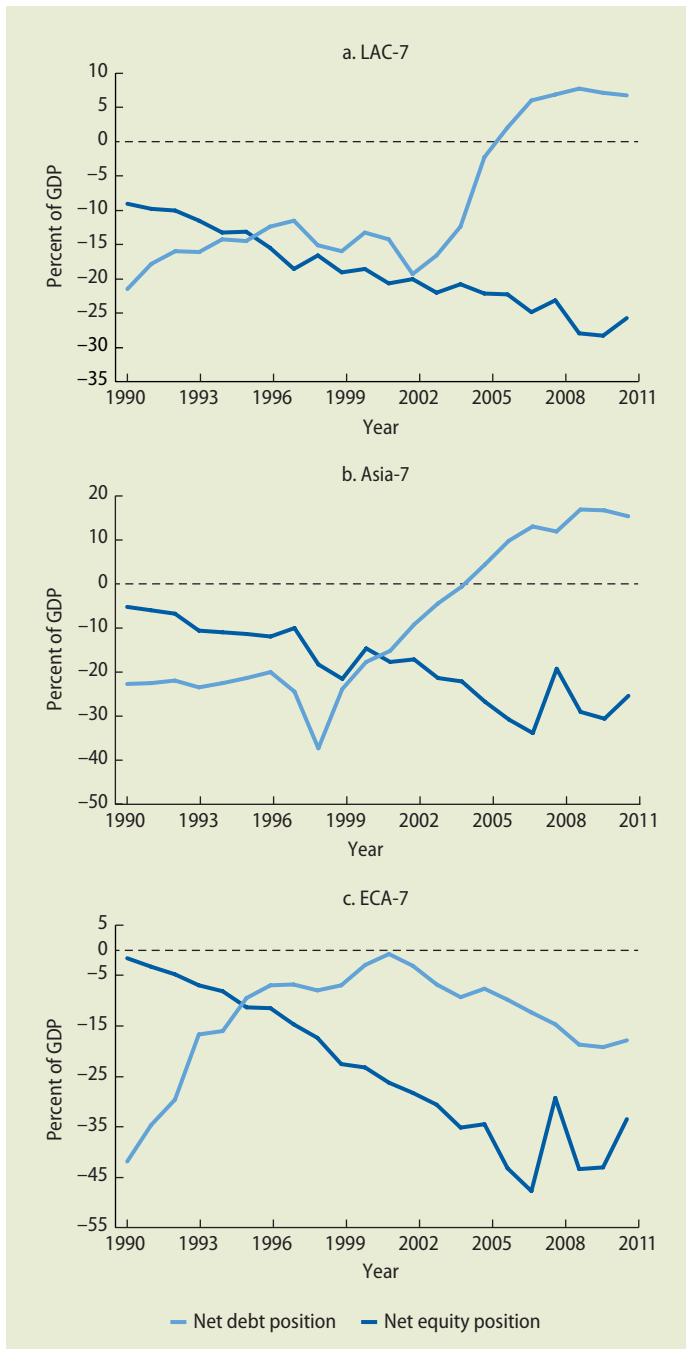
(continued)

FIGURE 8 Density maps of regional trade networks (continued)

Sources: De la Torre, Didier, and Pinat 2014 and DOTS.

Note: Figure shows the density maps of two regional trade networks based on bilateral exports, measured as a share of total exports of the sending country in 1980 and 2012. The density of a country in these maps depends 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 in which red indicates the highest density and blue the lowest. Each country is represented by its three-letter acronym. See box 1.1 in chapter 1 of this report for technical details.

FIGURE 9 Composition of foreign assets and liabilities in the South, by region



Source: Calculations based on updated and extended version of dataset constructed by Lane and Milesi-Ferretti 2007.

Note: Ratios are calculated at the country level and then averaged across countries (simple average) between 1990 and 2011. LAC-7: Argentina, Brazil, Chile, Colombia, Mexico, Peru, and Uruguay. Asia-7: China, India, Indonesia, the Republic of Korea, Malaysia, Philippines, and Thailand. ECA-7: Croatia, the Czech Republic, Hungary, Lithuania, Poland, the Russian Federation, and Turkey. GDP = gross domestic product.

Brazil). The density of connectivity in the East Asian network also suggests strong feedback effects, whereby tighter trade connections within East Asian emerging economies boost trade with advanced countries in the North and vice versa. In contrast, LAC countries (with the possible exceptions of Mexico and Costa Rica) seem to significantly underexploit the potential for complementarities and mutually reinforcing effects between intraregional trade and global trade. These different patterns may be linked to the fact that East Asian countries participate much more actively in GVCs than LAC countries do.

A third salient dimension of heterogeneity concerns *the asymmetric shifts in the net debtor-creditor positions with respect to the rest of the world for different emerging regions in the South*. LAC and East Asia followed a similar pattern in this respect, in sharp contrast with countries from Eastern Europe and Central Asia (figure 9). During the 2000s, there was a major shift from debt to equity in the external net liability positions of East Asia and LAC (in the context of the rise of the South). In contrast, Eastern Europe and Central Asia shifted its position toward debt liabilities.

Regarding debt contracts, East Asia and LAC went from being large net debtors with respect to the rest of the world in the 1990s to significant net creditors during the 2000s. This change reflected a strengthening of macrofinancial policy frameworks, which entailed a process of external debt reduction by governments coupled with self-insurance through accumulation of international reserves by central banks.¹⁰ It also reflected the continued presence of large current account surpluses, particularly among the high-saving East Asian economies.

Over the same period, both East Asia and LAC became more active users of foreign equity finance, which led to rising net debtor positions in risk-sharing equity contracts (particularly FDI) with respect to the rest of the world. The equity-laden position LAC and East Asia achieved in the 2000s arguably represents a more resilient form of integrating

into often volatile international financial markets than the debt-laden external net liability position of Eastern Europe and Central Asia.

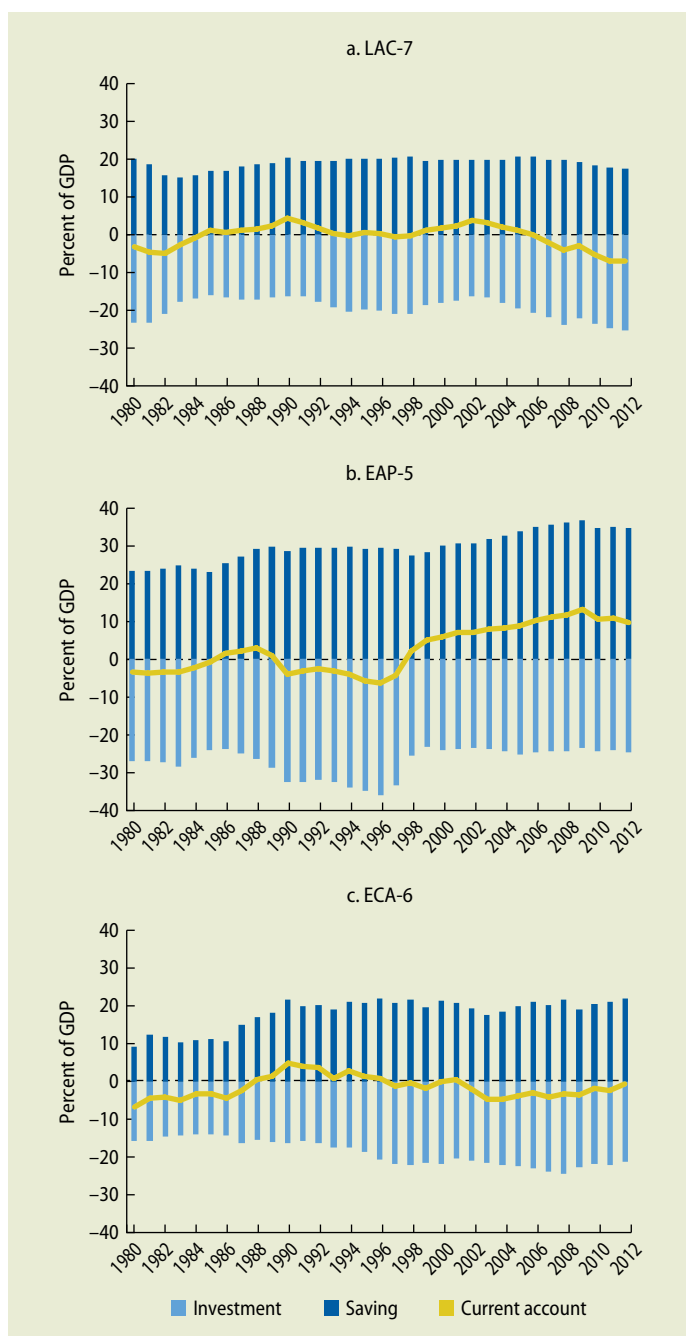
A fourth dimension of heterogeneity that is key to understanding the implications of the rise of the South is the differences in *the relative importance of domestic versus external demand in macroeconomic aggregates*. The contrast is sharpest between LAC and East Asia. While in LAC domestic demand largely drives the economy, in East Asia external demand is a dominant force. That LAC exhibits domestic demand-driven macroeconomic patterns implies an excess of aggregate demand over national income and, hence, typically low saving rates and a penchant for current account deficits (figure 10). The external demand-driven patterns of East Asia imply an excess of national income over aggregate demand and, hence, typically high domestic saving rates and current account surpluses. The macroeconomic patterns of the emerging economies of Eastern Europe and Central Asia are more similar to LAC than to East Asia. As argued below, a macroeconomic pattern that relies on external demand, and therefore high national saving rates, may be more conducive to seizing the potential growth benefits associated with the rise of the South.

How the rise of the South conditioned development in Latin America and the Caribbean: An interpretation

The rise of the South has left a noticeable mark upon the world economy. The preceding discussion highlights the heterogeneity of structural economic characteristics within the South before and during its rise, especially since 2000. This section interprets these global and regional trends, based on the evidence presented in this report.

From the viewpoint of small open-economies, including LAC countries, the rise of the South can be understood as having set three types of global shocks in motion: a supply shock, a demand shock,

FIGURE 10 Saving, investment, and the current account



Source: Calculations based on data from the IMF's International Financial Statistics (IFS).

Note: Simple regional averages are presented. LAC-7 includes Argentina, Brazil, Chile, Colombia, Mexico, Peru, and Uruguay. EAP-5 includes Indonesia, the Republic of Korea, Malaysia, the Philippines, and Thailand. ECA-6 includes Croatia, the Czech Republic, Hungary, Lithuania, Poland, and Turkey. GDP = gross domestic product.

and a financial shock. Both the demand and supply shocks have been associated with the asymmetric rise of the South across industries and trade flows (exports versus imports). The financial shock has been related to the recycling of savings from the emerging South.

LAC countries responded differently to these shocks as a result of differences in initial conditions, including factor endowments, initial trade structures, and macroeconomic frameworks. As it is difficult to precisely identify the direction of causality, this narrative provides an interpretation of the facts and statistical findings rather than a model of how the world economy has been operating.

This section thus characterizes the rise of the South from the viewpoint of LAC as a combination of external shocks. Subsequently, it examines the heterogeneous responses to such shocks across countries in the region and discusses the potential implications for LAC's long-term growth and (to a lesser extent) employment.

The rise of the South as external shocks for Latin America and the Caribbean

A global *supply shock* was related to the huge expansion in South-originated production

of manufactures, led by but not limited to China. This shock presumably lowered the (quality-adjusted) prices of manufactured goods and thus dampened global inflationary pressures. The shock can be interpreted as emanating from an increase in the number of manufacturing workers engaged in international trade, whose labor services were previously not integrated into the global economy (arguably the case of China before it joined the World Trade Organization in 2001).

For LAC economies, this shock implied increased international competition for various manufacturing industries. It thus instigated structural changes across sectors as well as within LAC's manufacturing sector. The resulting decline in the relative prices of manufactured goods was also associated with improved terms of trade for economies that were net importers of manufactured goods.

A *demand shock* was associated with an increase in global demand for primary goods. It reflected the relatively high commodity intensity of imports of the larger rising South countries, particularly China. The result was a rise in commodity prices—an unusually vigorous upswing phase of a veritable commodity supercycle.¹¹ For commodity exporters, including in LAC, this shock was associated with terms of trade gains.

The effects of the global supply shock may have dominated the effects of the global demand shock to the extent that large current account surpluses were observed at the epicenter of the shock (China and other East Asian economies). Consequently, the combination of the global supply and demand shocks engendered a global *financial shock*. This shock was associated with the international recycling of net savings from the South, particularly from the Asian and Middle Eastern countries, and changes in relative prices in financial markets around the world, including exchange and interest rates. These South countries integrated into the global economy with persistent current account surpluses that were accumulated mainly in the form of international reserves, most of which were recycled through the North. The result was a “global savings glut” that eased

FIGURE 11 Real U.S. interest rates



Sources: Calculations based on data from the Board of Governors of the U.S. Federal Reserve System and the Federal Reserve Bank of Cleveland databases.

Note: Series was constructed by deflating the (effective) monthly federal funds rate by the inflation rate for the previous 12 months.

financial constraints in countries with external and fiscal deficits, particularly the United States, and exerted significant downward pressure on world interest rates.¹² Accommodative monetary policy in the North contributed to the maintenance of unusually low global interest rates (figure 11). With low interest rates in the North, a search for yield among investors triggered capital flows to the South, including LAC, where borrowing spreads fell to historically low levels and currencies experienced strong appreciation pressures.

Heterogeneity of impacts as a result of initial sectoral trade weights

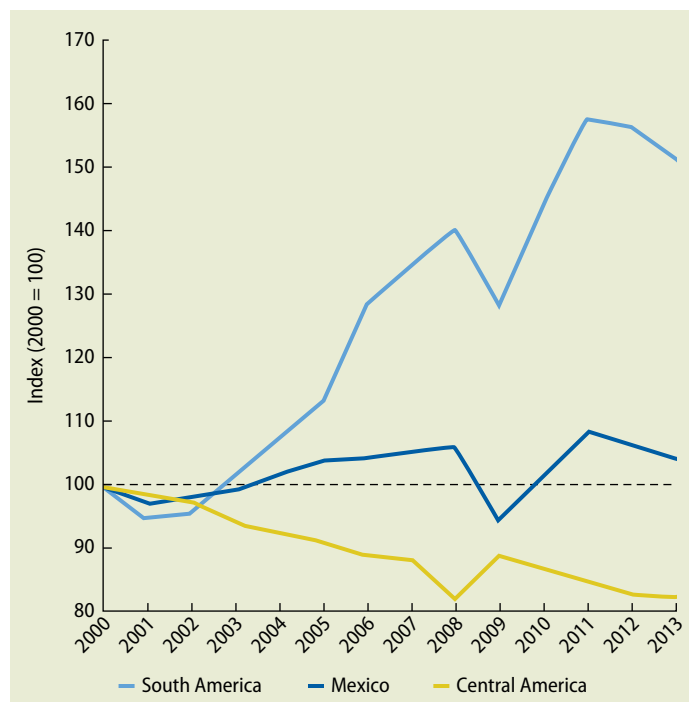
The combination of these supply and demand shocks affected the LAC countries' patterns of trade differently, depending on their natural endowments, geographical characteristics, economic size, and initial production and trade structures. The shocks were channeled through changes in the terms of trade starting in the early 2000s and reflected the extent to which initial trade structures were similar to those of China, at the epicenter of these shocks, and the United States.

Only a few countries in the region—chiefly Mexico and, to a lesser extent, countries in Central America—maintained an export structure similar to that of China. The trade structures of most countries in the region were quite different from that of China. For the economies of South America, where the dominant resources are land and mining endowments, the combination of external supply and demand shocks translated into unequivocal and significant improvements in their terms of trade (figure 12). In contrast, Mexico's diversified economy—which combined an initially broad and relatively strong manufacturing base with substantial productive capacity in commodities (such as fossil fuels, coffee, and iron ore)—experienced stagnant terms of trade.¹³ In Mexico, the supply shock that kept manufacturing prices in check was compensated for by the demand shock that increased commodity prices. Central America and the Caribbean experienced

a deterioration of their terms of trade because of their export dependence on light manufactures and high level of imports of commodities. In addition, in some LAC economies, low domestic saving rates further reduced the competitiveness of the manufacturing sector, and in economies with large agricultural and mining sectors, wages were pushed up, as explained below.

Illustrative of the differences within LAC as a whole, figure 13 shows the evolution of indexes of manufacturing export similarity for Brazil and Mexico. Brazil's highly diversified export structure (spanning from agricultural commodities to automobiles) has been more similar to that of the United States and the European Union than that of China. In contrast, Mexico's manufacturing export basket has been consistently more similar

FIGURE 12 Terms of trade within Latin America and the Caribbean



Sources: Calculations based on data from the Economic Commission for Latin America and the Caribbean (CEPAL).

Note: Simple average across countries within each LAC subregion are presented. South America includes Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Paraguay, Peru, Uruguay, and República Bolivariana de Venezuela. Central America and Caribbean includes Costa Rica, the Dominican Republic, El Salvador, Guatemala, Haiti, Honduras, Nicaragua, and Panama.

to China's. Approximately 60 percent of Mexico's exports of manufactures were similar to those of China, compared with only 30 percent in the case of Brazil.¹⁴ The global manufacturing supply shock dampened the potential growth of LAC's manufacturing exports in general, with the effect most acute in countries whose export structures were most similar to China's at the outset (in 2000). LAC countries that benefited the most from the Asia-led global commodity demand shock were countries that were rich in natural resources and had a commodity-oriented initial export structure that matched the structure of commodity (agricultural and mineral) imports of China.

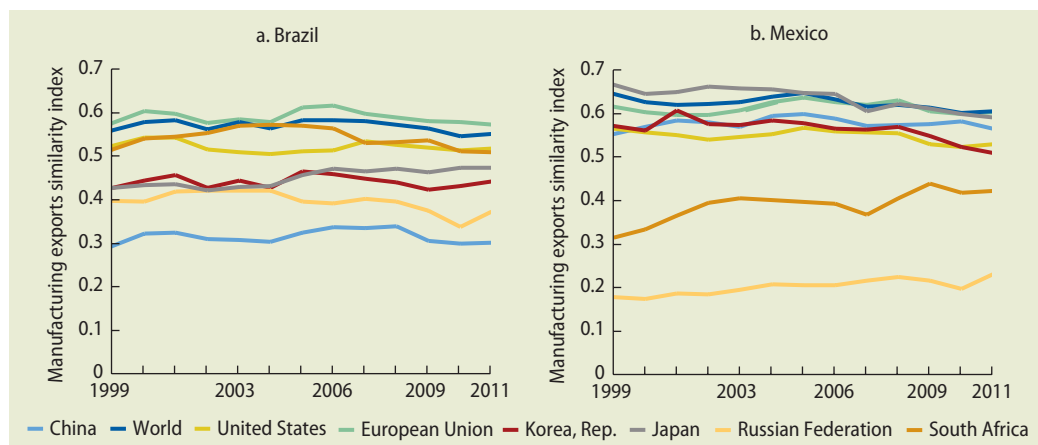
Empirical attempts to gauge the impact of the rise of the South on LAC exports are consistent with differences in the evolution of the terms of trade and the variance in the degree of similarity between the LAC region's initial trade structures and the trade structure of China. Figure 14 illustrates these patterns by presenting indexes of the quantitative impact of the rise of China on the growth rate of manufacturing, mineral, and agricultural exports for a large sample of LAC countries between 2000 and 2011. The heterogeneity of the estimated impacts across countries in the region is pronounced. The negative impact on the exports of manufactures was stronger for

the Caribbean, Central America, and Mexico, where initial export structures were similar to China's (panel a). In contrast, the negative impact of the rise of China on manufacturing exports was significantly weaker for South American economies. The positive impact on their exports of agricultural and mineral commodities was substantial (panels b and c).¹⁵ In fact, South American countries represent all the observations in the three panels of figure 14 that were above the LAC average.

Weak participation of Latin America and the Caribbean in global value chains

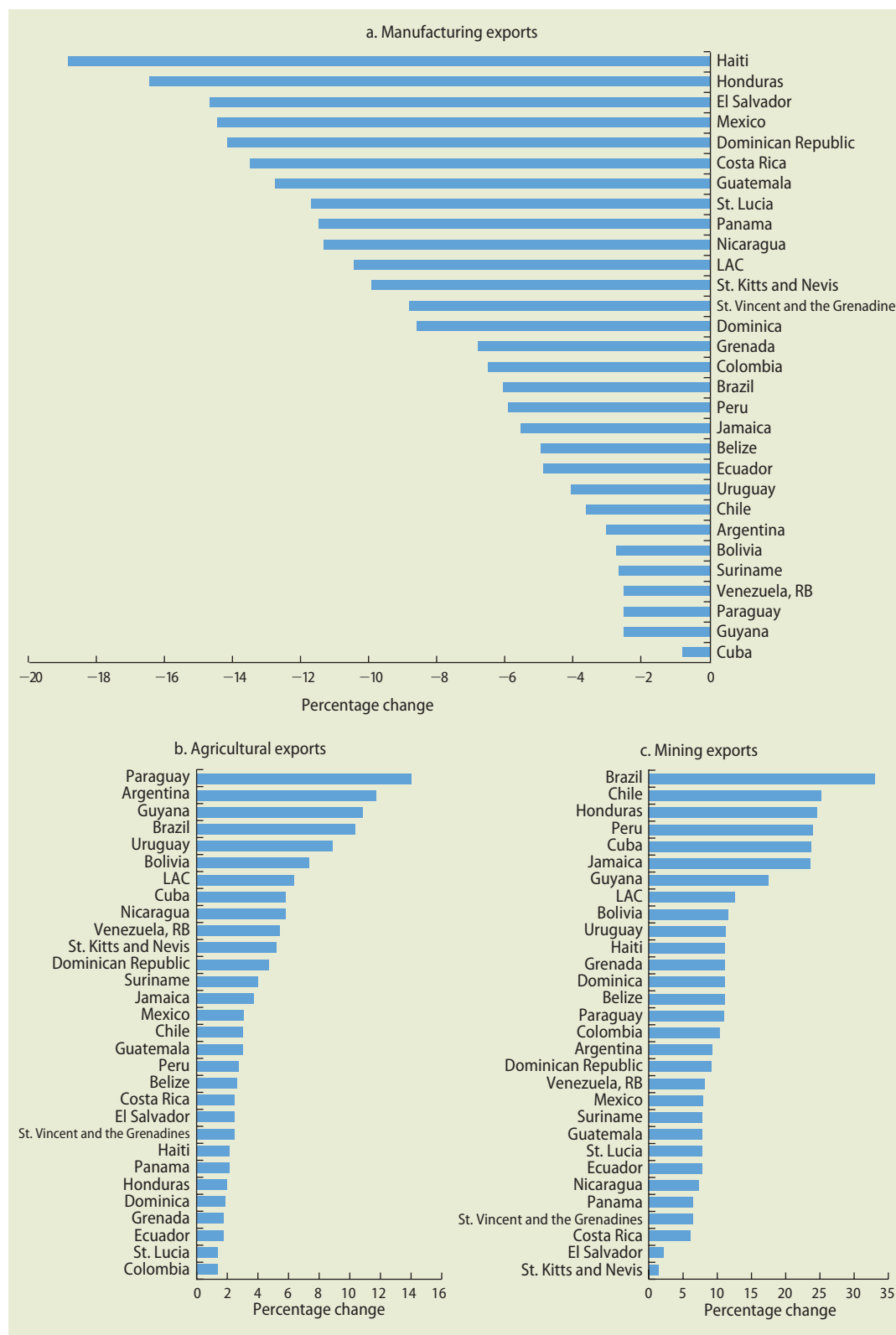
The sectoral composition of trade conditioned the within-LAC heterogeneity of export and import responses to the global supply and demand shocks. These shocks boosted LAC's share in world commodity exports while undercutting the region's share in global manufacturing exports. Financial flows to LAC countries seem to have reinforced these trends. Specifically, LAC's cross-border financial inflows from the South have been more biased toward the primary sector than flows from North countries. For example, during the 2000s, 92 percent of the total cross-border M&A investments from the South in LAC went to the primary sector, whereas only 48 percent of the same type of investments

FIGURE 13 Export similarity indexes in manufacturing in Brazil and Mexico



Sources: Calculations based on data from World Integrated Trade Solution (WITS) and Comtrade; index proposed by Finger and Kreinin 1979.
 Note: The higher the index, the greater the similarity between the manufacturing export baskets of two economies.

FIGURE 14 Effects of the rise of China on gross exports from Latin America and the Caribbean, by sector, 2001–11 average



Source: Artuç, Lederman, and Rojas 2015, based on data from WITS and Comtrade.

Note: Sectoral classification of trade flows is based on the ISIC classification, Revision 3. Agriculture corresponds to ISIC codes 0111–0500, mining to ISIC codes 1010–1429, and manufacturing to ISIC codes 1511–3699. See box 3.1 in chapter 3 of this report for technical details. LAC = Latin America and the Caribbean.

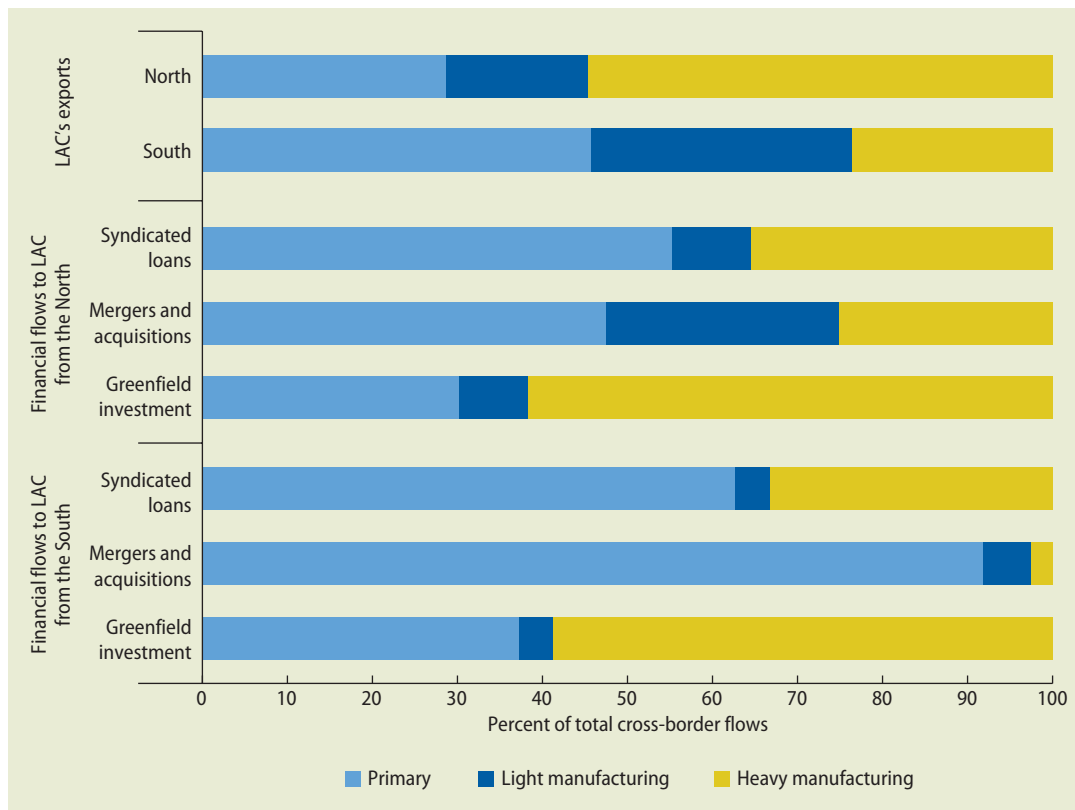
from the North in LAC went to the primary sector (figure 15). Large, albeit less striking, differences are also observed in cross-border greenfield investments and syndicated loans.¹⁶

These trends suggest that the proliferation of LAC’s ties with the South was driven to a larger extent by natural endowment-based comparative advantages than by integration into manufacturing GVCs. Two key questions may be raised in this regard. First, is LAC indeed characterized by weaker integration into GVCs than other South regions? Second, are some types of trade structures (such as structures associated with participation in GVCs) more conducive to growth than others? The rest of this section provides

evidence to support a nuanced yet positive answer to the first question.¹⁷ The second question is examined in a subsequent section.

New forms of cross-border trading emerged alongside the rise of the South. One manifestation of this phenomenon was the proliferation of GVCs. These chains entail the offshoring and international distribution of specialized activities that are part of an integrated production process. They typically involve a group of firms located in different countries that operate at different stages of the same production process in a coordinated fashion, all under the aegis of a lead firm, with the goal of enhancing the overall efficiency of the chain. The GVC-based

FIGURE 15 Sectoral composition of cross-border flows in Latin America and the Caribbean, 2003–2011 average



Source: Calculations based on data from Comtrade, SDC Platinum, and fDi Markets.
 Note: The primary sector includes agriculture, hunting, forestry, and fishing; mining; and crude petroleum and natural gas. The light manufacturing sector includes food, beverages, and tobacco; textiles and apparel (including leather); and wood and paper-related products. The heavy manufacturing sector includes refined petroleum and related products, chemicals and plastics, nonmetallic minerals, metals, machinery and equipment, and transport equipment. The North includes the G-7 members and Western European countries. The South includes all other economies. Figure excludes offshore centers. G-7 = Group of Seven; LAC = Latin America and the Caribbean.

globalization pattern is thus driven more by firms' global strategies than by traditional country-based comparative advantages. The resulting multicountry production process calls for a finer analysis of trade patterns that goes beyond the traditional focus on broad sectors and skill categories (see, for instance, Baldwin 2012).

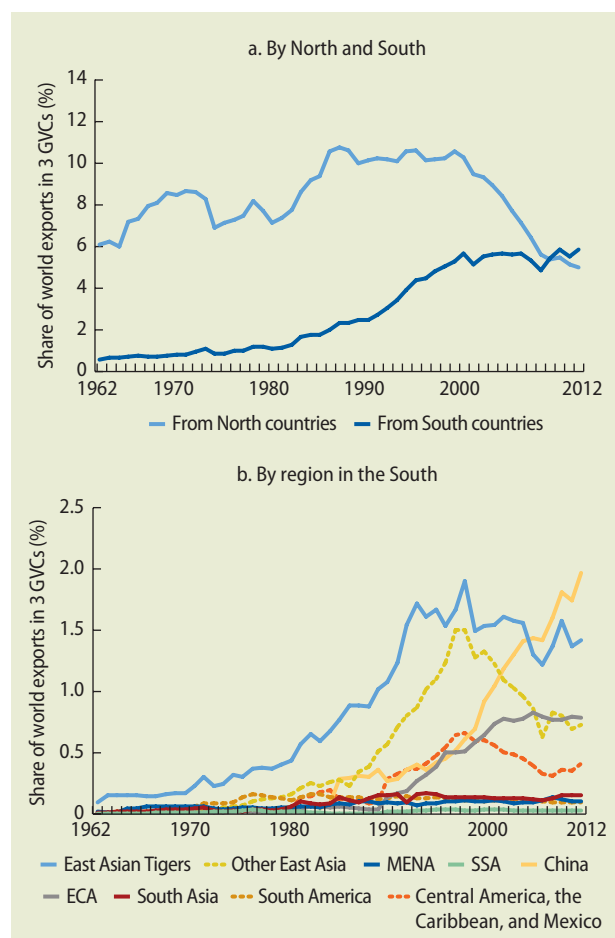
Measuring the intensity and quality of integration of a country into GVCs is a challenge. Given the paucity of suitable data, proxies must be used.¹⁸ One way to do so is to focus on exports of GVC-relevant intermediate goods, as these fragmented production processes require that parts and components cross borders before finished goods are shipped to final markets. Figure 16 documents the rise of exports of intermediate goods that are relevant for GVCs in three industries: apparel and footwear, electronics, and automobiles and motorcycles.

The North started visibly losing its dominance in the exports of these intermediates (measured as share of total exports of GVCs in the three industries) in the late 1980s, when the South's activity appears to have taken off (figure 16, panel a). This process accelerated in the 1990s; by 2009 the South's exports of intermediate goods for these GVCs had surpassed the exports of the North. The North's relative importance in GVC-relevant intermediate exports began to decline around 2000—yet another piece of evidence that a major global restructuring broadly coincided with China's accession to the World Trade Organization.

Participation in GVC-relevant exports of intermediate goods varied widely across countries and regions within the South (figure 16, panel b). The first economies from the South that picked up sizable shares of global trade in intermediates were the East Asian Tigers (Hong Kong SAR, China; Korea; Singapore; and Taiwan, China), whose surge began in the 1970s. They were followed by other Asian countries (Indonesia, Malaysia, the Philippines, and Thailand), which picked up sharply in relative importance during the 1990s but then lost ground precipitously after 2000, when China rose to a dominant position.

Within LAC, Central America and Mexico gained relative importance during the early 1990s, probably as a result of the North American Free Trade Agreement (NAFTA). They peaked around 2000 and then lost ground, even as Eastern Europe rose, until about 2009. Since then, Central America and Mexico seem to have experienced a rebound. The contrast with South America is stark: it did not experience a relative surge in terms of

FIGURE 16 Exports of intermediate goods as share of total exports in three global value chains



Sources: Calculations based on data from Comtrade; classification of intermediate goods into three major global value chains (apparel and footwear, electronics, and automobiles and motorcycles) is from Sturgeon and Memevodic 2010.

Note: The North includes the G-7 members and Western Europe countries. The South includes all other economies. East Asian Tigers include Hong Kong SAR, China; the Republic of Korea; and Singapore. Other East Asia includes Indonesia, Malaysia, the Philippines, and Thailand. All other regions follow the World Bank classification of countries. ECA = Europe and Central Asia; G-7 = Group of Seven; GVC = global value chain; MENA = Middle East and North Africa; SSA = Sub-Saharan Africa.

exports of GVC-relevant intermediates, and it never had as large a share as many other South regions. This evidence suggests that geography (that is, proximity to the United States and distance from East Asian countries) played a key role within LAC as a conditioning factor for the region's participation in GVCs.

Another way of gauging a country's integration into GVCs is to focus on GVC-related forward and backward linkages. From this perspective, even raw commodity exporters can participate in GVCs, albeit in the forward linkage space, by, for instance, exporting inputs (such as crude oil) for the manufacture of intermediate goods with greater degrees of processing or final goods (such as gasoline and other oil derivatives). Figure 17 shows the differences between regions and subregions around the world in terms of their backward- and forward-linkage participation in GVCs.

Mexico and Central America relate to GVCs mainly as manufacturers of final goods, hence predominantly in the backward linkage part of GVCs. Moreover, they have integrated toward the final stages of GVCs with North countries, particularly the United States. South American countries, by contrast, being net commodity exporters, are inserted mainly in the forward-linkage segments of GVCs.

The East Asian countries show equal participation in the forward and backward segments of GVCs, implying that about half of their GVC-related trade is from imports of intermediate goods and half from exports of final goods. This benchmark of 50 percent may be relevant for growth, as it could be a sweet spot for the maximization of certain learning spillovers, as, for instance, producers of tradables can learn as much from their suppliers of imported goods as from the buyers of their exports.

Differential employment effects

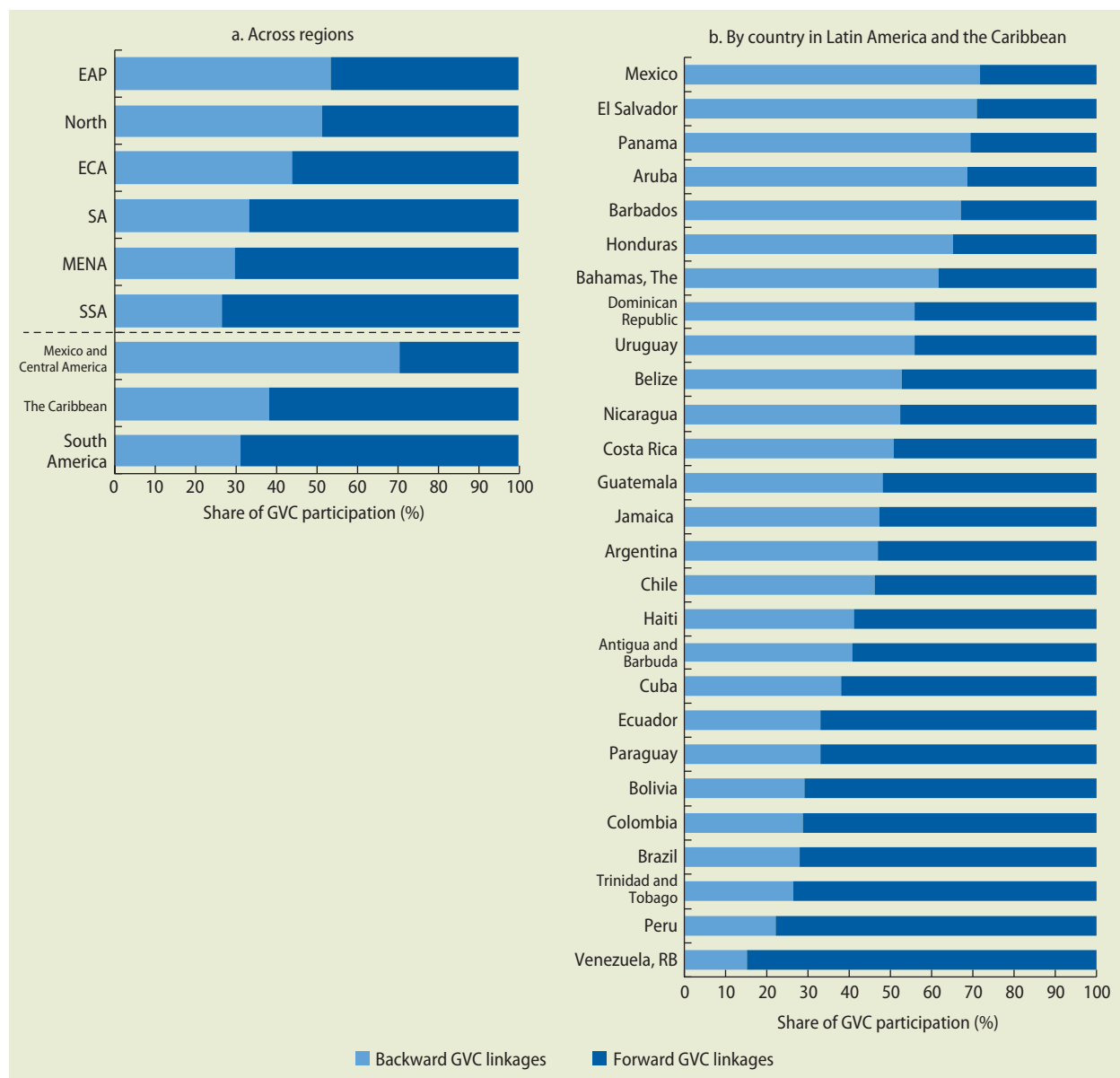
How did the economic shocks emanating from the restructuring of global trade affect employment in LAC, especially given the similarity in the trade structures of the region's

larger countries and China? The consequences were indeed asymmetric across LAC countries and tradable industries, as could be expected.

In Argentina, Brazil, and Mexico, the share of manufacturing employment, especially formal employment, has declined since roughly 2000 (figure 18). The fact that it was most apparent in Mexico—one of the countries in the region hardest hit by the rise of China in global markets of manufactured products—suggests that the employment impact of China was particularly intense where the trade effects were largest.

Evidence from the simulation models presented in this report indicates that the impact of China on labor market dynamics in Argentina, Brazil, and Mexico (through global markets of manufactured goods, agriculture, and mining) was substantial in the short run but, perhaps contrary to expectations, relatively weak in the longer run (for technical details, see chapter 3 of this report). Labor market frictions appear to have significantly increased the short-run pain of the adjustment for workers in the manufacturing industry. However, these effects were counterbalanced in Argentina and Brazil by the positive employment effects of rapidly rising agriculture and mining imports from China. Mexico fared a bit worse: the simulation estimates suggest that the negative effects on labor demand in manufacturing were too large to be compensated for by the relatively small positive effects on Mexico's labor demand in agriculture and mining. This China-led rise of the South can thus plausibly and at least partially explain why wages (adjusted for purchasing power parity) rose faster in Brazil than in Mexico since the early 2000s (figure 19). The evidence on the seemingly small longer-run employment impacts should be interpreted cautiously, however. Evidence from other sources discussed in this report suggests that labor market frictions that inhibit labor migration within countries may result in significant long-term losses in areas that had high levels of manufacturing employment before the rise of China (see, for instance, Autor, Dorn, and Hanson 2013; Chiquiar 2014).

FIGURE 17 Backward and forward participation in global value chains, 2011



Sources: Calculations based on data from Eora-MRIO and WDI.

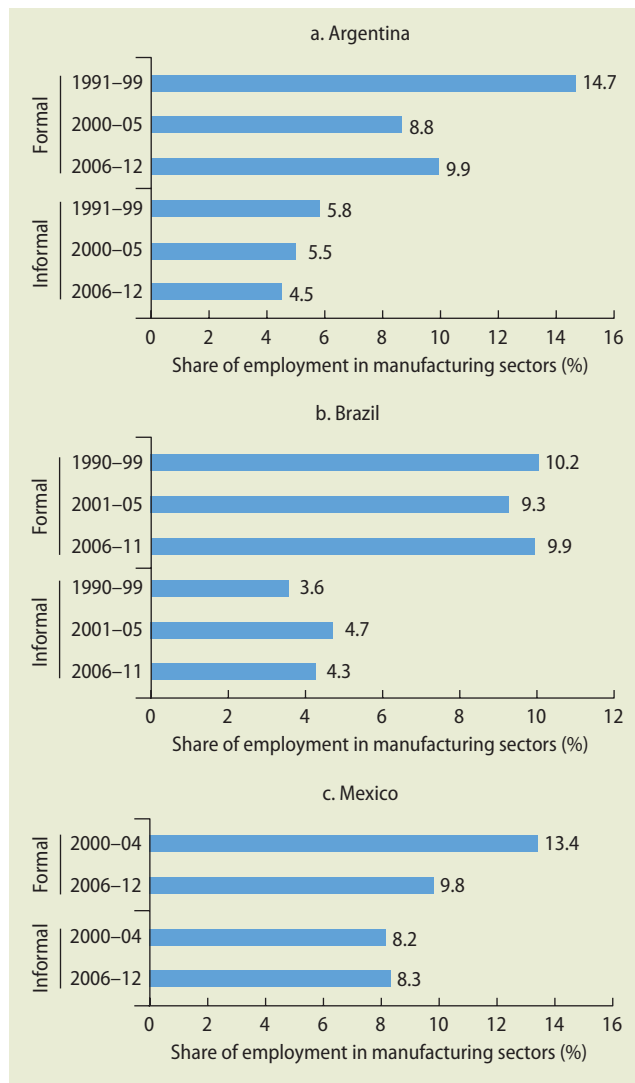
Note: Participation in global value chains (GVCs) is proxied by the share of a country's export that is part of a multistage trade process. This measure is constructed by adding the foreign value added used in a country's own exports (backward GVC linkages) to the value added supplied to other countries' exports (forward GVC linkages) and scaling the total by the country's total exports of goods and services. Panel a reports cross-country averages. The North includes the G-7 members and Western Europe countries. The South includes all other economies. All other regions follow World Bank classification of countries. EAP = East Asia and Pacific; ECA = Europe and Central Asia; G-7 = Group of Seven; GVC = global value chain; MENA = Middle East and North Africa; SA = South Asia; SSA = Sub-Saharan Africa.

Low saving rates in Latin America and the Caribbean

LAC's response to the global shocks was also conditioned by the net integration of countries

into the world economy. This seldom explored structural dimension of globalization is based on the composition of demand—that is, the relative importance of domestic versus external demand relative to the country's income.

FIGURE 18 Employment shares in the formal and informal manufacturing sectors of Argentina, Brazil, and Mexico



Sources: Calculations based on data from Encuesta Permanente de Hogares-Continua (EPHC) surveys in Argentina, Pesquisa Nacional por Amostra de Domicílios (PNAD) surveys in Brazil, and Encuesta Nacional de Ingresos y Gastos de los Hogares (ENIGH) surveys in Mexico.

Note: Informal workers are defined as workers without social security benefits.

The patterns of net integration of LAC countries are undisputedly related to the region's historically low savings rates. Indeed, the difference between aggregate domestic demand and income is the external current account, which is also equal to the difference between domestic saving and investment. For its part,

national saving could be related to external competitiveness, balance of payments sustainability, investment, and growth, among other factors. This section documents key relevant facts regarding the patterns of saving, investment, and real exchange rates in LAC relative to other middle-income South regions. The effects of (low) saving on growth are discussed further below.

Figures 20 and 21, which come from an econometric model discussed in this report, show the comparative dynamics of saving, investment, the current account, and the real exchange rate resulting from global shocks for LAC and non-LAC emerging economies.¹⁹ As discussed earlier, the supply shock in the first decade of the 2000s seems to have dominated the demand shock. Hence, the focus is on the response to an increase in global supply and to a decline in world interest rates (equivalent to a shock from monetary easing).

Assuming no major institutional or structural change during the entire period, a positive supply shock (an increase in global supply) boosts LAC's investment, appreciates its real exchange rate, and widens its current account deficit more and more persistently than in other emerging economies (figure 20). At the same time, such a shock depresses LAC's saving rates for a prolonged period (in contrast with other emerging economies).

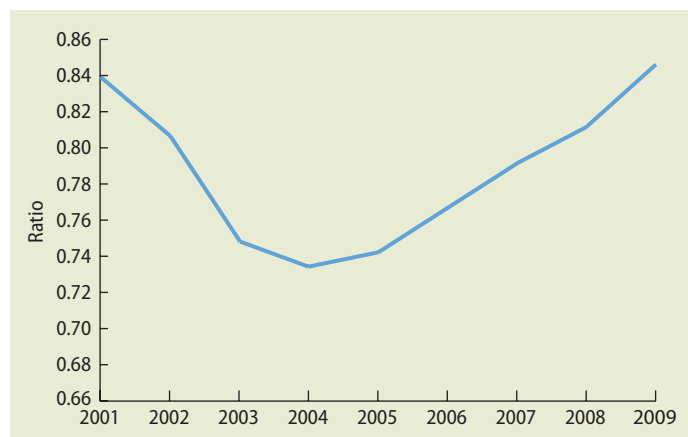
Consistent with the earlier discussion, a favorable global monetary shock that took place over the same period accentuated the macroeconomic effects of the global supply shock in LAC. In fact, the econometric exercise finds that a decline in the U.S. interest rate led to a rise in LAC's investment rate, an appreciation of its exchange rate, and a fall in its saving rate (figure 21). These effects were also more durable than in other emerging economies.

The patterns of low saving rates and appreciating real exchange rates that prevailed in many LAC countries over the past decade can thus be at least partially explained as region-specific responses to global shocks emanating from the rising South. The differences in macroeconomic responses to the global shocks between LAC and other

emerging South regions seem to have diminished during the past decade, however, at least in part thanks to improvements in macroeconomic policy management. In particular, evidence from the econometric exercise suggests that the adoption of inflation-targeting-cum-exchange-rate-flexibility and improved fiscal rules in several LAC countries appears to have led to significantly smoother responses of output, consumption (hence saving), and investment to global shocks. This smoothing was counterbalanced, at least in inflation-targeting countries, by larger responses in the real exchange rate.

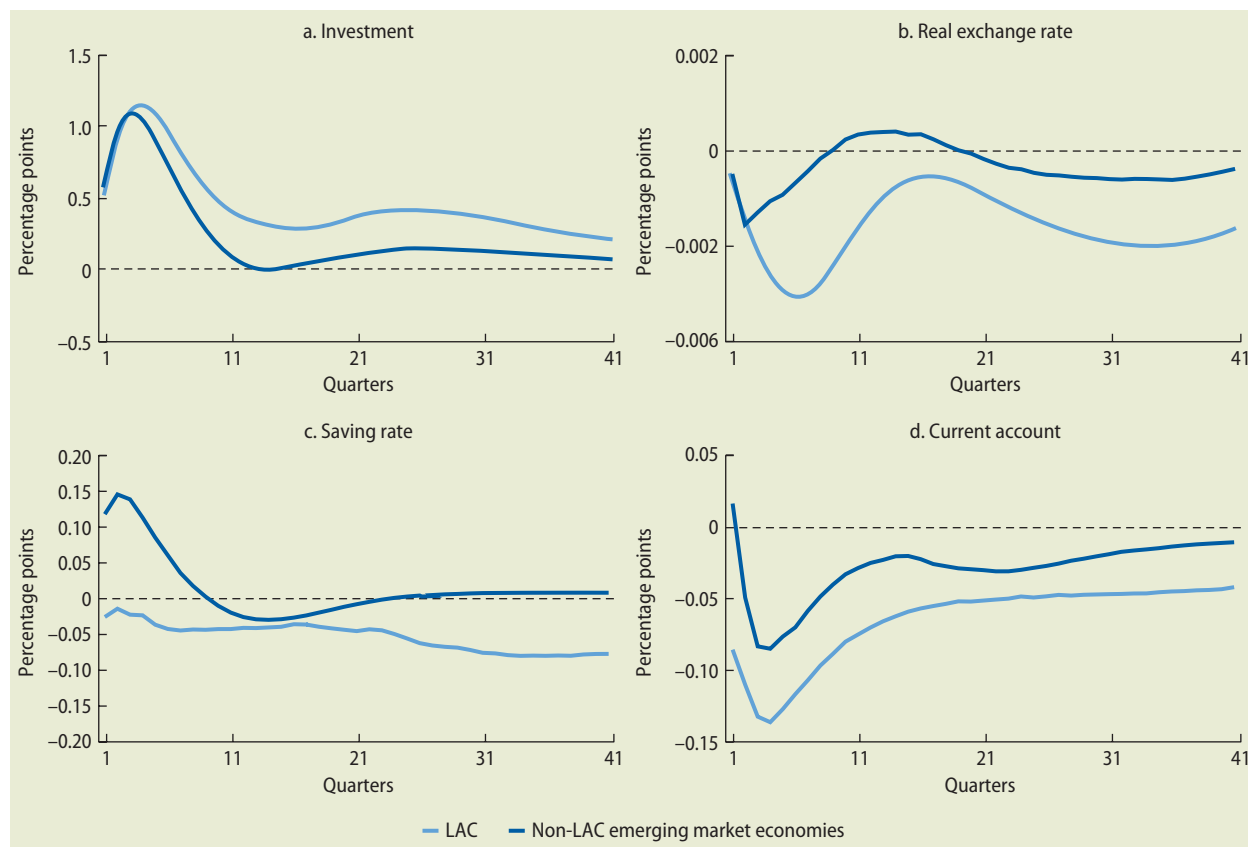
LAC's patterns of macroeconomic responses to the global shocks, and the change in such patterns over the past decade, are arguably influenced by LAC's reliance on

FIGURE 19 Evolution of wages in Brazil relative to wages in Mexico



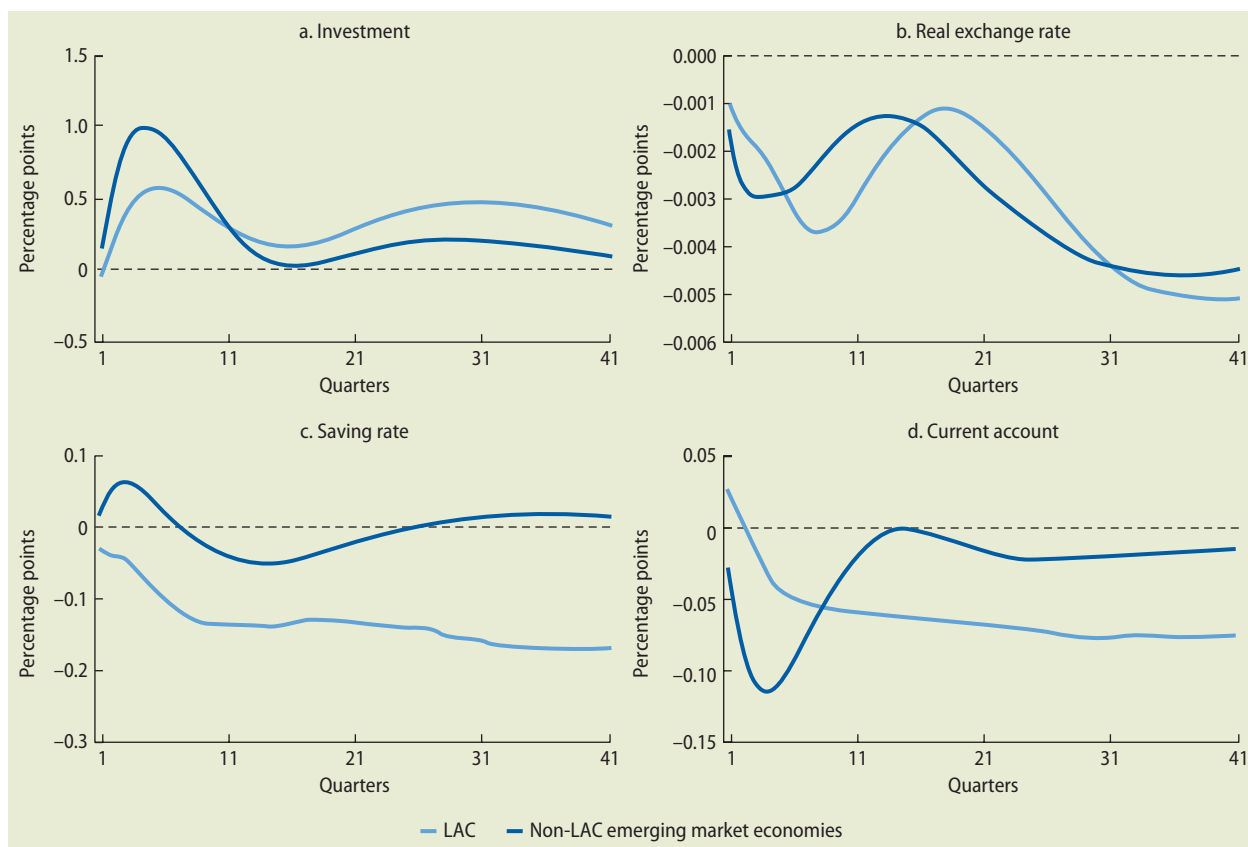
Source: National average wages in local currency are from the International Labour Office. They were converted to international purchasing power parity constant 2005 U.S. dollars using the conversion factor from World Development Indicators (WDI).

FIGURE 20 Responses to a positive global supply shock in Latin America and the Caribbean and other emerging market regions



Source: Hevia and Servén 2014.

Note: Lines represent the accepted median model deviation from the trend from a global demand shock, in terms of the sign restrictions defined in Hevia and Servén (2014). See table 5A.4 in chapter 5 of this report for technical details on the sign restrictions. Non-LAC emerging market economies include Hungary, India, Indonesia, the Republic of Korea, the Philippines, Poland, the Russian Federation, South Africa, Thailand, and Turkey. LAC = Latin America and the Caribbean.

FIGURE 21 Responses to a global monetary easing in Latin America and the Caribbean and other emerging market regions

Source: Hevia and Servén 2014.

Note: Solid lines represent accepted model median deviation from the trend from a global demand shock, in terms of the sign restrictions defined in Hevia and Servén (2014). See table 5A.4 in chapter 5 of this report for technical details on the sign restrictions. Non-LAC emerging market economies include Hungary, India, Indonesia, the Republic of Korea, the Philippines, Poland, the Russian Federation, South Africa, Thailand, and Turkey. LAC = Latin America and the Caribbean.

domestic demand (associated with low saving rates and a penchant for current account deficits). Some evidence to back this statement was provided earlier, in connection with figure 10, which shows that current account deficits tend to emerge systematically in LAC, even during the recent times of favorable terms of trade.

Low saving rates arguably condition macroeconomic outcomes and responses to external shocks through one of two channels. The first is a real exchange rate (ER) channel—a competitiveness-reducing effect caused by appreciating real exchange rates that can hinder growth.²⁰ The second is an interest rate (IR) channel, associated with a balance

of payment vulnerability effect, which can also hinder growth.²¹ Where the ER channel dominates, one would expect to observe a pattern in which countries that save less grow less and have appreciated real exchange rates. Where the IR channel dominates, one would also expect to see that countries that save less grow less. Yet, real exchange rates would be undervalued in this case, reflecting low sovereign ratings and vulnerable balance of payments trajectories.

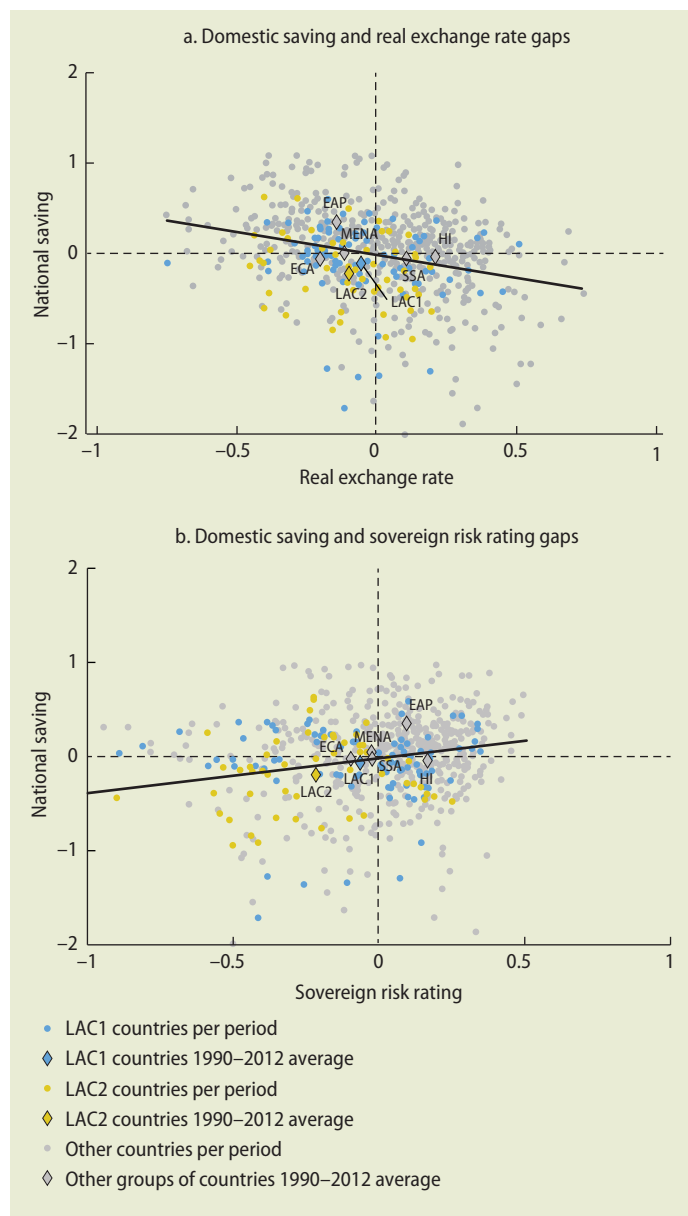
The patterns observed in figure 22 are consistent with these expectations. The variables of interest in the scatter plots reflect medium-term equilibrium relations that are presented in the form of deviations from the

benchmark.²² The size of the deviations can be attributed largely to differences in policies and policy-driven institutions.²³

Panel a of figure 22 shows that an ER pattern is consistent with the entire analyzed sample: on average countries that save more have more competitive real exchange rates, relative to benchmark. However, LAC countries (divided into two groups, higher-income countries [LAC1] and lower-income countries [LAC2]) tend to be located in the lower-left quadrant, where exchange rates are undervalued. In contrast, East Asia and Pacific countries tend to occupy the upper-left quadrant, where oversaving is associated with undervaluation. These patterns suggest that low saving rates have historically influenced macroeconomic outcomes in LAC mainly through the IR channel—that is, through adverse balance of payments vulnerability effects reflected in low country ratings. This finding is consistent with the scatter diagram in panel b of figure 22, which shows that worldwide data also support an IR pattern (countries that save less tend to have lower sovereign risk ratings). LAC is located closer to the fitted line, although it still appears as an undersaving and underrated region.

Two key caveats have to be made in this regard. First, there has been considerable heterogeneity within LAC, as shown in panel a of figure 23. Between 1990 and 2012, the region started to break free from the spell of low sovereign ratings (figure 24) and hence started to transition from an IR to an ER pattern. Chile, Mexico, Panama, and Peru appear as oversavers with undervalued real exchange rates (all relative to benchmark), whereas the Bahamas, Barbados, Brazil, Costa Rica, and Uruguay appear as undersavers with overvalued exchange rates. These country cases thus conform to the ER pattern. In contrast, Colombia, Ecuador, and Trinidad and Tobago sit in the lower-left quadrant, with low domestic saving and undervalued exchange rates. These patterns suggest that these latter countries have remained more persistently under the grip of the IR channel. Perhaps surprisingly,

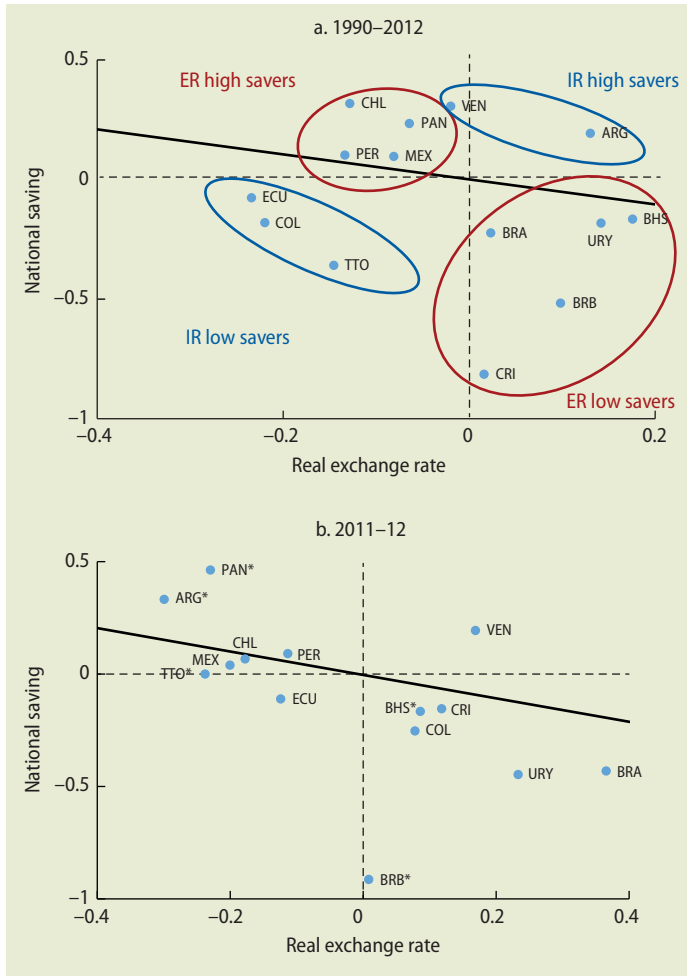
FIGURE 22 Domestic saving, real exchange rates, and sovereign risk ratings, 1990–2012 average



Sources: Calculations based on data from United Nations (UNSTAT), WDI, and Institutional Investor database.

Note: The linear fit was calculated for the period version of the complete country sample for 1990–2012. LAC1 countries are countries in Latin America and the Caribbean (LAC) with annual per capita GDP of more than \$5,000; LAC2 countries are those with annual per capita GDP of \$5,000 or less; see table A.1 for list of countries in all groups. GDP = gross domestic product; EAP = East Asia and Pacific; ECA = Europe and Central Asia; HI = high income; MENA = Middle East and North Africa; SSA = Sub-Saharan Africa. See annex 5A in the main report for details on how the benchmarks are calculated.

FIGURE 23 Saving and real exchange rate gaps for higher-income countries in Latin America and the Caribbean



Sources: Calculations based on data from UNSTAT and WDI.
 Note: The linear fit (shown in both panels) was calculated for the complete country sample for 1990–2012. Higher-income countries in Latin America and the Caribbean are countries with annual per capita GDP of more than \$5,000 (see annex table A.1 for list of countries). See annex 5A in chapter 5 of this report for technical details on the calculation of the benchmarks. Three-letter country groupings correspond to ISO 3166 standard. * = due to missing data for the 2011–12 period, the latest available period was used. IR=countries affected by the interest rate channel. ER=countries affected by the real exchange rate channel. GDP = gross domestic product.

Argentina and República Bolivariana de Venezuela appear as high savers with overvalued currencies. As these countries have had sovereign ratings well below the average of the LAC1 group, a plausible explanation for their location in the figure is the repeated occurrence of exchange controls and episodes of massive capital flight, during which excess saving and current account surpluses

were generated to effect the transfer of capital abroad.²⁴

Second, consistent with the suggestion stemming from the dynamic analysis referred to earlier, the benchmarking exercise identifies an accelerated migration of LAC1 countries toward the ER pattern during the first decade of the 2000s, as real exchange rates appreciated substantially and sovereign risk ratings rose steeply. Country ratings actually converged in this period to those of the middle-income countries of Southeast Asia (figure 24), with several countries in LAC joining the investment-grade asset class.²⁵ This migration reflected improvements in macrofinancial policy frameworks and, at least in South America, the powerful forces of the global shocks associated with the rise of the South. In fact, as shown in panel b of figure 23, many LAC1 countries moved significantly closer to the ER pattern that is observed for the entire sample (the fitted line) during the 2011–12 period. Particularly strong real appreciations took place in Brazil, Colombia, Costa Rica, and Uruguay.

Implications for growth: Trade structure, foreign direct investment, and the composition of aggregate demand

Do the LAC-specific trade and aggregate demand structures really matter for growth? This section summarizes the main findings of a battery of econometric tests conducted to shed light on this question, with special attention on the relevance for growth of trade structure, FDI, and domestic saving. The key message is that economic structures matter for growth. A reassessment of the region’s growth- and productivity-oriented reform agenda from the angle of structure would therefore be useful.

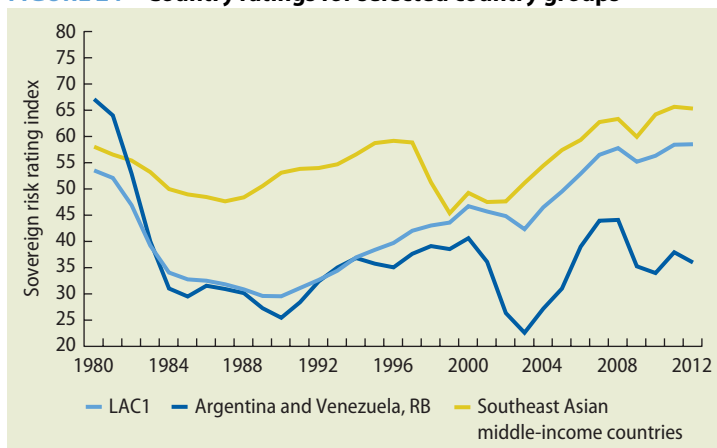
The role of trade structure. The literature supports the notion that trade openness can raise growth rates, at least temporarily, during the transition to a higher steady-state path of GDP per capita.²⁶ There is much debate, however, regarding the channels through which this transition may operate.

The traditional answer, dating back to the neoclassical theories of trade, has been that trade lifts growth (at least transitionally) through the efficiency gains of specialization based on comparative advantage. This channel hinges on differences in either factor endowments (labor, capital, land, natural resources) or average productivities across countries.²⁷

More recently, the focus has been on a different (and arguably complementary) mechanism, whereby trade boosts growth by serving as a conduit for learning spillovers and technology diffusion (see Keller 2004 for an early review of the literature). One implication is that when it comes to its impact on growth, not all trade is created equal. The question is less about whether and how much an economy trades but rather how much it learns from its international trade. This realization naturally shifts the debate toward questions such as how and with which partners a country trades. Empirically, these questions point to measurable dimensions that can be used as proxies for learning-intensive trade.²⁸ As such, this report adds to the growing evidence that suggests that certain features of a nation's trade structure matter for economic development and growth. Some of these features include the degree of intraindustry trade, participation in GVCs, the composition of trading partners, and the degree of export concentration. These features shed light on the extent to which technology diffusion and the learning intensity of trade can positively affect growth and other economic outcomes, such as macroeconomic volatility (see, for instance, Lederman and Maloney 2007; Alvarez, Buera, and Lucas 2013; and Pinat 2015).

This report analyzed the relationship between several characteristics of trade structure and growth, given that there is no overarching consensus in the literature as to which ones are most influential. Two particularly interesting characteristics—intraindustry trade and participation in GVCs—are likely to be related to international technology and knowledge flows because they tightly link trade to domestic factor and input markets, logistics, and production processes. One

FIGURE 24 Country ratings for selected country groups



Source: Calculations based on data from Institutional Investor database.

Note: Middle-income countries in Southeast Asia include Indonesia, the Republic of Korea, Malaysia, the Philippines, and Thailand. LAC1 countries are countries in Latin America and the Caribbean (LAC) with annual per capita GDP of more than \$5,000 (see annex table A.1 for a list of countries). GDP = gross domestic product.

can thus surmise that to the extent that trade flows embody technology and knowledge, producers can benefit more from exports and imports that are part of the same industry or a GVC than they can from exports and imports that correspond to unrelated or disconnected activities. The composition of trading partners may also play an important role in how much countries learn and how quickly they adopt new technologies.

The econometric evidence in this report suggests that trade linkages with the North could indeed yield higher growth payoffs than trade with the South. The results, based on data for 1960–2010, indicate that a 1 percentage point increase in the degree of trade openness with North countries is associated with a 1.6 percent increase in GDP per capita per year over a five-year period, followed by potentially longer-lasting effects. In contrast, the estimated effect of trade with the South is much lower: a 1 percentage point increase in the degree of trade openness with South countries is associated with an increase in GDP per capita of only about 0.3 percent.

The difference in the estimated effects when trading with the North versus the South seems to be associated with differences in the

structure of trade along several dimensions, arguably including the extent and manner in which countries participate in GVCs (see chapter 2 of this report and Didier and Pinat 2015 for technical details and a deeper analysis of the structure of trade linkages and economic growth). Controlling for the overall volume of trade flows, increases in participation in GVCs, especially the middle segments of these chains, yield additional gains in GDP per capita. An increase in the share of total trade that comes from intraindustry trade has a positive and statistically significant association with income growth. Trading with countries at the center of the global trade network is associated with higher growth, arguably because these types of connections expose the country to the frontier of ideas and technologies. The econometric results also suggest that countries benefit more from international trade connections when they have a more educated labor force, which points to the importance of human capital formation for the absorption of foreign technology and knowledge.

Intraindustry trade and insertion into the core of GVCs thus appear to be more conducive to higher long-term growth rates. Except possibly in Mexico, Costa Rica, and Uruguay, the rise of the South has not systematically yielded these types of growth-inducing changes in trade structures in LAC.

The role of foreign direct investment. The increase in financial flows across countries, especially FDI, could be driven by companies seeking to capitalize on efficiency improvements made possible through the fragmentation of production stages across countries. Therefore, the rising participation of the South in global financial flows could be a potential driver of economic growth. Such flows may not only ease financing constraints in recipient economies but also be a conduit for technology diffusion and learning spillovers. Indeed, policymakers from the South, including LAC, see the attraction of FDI and multinational corporations as a policy priority.

The empirical findings presented in this report indicate that although North-North

M&A flows are positively (and significantly) associated with the recipient country's labor productivity within manufacturing industries, North-South, South-North, and South-South flows are not (for technical details, see chapter 4 of this report and Didier, Nguyen, and Pienknagura 2015). These findings suggest that LAC and other South economies have yet to benefit in terms of labor productivity increases within manufacturing industries from their flourishing connections with the rest of the South or the North.

Other evidence, however, suggests that LAC has benefited from the presence of multinational corporations through different channels, including by accelerating the exit of low-productivity domestic firms and enhancing the productivity of domestic firms across all industries (see, for instance, Lederman and others 2014).

The new evidence on FDI presented in this report suggests that aggregate industry-specific labor productivities in the South so far appear to be unaffected by foreign firms' mergers with or acquisitions of domestic firms. Future research could attempt to ascertain the features in North economies that allow them to benefit from M&A flows within industries, with an eye toward understanding whether these positive effects depend on public policies (as impediments to or propagators of learning spillovers), the quality of institutions, the quality of human capital, or other factors. The section on policy priorities below addresses these issues.

The role of the composition of aggregate demand. Do low national saving rates—a trademark of LAC economies—hamper growth? Mainstream open-economy growth models typically assume that foreign and domestic saving are perfect substitutes. Implicit in these models is the notion that what really matters for growth are investment (and profit) prospects, but not how investment is financed. This view is consistent with the assumption that factors of production (particularly capital) respond to small differences in relative returns by flowing into their most productive uses,

both across countries and industries or firms within countries. The implication is that domestic saving, and more broadly the composition of aggregate demand, is not a determinant of the equilibrium real exchange rate. Rather, the latter would be determined only by productivity differentials across tradable and nontradable industries driven by supply-side characteristics, such as the capital intensity of production. Consequently, saving and the real exchange rate would not affect growth, as small increases in returns to capital would immediately attract capital to the countries, industries, or firms that temporarily offer higher returns. The real exchange rate would adjust back to its equilibrium level accordingly.

This view clashes with certain well-established stylized facts. For example, countries that rely on foreign saving grow less (see, for instance, Prasad, Rajan, and Subramanian 2007); countries whose productivity falls behind are countries that “tax” saving (see, for instance, Gourinchas and Jeanne 2012); and there is considerable misallocation of factors of production, which shows up in large and persistent dispersion of productivities across firms, sectors, and countries.

This report provides evidence in support of the alternative hypothesis that national saving matters for growth, implying that domestic and foreign saving are imperfect substitutes. Econometric evidence suggests that national saving rates have an impact on growth (for technical details, see chapter 5 of this report and De la Torre and Ize 2015). It shows that, on average, a 10 percentage point increase in the saving rate (which would bring the average LAC saving rate to the level in Southeast Asia) would increase GDP per capita by 1–2 percentage points a year for at least three years, followed by potentially long-lasting effects of similar magnitudes thereafter. The evidence is preliminary and thus should be interpreted with caution. However, it does strengthen the argument that saving matters for long-term growth.

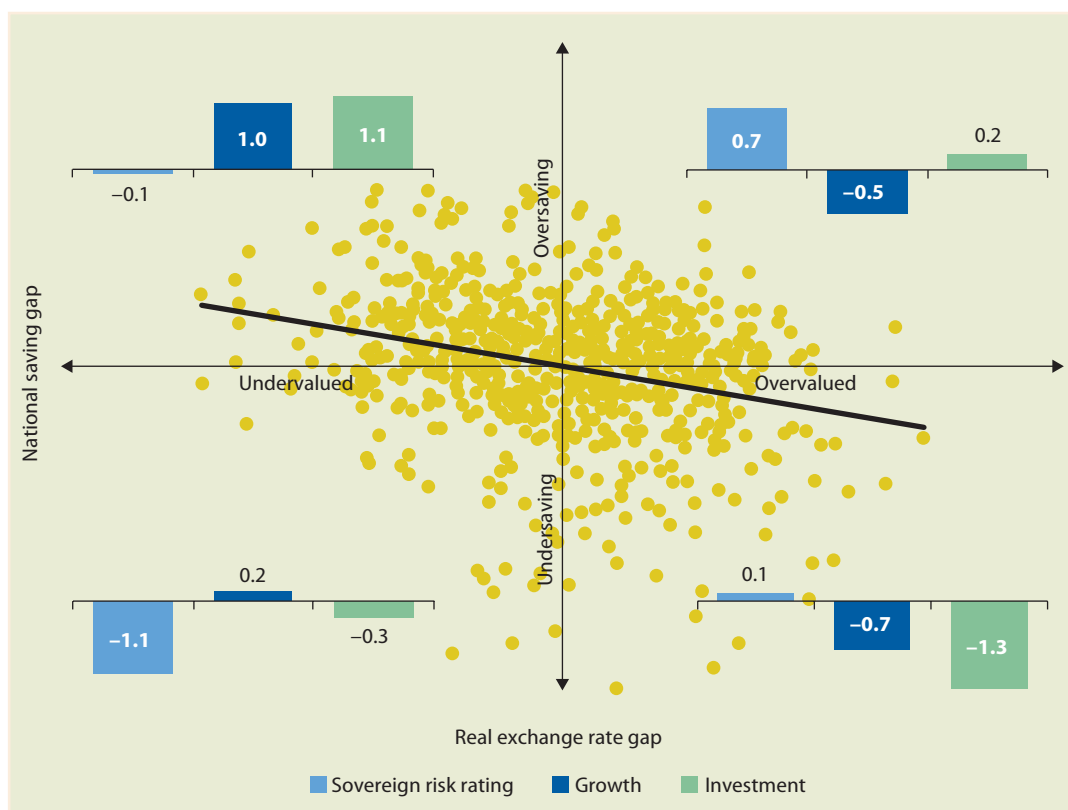
The findings also suggest that the saving-to-growth link is stronger for middle-income countries. This result should not be

surprising, given that factor mobility is lower (and factor misallocation higher) in emerging than advanced economies. Foreign and domestic saving are thus less perfect substitutes, as far as growth is concerned, in these emerging economies. The result also suggests that saving rates can in some sense compensate for market imperfections and policy obstacles that get in the way of efficient resource allocation. As the allocative function of markets improves, saving should be less of a constraint on growth.

Finally, important asymmetries seem to characterize the effects of saving on growth. In particular, a higher domestic saving rate has a greater positive impact on growth when countries experience current account deficits. This finding should not be surprising, as it stands to reason that the benefits of a saving effort that help to avoid unviable balance of payments trajectories outweigh the benefits of a saving effort that increase an already strong current account surplus.

When the data are explored in ways that identify the underlying mechanisms, the relevance of both the external competitiveness (ER channel) and the balance of payment vulnerability (IR channel) effects of saving is borne out. Figure 25, which uses the entire sample, shows deviations from benchmark in the domestic saving–real exchange rate space. For all observations in each quadrant (that is, for all the dots plotted in figure 22, panel a), figure 25 shows the average of the corresponding deviations from benchmark for other key variables (namely, sovereign ratings, growth rates, and investment rates).

Four key messages emerge from figure 25. First, countries with undervalued real exchange rates grow faster than countries with overvalued currencies. This finding is a restatement of the well-known finding of Rodrik (2008). Second, the ER pattern strongly emerges from the world data: countries that oversave typically have undervalued real exchange rates and grow faster than other countries, whereas countries that undersave typically have overvalued currencies and grow more slowly. Third, the IR pattern also emerges from the data: countries

FIGURE 25 Sovereign risk rating, growth, and investment gaps, 1990–2012

Sources: Calculations based on data from UNSTAT and WDI.

Note: Each bar in the figure represents the simple average of sovereign risk rating, growth, or investment gaps for the observations located in each quadrant of the scatter plot. The scatter plot is a reproduction of figure 22, panel a. Each point represents a country for a given time period. See chapter 5 for additional details.

that undersave and face balance of payments viability problems (that is, countries in which sovereign risk ratings are well below benchmark) also have undervalued real exchange rates. Fourth, saving affects future growth through investment: countries that oversave relative to benchmark typically outperform their peers in terms of investment rates, especially where the real exchange rate is undervalued.

During the past decade or so, LAC was caught up in the forces of real and monetary global shocks precisely at a time when significant improvements in macrofinancial policy frameworks were materializing. The confluence of these external and internal factors promoted rapid improvement in country

ratings for much of LAC, even as the region boosted growth and reduced systemic vulnerabilities. However, LAC adapted and responded to these shocks with its traditional domestic demand-reliant (low saving) macroeconomic structure, which led to strong real appreciations, especially in countries that save less.²⁹ The force of the external tailwinds was such that they more than offset (and actually concealed) the adverse growth effects of low saving. Now that the tailwinds of commodity prices no longer blow, one can hypothesize that, given the vastly improved country ratings, low saving rates in LAC may hinder growth less through balance of payments vulnerability effects and more through external competitiveness effects.

Changing world, new priorities

The rise of the South has affected at least three major policy areas, all of which have implications for employment and growth. In some respects, the global shocks may have temporarily dimmed the urgency of such old policy challenges as commodity dependence, labor market frictions, and low saving rates. However, as the pull of the rise of the South tapers off and the tailwinds recede, the policy agenda should turn even more forcefully toward the issues highlighted below.

Reducing labor market frictions

Labor market frictions made the process of adjustment to the global supply and demand shocks unnecessarily costly, especially for the net commodity importing countries in LAC. They explain why China was once the scapegoat of choice for LAC policymakers.³⁰

Especially since 2001, when China accelerated its pace of growth in global trade, workers in LAC could have benefited from the declining prices of manufactures and the employment opportunities in agriculture, mining, and nontraded domestic industries if they had been able to switch jobs easily. However, the evidence in this report, as well as the public's tendency to worry about competition from China, suggests that labor market frictions prevent workers from easily transitioning to industries where they could be most productive. The evidence indicates that workers behave as if they have "sticky feet," the title of a recent World Bank report on trade and jobs (Hollweg and others 2014). As Chinese competition in manufactured goods markets became tough, manufacturing industries had to adjust, partly by shedding workers and partly by retooling to regain competitiveness. Workers stuck in "senescent" (declining) manufacturing industries bore a heavy price, in the form of unemployment or informality. They would have been better off had they been able to adapt their skills and more easily move within countries to take advantage of better employment opportunities.

The root causes of such labor market frictions remain unclear. The policy agenda is therefore far from obvious. Regulatory rigidities, which are often bypassed by voluntary shifts to informality, are unlikely the only source of friction (although they are undoubtedly important). Other sources could include skills mismatches (including mismatches arising from information asymmetries or limited skill portability) and transport costs within countries.

The role of skills mismatches is evidenced by the well-known finding that the estimated costs of moving to a new job varies significantly across industries, which implies that skills are to a large extent industry or firm specific. LAC's experience over the past decade, as well as the powerful forces of technical change, calls for a policy agenda aimed at facilitating and enhancing skills development, skills matching, and the formation of more flexible human capital, so that workers can more easily adjust to production innovations and shifting market realities by changing jobs and careers over their working lives at lower personal (and social) costs. This policy agenda naturally puts a premium on suitable reforms to educational systems, labor market rules and contracts, social protection benefits (to make them more portable and compatible with labor mobility), and training and retraining programs.

The potential role of transport costs (and hence transport-related policies) in interindustry labor mobility has received little attention to date. The costs of moving labor across industries may reflect the concentration of industries across territories. In Brazil, for example, most manufacturing is concentrated around São Paulo and the southeastern coast, whereas agriculture is located in the interior of the country. The costs of moving workers and their families across vast geographical regions may help explain the sluggishness of labor market adjustments within countries. In fact, a growing body of academic literature argues that transport costs may play an inhibiting role in the integration of domestic labor markets.

There is, however, persistent, albeit relatively low-level, rural-to-urban migration within LAC countries, including Brazil and Mexico. It is thus also plausible that the choice of migration by workers across vast distances is driven not just by transport costs but also by workers' specific circumstances and preferences, some of which may be unrelated to market signals. For instance, being close to family may be an overriding consideration for workers unless they face extreme circumstances (shocks) or belong to communities with a historical inclination for migrating to specific destinations.

The objective here is not to prescribe specific policies but rather to argue that policy makers need to rethink broad priorities. Infrastructure is one area that may be prime for reconsideration, not just because of its relationship with competitiveness (through its impact on firms' cost structures) but also because poor infrastructure may make domestic labor markets less nimble and thus less able to absorb permanent shocks.

Fostering trade, foreign investment, and knowledge spillovers

For some LAC countries, the rise of the South brought some benefits, such as lower borrowing costs and better terms of trade for net exporters of agriculture and mining products. However, the structure of trade between LAC and the South seems to be less growth inducing than its trade with the North. Likewise, FDI into LAC (in the form of M&A) that originates in other South countries does not seem to be raising labor productivity within industries in the region. Labor productivity appears to more clearly benefit from North-North M&A activity. Both sets of results suggest that some rethinking is called for in the area of structural change and the scope for learning and technology diffusion through ties with global partners.

There have been two extreme paradigms about policy challenges in this area. One is the laissez-faire view, which posits that learning from foreign knowledge will take place as long as domestic markets function well

and are undistorted. From this viewpoint, removing policy distortions that get in the way of market-driven resource allocation and reducing the costs of doing business will naturally attract corporations from around the world. Trade structures would then specialize and respond endogenously to comparative advantages and a business-friendly environment. Whether the efficient outcome is a knowledge-intensive type of export growth will depend on factor endowments and relative returns, but the outcome would move the economy to its production possibilities frontier. This paradigm emphasizes public policy failures that hinder market forces rather than market failures. It thus puts a premium on reforms that seek to maximize the operation of the Invisible Hand.

The alternative view is that by itself, the market may not automatically bring knowledge from abroad and will thus underexploit opportunities for boosting technology-driven endogenous growth dynamics. From this perspective, some form of industrial policy will be required to induce market players to internalize the positive externalities associated with the exploitation of knowledge spillovers. A 2014 report by the Inter-American Development Bank, *Rethinking Productive Development*, provides a set of organizing principles to discipline thinking about choosing industrial policy interventions to target specific types of market failures.

Looking through the prism of the rising South phenomenon, this debate boils down to a balancing act. On the one hand are the potential benefits of improvements in the market-enabling environment that reduce trade costs for domestic agents, who in turn are guided by competition and relative price signals in enhancing their trade and financial linkages with both the South and North. On the other hand are the coordinating roles of the state, including through the provision of specific tax or subsidy incentives, or targeted loans and loan guarantees, for firms and workers to move into preselected activities that have a good chance of becoming part of GVCs or fostering intraindustry trade patterns.

A safe approach is one that strikes a sensible balance between the laissez-faire and industrial policy approaches. First and foremost, policy should do no harm: policy-induced distortions that get in the way of efficient resource allocation and unnecessarily raise the costs of international transactions should be reduced. The report highlights one such distortion: the region's increasing reliance on temporary trade barriers (such as antidumping, countervailing, and safeguard import duties), which appear to be overused, especially against China and other South economies. Many other actions can be considered in this regard, including eliminating or redesigning government programs that unintentionally subsidize informality or unduly encourage firms to remain small.

Second, there is plenty of room for positive policy actions aimed at improving the market-enabling environment—by, for instance, raising information transparency and disclosure standards and strengthening contract rights. In general, horizontal policies of this nature can only help, although they may not necessarily remove the most binding constraints to the development of growth-friendly globalization patterns. Policies aimed at improving the functioning of labor markets while maintaining adequate labor protections are worthy of special attention in this regard.

Third, it is time to get serious about assessing deficits in the formation of human and physical capital (particularly transport, energy, and telecommunications infrastructure), which may be constraining the ability of individuals and firms to engage in cross-border transactions efficiently. On the human capital side, educational systems need upgrading, particularly in ways that allow them to foster the type of skills modern economies demand. Workers need to be trained and retrained, on and off the job, throughout their working lives. On the infrastructure side, closing gaps is essential to reducing international trade costs, a key determinant of the emergence of, and incorporation into, GVCs and other types of international commercial relations.

Fourth, both vertical and horizontal industrial policies need to be put on the table, particularly for countries that have advanced on the laissez-faire front, so that old policy distortions do not get in the way of the potential success of new industrial policies. Countries throughout LAC already have some industrial policies in place, such as investment and trade promotion that targets certain types of firms and industries over others. An extension of this debate could encompass policy-based incentives, including tax and expenditure policies, with an eye on helping markets internalize large positive externalities associated with research and development (R&D) and technology adoption and adaptation. Given that industrial policies can have significant downsides, it is important that they be designed and implemented in ways that generate information and learning (so that impacts can be assessed and mistakes corrected promptly along the way) and complement and crowd in market forces (in order to widen the scope for efficiency gains).

Raising national saving rates

A reform agenda in LAC focused exclusively on the sorely needed enabling environment and supply-side reforms may not be sufficient to avoid the downsides of globalization while fully reaping its upsides. A demand-side component focused on raising national saving rates, intended to prevent persistent currency overvaluations and balance of payments vulnerabilities, is also a crucial element of the growth-oriented reform agenda. This demand-side component is particularly important for LAC countries that exhibit chronic low saving rates. It is also key in the context of market imperfections that limit the scope of factors to quickly and smoothly move to their more productive uses.

Keeping these considerations on the policy radar screen may not be easy, given that the region's historical low-saving/low-growth syndrome may be shifting in the context of the rising South and the region's more resilient macrofinancial policy frameworks. The greatly improved sovereign risk

ratings that now characterize much of LAC may facilitate external borrowing, which (in the best of cases) can conceal the adverse growth consequences of uncompetitive real exchange rates or (in the worst of cases) rekindle LAC's traditional tendency to suffer from balance of payments sustainability problems.

Although economists often resist treating saving as a policy variable, a saving-boosting reform agenda is within reach, although it will require patience and persistence and is likely to be fraught with tensions. There are at least four entry points for a comprehensive policy approach.

First, raising public sector saving can raise national saving, because it is unlikely that the private sector will completely offset such efforts by reducing its saving. Raising public saving through fiscal tightening (by raising revenues, reducing expenditures, or both) would not be easy in the current global economic environment. Fiscal reforms that boost public saving, and hence tilt public outlays in favor of investment, would have to confront the difficult and sensitive question of who would consume less today. Tensions would thus arise over the distribution of taxes and expenditures across space, households, and firms as well as between current and future generations. Deft political leadership would be needed to increase frugality and foster asset building (which implies a sacrifice of some consumption today) in a way that protects the basic consumption needs of the poor.

Second, there may be openings for implementing saving-enhancing policies in the financial sector. Since the late 1990s, financial development in LAC has been strongly biased in favor of consumer finance when contrasted with other regions, as De la Torre, Ize, and Schmukler (2011) show. Reforms of financial regulations could help promote saving, investment, and production rather than consumption. Financial inclusion could be expanded on the deposit-taking and payment side rather than the lending side. Macroprudential regulatory policy aimed at preventing credit-fueled consumption booms is also called for.

Third, careful social safety net reforms can strengthen domestic saving. The region made progress in the past decade in mainstreaming and targeting social assistance to the poorer and most vulnerable segments of the population, including through highly successful conditional cash transfer programs. Several LAC countries complemented these efforts with improvements in noncontributory social benefits, especially through minimum pension pillars (so-called social pensions) and the provision of health services at very low or no cost to poor households and informal workers. Given the social benefits of higher saving rates, however, as the region considers second-generation reforms to the health, pensions, and unemployment safety nets, it should ensure that such reforms should not only improve fairness and financial sustainability but also promote self-reliance (instead of excessive reliance on the state), especially among the elites and upper social echelons.

Fourth, in designing short-run macroeconomic interventions, policy makers should take more explicit account of the growth-boosting saving agenda. Doing so militates in favor of shifting toward a tighter fiscal, looser monetary macroeconomic policy mix—something that is politically difficult to achieve, especially in the current environment of weak world demand, which puts a premium on spending rather than saving. The current international financial environment, characterized as it is by low interest rates and abundant liquidity, could encourage policy makers to borrow imprudently and hence risk fiscal and balance of payments sustainability problems in the future. To reconcile short-run aggregate demand management with longer-run growth objectives, it is crucial that LAC maintain robust saving rates.

The rise of the South has deeply changed the global economy, and irreversibly so. Policies and reform agendas have to adapt to this momentous change. The challenge is great, but it provides LAC's political leadership with an opportunity to shine. It is time for cold-headed rethinking of policy priorities that can unleash growth potential of an immensely diverse and in many ways rich region.

Annex A

TABLE A.1 Country group composition

Region	Countries
Higher-income countries in Latin America and the Caribbean (LAC1)	Argentina, the Bahamas, Barbados, Brazil, Chile, Colombia, Costa Rica, Ecuador, Mexico, Panama, Peru, Trinidad, Uruguay, Venezuela, RB.
Lower-income countries in Latin America and the Caribbean (LAC2)	Belize, Bolivia, the Dominican Republic, El Salvador, Guatemala, Guyana, Honduras, Nicaragua, Paraguay
East Asia and Pacific (EAP)	Bangladesh; Bhutan; Cambodia; China; Fiji; Hong Kong SAR; China; India; Indonesia; the Republic of Korea; Malaysia; Pakistan; Papua New Guinea; the Philippines; Sri Lanka; Thailand; Tonga; Vietnam
Europe and Central Asia (ECA)	Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Estonia, Georgia, Greece, Hungary, Kazakhstan, the Kyrgyz Republic, Latvia, Lithuania, the former Yugoslav Republic of Macedonia, Moldova, Mongolia, Romania, Slovenia, Tajikistan, Turkmenistan, Ukraine
High income	Australia, Belgium, Canada, Cyprus, Denmark, Finland, France, Germany, Iceland, Ireland, Israel, Italy, Japan, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, the United Kingdom, the United States
Middle East and North Africa (MENA)	Algeria, the Islamic Republic of Iran, Jordan, Lebanon, Morocco, Syria, Tunisia, Turkey
Sub-Saharan Africa (SSA)	Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Chad, Côte d'Ivoire, Equatorial Guinea, Ethiopia, Gabon, The Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Madagascar, Malawi, Mali, Mauritania, Mauritius, Mozambique, Namibia, Niger, Rwanda, Senegal, South Africa, Sudan, Swaziland, Togo, Uganda, Zambia

Note: The dividing line between LAC1 and LAC2 countries is per capita income of \$5,000 a year.

Notes

1. In this report, the North includes the Group of Seven (G-7) members (Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States) plus the following Western Europe countries: Andorra, Austria, Belgium, Denmark, Finland, Greece, Iceland, Ireland, Liechtenstein, Luxembourg, Monaco, Netherlands, Norway, Portugal, San Marino, Spain, Sweden, and Switzerland. The South includes all other economies, including all countries in Latin America and the Caribbean (LAC).
2. As a share of the total number of possible connections, the number of LAC trade connections with North countries remained almost stable, at about 98 percent, between 1990 and 2012, whereas the number of LAC-South connections increased from about 40 percent in 1990 to 62 percent in 2012.
3. LAC's financial connections with other South countries also grew faster than its connections with North countries, especially during the second half of the 2000s. For a deeper analysis of the degree of financial connectivity of LAC countries with the North and the South, see Didier, Moretti, and Schmukler (2015) and chapter 4 of this report.
4. The share of active financial connections within the South in 2011 was even smaller for mergers and acquisitions (1.4 percent), syndicated loans (2.0 percent), and greenfield investments (3.6 percent).
5. This similarity in export shares captures two distinct dimensions: the relative importance a given country has in other countries' exports and the relative importance that other countries have in a given country's exports.
6. The importance of a country to the global trade network rises with its share in other countries' exports and the number of its bilateral trade connections.
7. The measure of FVA of exports captures only backward linkages (the imports a country uses in producing its exports). It does not capture forward linkages (the exports of a country that are used by other countries as inputs to produce their exports). The patterns of regional

- clustering in forward linkages are qualitatively similar to the ones reported here. Chapter 2 of this report provides a detailed analysis of GVCs.
8. The algorithm underlying figure 8 is similar to that of figure 5, in that it takes into account the relative (rather than the absolute) importance of each country in its regional trade network. The distance between countries reflects the degree of similarity in the structure of their trade connections (“similarity” is measured in terms of the relative importance that a country has in other countries’ exports and the relative importance that countries have in a given country’s exports). Countries with similar trade structures are clustered together in figure 8. Unlike figure 5, however, figure 8 depicts the density of connections, hence the systemic importance of countries in their respective regional network, in terms of colors. The systemic importance of countries increases as colors shift from green to yellow to red. Distance between countries is defined by the sum in absolute value of the differences in trade shares between countries for a given destination. The density captures the average distance per number of connections; the smaller the distance, the higher the density (see De la Torre, Didier, and Pinat 2014 and Van Eck and Waltman 2010 for more technical details).
 9. The contrast between the two regional networks in 2012 is captured by measures of average node density, defined as the average across nodes of the number of links over the total number of possible connections. The average node density in 2012 was 0.99 for East Asia and just 0.89 for LAC. The dispersion of node centrality (the standard deviation of the node density) was 0.09 for the East Asia network and 0.31 for the LAC network.
 10. Various issues of the semiannual report series produced by the World Bank’s Chief Economist Office for LAC (<http://go.worldbank.org/WTVI133GT0>) examine the improvement in LAC’s macrofinancial policy management, beginning with the April 2008 issue, entitled “Latin America’s New Immune System: How Is It Coping with the Changing External Environment?”
 11. In contrast with other commodity cycles experienced by LAC in the post–World War II era, the rise of the South was associated with the simultaneous surge in the international prices of virtually all commodities exported by LAC economies for an extended period of time. In this sense, it was a supercycle (see Sinnott, Nash, and De la Torre 2010).
 12. Bernanke (2005) argues that a confluence of factors led to the emergence of a global saving glut, including policy interventions to boost exports in Asia, higher oil prices in the Middle East, and a dearth of investment opportunities and an aging population in advanced industrial countries. Mendoza, Quadrini, and Rios-Rull (2007) attribute high saving in emerging market countries to relatively low levels of financial development, which generate greater precautionary saving. Caballero, Farhi, and Gourinchas (2008) instead emphasize the lack of investment opportunities in these countries and the associated shortage of financial assets as the main source of the global saving glut. Similarly, the IMF (2005) stresses low investment rates following the Asian crisis rather than an increase in saving rates.
 13. In fact, between 2000 and 2011 Mexico was a net exporter of mining products every year, a net exporter of agricultural commodities in some years, and a net importer of manufactured products every year. Its gross exports of manufactured goods faced stiff competition from China, however, as discussed later in the overview.
 14. Exports are disaggregated at the four-digit level of the International Standard Industrial Classification (ISIC).
 15. Brazil, Chile, and Peru were among the countries that benefited most from China’s rising imports of mineral commodities. Some Central American and Caribbean economies also seem to have received a boost in their mineral exports (such as zinc from Honduras and aluminum and bauxite from Jamaica), confirming that natural resource endowments were important determinants of the impact of the rise of China.
 16. There are, however, significant differences within countries in LAC. Chapter 4 of this report explores the link between trade and financial flows.
 17. The empirical literature on the extent of integration of LAC countries into GVCs is sparse, but it has been expanding. Useful references are UNCTAD’s 2013 report *Global Value Chains: Investment and Trade for Development* and the Inter-American Development Bank’s report *Synchronized Factories* (Blyde 2014). Chapter 2 of this report expands on

- this literature by providing more detailed evidence on LAC's participation in GVCs, including its integration into GVCs with North and South countries. The general message of this literature is consistent with the message of this report—namely, that LAC's participation in GVCs is lower than that of other South regions, even though there has been an increase in its participation since the 1990s. There is, however, considerable heterogeneity across LAC countries.
18. FDI data, for instance, do not typically differentiate between affiliates that provide inputs to parent companies and affiliates that produce the same good or service as its parent.
 19. Non-LAC emerging market economies include Hungary, India, Indonesia, Korea, the Philippines, Poland, the Russian Federation, South Africa, Thailand, and Turkey. The econometric exercise entailed the estimation of structural vector auto-regressive models (SVARs) (see Hevia and Servén 2014 and chapter 5 of this report for technical details).
 20. Low domestic saving implies an excess of domestic expenditure over income. For small open economies, which cannot influence international prices, the excess expenditures that flow out of the country are satisfied by higher imports at unchanged international prices. The excess of expenditure that falls on the nontradable sector of the economy raises domestic prices, particularly if the economy is near full employment. The rise in the prices of nontradables relative to tradables is a real exchange rate appreciation. It can become durable to the extent that factors (especially capital) are sticky and reallocate sluggishly to more productive uses across sectors and borders, a fact that is borne out by the observed large and persistent differentials in factor productivities across firms, sectors, and countries (see Hsieh and Klenow 2010; Syverson 2011; and Artuç, Lederman, and Rojas 2015, among others).
 21. Low saving leads to a systematic tendency toward current account deficits, which imply a buildup of external liabilities over time. Such a buildup can make the balance of payments more vulnerable to shocks and raise the risk of default, which would be reflected in a bias toward higher risk premiums.
 22. Each point in the scatter plot represents a country for a given time period. As the aim of this figure is to capture medium-term equilibrium relationships, each period is a three-year average.
 23. The benchmark is calculated based on regression analysis for the entire sample. It indicates where a country is expected to be, controlling for its stage of development (as proxied by per capita income); structural features that are largely beyond the control of policy (for example, demographic structure, natural resource endowment, economic size); and the average policies of its peers (see De la Torre and Ize 2015 for technical details).
 24. Associated with capital flight episodes were multiple exchange rate regimes, which tend to show up in the data as overvaluations, given that the official exchange rate is typically used to measure the purchasing power parity index.
 25. Chile, Colombia, Mexico, Peru, Trinidad and Tobago, and Uruguay were in the elite group of “investment-grade” countries.
 26. See Frankel and Romer (1999) and Alcalá and Ciccone (2004), among many others. Singh (2010) reviews this literature.
 27. Endowments determine the structure of production, employment, and trade in neoclassical models of trade and development in the tradition of Heckscher-Ohlin. Relative national average productivities matter in Ricardian models.
 28. Some studies, notably Hausmann, Hwang, and Rodrik (2007), put the emphasis on what a country trades as a means of identifying the productivity embedded in the traded good. However, the empirical approach in such studies suffers from important limitations, as Lederman and Maloney (2012) note.
 29. Both high and low savers in the LAC1 group of countries had substantially undervalued currencies in the 1980s and 1990s, and both groups experienced a substantial appreciation during the 2000s. However, the real appreciation was much more pronounced (and investment and growth lower) among low savers, which became significantly overvalued relative to benchmark by the end of the period. In contrast, the high savers were able to retain somewhat undervalued currencies by the end of the period.
 30. As an example, at a summit meeting of the Asia-Pacific Economic Cooperation in 2002, President Vicente Fox remarked, “It is not clear whether or not China is actually competitive. Perhaps it is, but perhaps its current success is based on the fact that they do not

respect a series of rules that other countries, such as Mexico, do respect” (cited in Lederman, Olarreaga, and Perry 2009, 4).

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“This report is an impressive piece of work, very clearly written and bristling with new facts and interpretations.”

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“Between the last decade of the past century and the first decade of this one, the share of the South in the world economy doubled, from 20 to 40 percent of global GDP. This excellent report argues, however, that the gains from such a momentous shift have not been equally shared by all countries in the South. The report highlights, correctly in my view, that long-standing weaknesses of the Latin American and Caribbean region associated with its low savings rates and distorted labor markets are impeding it from fully benefiting from the rise of the South. The implication is clear: this region of the world needs to go substantially beyond improved macroeconomic management if it wants to avoid being the world economy’s laggard in the decades ahead.”

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*Vice President for Sectors and Knowledge
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“This report tackles interesting and important questions for development policy. It identifies a series of new stylized facts relevant for the connection between trade and growth that should stimulate lots of research. It also helps in moving the debate from ‘does trade cause growth?’ to ‘what type of trade causes more growth?’ The second question is of first order importance for development policy.”

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