Latin America and the Caribbean as Tailwinds Recede

In Search of Higher Growth

April 2013

THE WORLD BANK
LATIN AMERICA AND THE CARIBBEAN AS TAILWINDS RECEDE: IN SEARCH OF HIGHER GROWTH
Foreword

This semiannual report — a product of the Office of the Chief Economist for Latin America and the Caribbean Region of the World Bank — examines the short and medium-term challenges for Latin America and the Caribbean (LAC) as the external factors that were instrumental in the region’s recent performance recede.

As is customary in this series, Chapter 1 starts by providing an overview of the global economy and its implications for the short and medium-term prospects of the LAC region. Chapter 2 provides a detailed analysis of the general patterns of domestic demand and supply observed in LAC over the last decade.

This report was led by Augusto de la Torre, Regional Chief Economist, and Eduardo Levy Yeyati, in close collaboration with Samuel Pienknagura, Research Economist. Substantive inputs were provided by Tatiana Didier, Julian Messina, Marcela Sanchez-Bender, as well as members of the Regional Leadership Team from the Vice Presidency for Latin America and the Caribbean of The World Bank. Nicolas Kohn and Tanya Taveras, members of the LCRCE Macro-team, provided outstanding research assistance. Danilo Delgado, Karen Ortiz, and Juan Pablo Uribe provided helpful contributions in preparing parts of this report. Finally, we would like to gratefully acknowledge the help received from Kiyomi Cadena, Leonardo Lucchetti, and Carlos Rodriguez.

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Executive Summary

Economic and financial news in the past six months point to a softening of the formidable tailwinds that facilitated the achievement of high growth with social equity in Latin America and the Caribbean (LAC) over the past decade. The developed world seems to have arrived to a much debated “new normal” of excess liquidity, uninspiring growth (particularly in Europe), and stubbornly high public debt, even as the probability of a systemic event that would dislocate the global financial and economic dynamics has been, if not eliminated, at least postponed, thanks to the proactive action by major monetary authorities. At the same time, China seems on its way towards a lower but arguably more sustainable rate of growth (between 7 and 8 percent). Tailwinds for LAC are clearly receding.

Against this backdrop, a 0.5 percentage point acceleration of growth rates in the emerging world is forecast for 2013, although with a large degree of heterogeneity. China should continue to lead with a projected 8.2 percent growth rate, while the middle income countries (MICs) of Eastern Europe, severely affected by the EU’s unresolved problems, will likely lag and expand by around 2.5 percent. In between, South East Asian MICs and LAC are expected to grow by 4.3 and 3.5 percent, respectively. There is also greater heterogeneity in the 2013 growth forecasts for countries within LAC, ranging from as low as 0.1 and 1 percent for Venezuela and Jamaica, respectively, to 6 percent for Peru, 9 percent for Panama, and 11 percent for Paraguay. Bolivia, Chile and Colombia will continue to beat the regional average with growth projections between 4 and 5 percent, while Argentina and Brazil will likely fall below the regional average, despite bouncing from rates below 2 percent in 2012 to close to 3 percent in 2013.

Using an index that combines the three key exogenous drivers of LAC’s growth (external demand coming from G7 countries and China, terms of trade shocks, and global financial risk), we estimate that whereas the strong winds of the recent past were consistent with average growth rates in LAC of 5-6 percent, the now receding tailwinds are, in the absence of growth oriented reforms, consistent with an average growth around of 3.5 percent. This is not bad, to be sure, but it would be lower should the global scenario unexpectedly worsen and is, in any case, insufficient to maintain the pace of social progress that the region registered—and became accustomed to—in the past decade. Accordingly, the policy emphasis is shifting from external to domestic engines of growth, and from macro and financial stability concerns to growth-enhancing reforms. As global tailwinds subside, the ability of Latin American countries to lift (noninflationary) trend growth above 3.5 percent depends critically on themselves.

How can the region turn on the domestic engines of growth for good? Answering this question requires an understanding of the specificities of LAC’s growth pattern, its limitations, and its strengths. Two aspects stand out in this regard, in sharp contrast with the South East Asian growth model: (i) domestic demand-driven growth and (ii) the rising importance of the service sector in the creation of value added and employment (“tertiarization”).

Indeed, domestic demand in South America and Mexico (SAM) drove last decade’s growth. The share went from an already high level close to 99 percent of GDP in the early 2000s to about 104 percent in the late 2000s. By contrast, domestic demand in South East Asia which by the early 2000s was barely about 95 percent actually declined somewhat by the late 2000s. Moreover, the strong expansion of domestic demand in SAM was not, as often believed, an overriding consumption story. In most of SAM, real investment grew faster than private consumption and significantly in excess of real GDP. As a result, LAC brought its average investment ratio closer to that in South East Asian MICs.
The flipside of SAM’s domestic demand-led growth is a tendency toward current account deficits, which started to emerge, following modest surpluses, already in 2008, despite the continued commodity export bonanza. A close look at the structure of SAM’s external transactions reveals a systematic dynamic whereby imports of hard-to-substitute capital and intermediate goods (the lion’s share of total imports) are financed by foreign capital (mostly FDI) that eventually gets repaid in the form of large factor payments abroad and that subtract from the trade balance, placing the current account in negative territory. The South East Asian export-led growth model, by contrast, generates consistently high current account surpluses and has a much subdued reliance on foreign capital. LAC thus illustrates the reversal of the Lucas paradox: foreign capital flows into countries with good prospects to fund profitable investments and bring the profits back home.

How can we reconcile this domestic demand-led, FDI-financed Latin American path to growth with the well-documented importance of external growth drivers? The remarkable resilience of FDI flows into SAM certainly owes to low international interest rates and record terms of trade that increased the relative investment appeal of natural resource-rich economies. In turn, the trade balance, which strengthened visibly in the early 2000s, provided the foreign exchange to meet the rising domestic demand, boosted public finances, and helped SAM deleverage and de-dollarize away from macro and financial fragilities. Global tailwinds were thus metabolized into domestic demand expansion and overall healthier economies. Against a backdrop of abundant international liquidity, LAC was able to lure foreign savings to fuel growth and compensate for the region’s historically low savings ratios.

In turn, “tertiarization” in LAC may be seen as a consequence of domestic demand favoring non-tradables over tradables or, more specifically, services over manufactures. This point should not be exaggerated, however, as a quick global comparison suggests that LAC tended to converge towards the expected path, whereby the share of services (in terms of value added and employment) rises with per capita income. Moreover, manufacturing shares may not be comparable overtime. Globalization and outsourcing imply that many tertiary activities that in the past were performed inside the industrial firm now are provided by outside service suppliers, and are therefore grouped under services at the expense of the industrial output. In sum, tertiarization in LAC looks not only consistent with LAC’s income growth, but also with structural changes in the global economy. And while by-and-large LAC countries employ a bigger share of their labor force in services than what their income levels (and their service value added) would predict, the gap between the observed labor shares in services and those predicted by income also narrowed in the 2000s.

The idea that services are unskilled and unsophisticated is put into also question by LAC’s data. Non-construction services are, comparatively speaking, skill-intensive: more than 50 percent of the labor force employed in services has at least a secondary degree (20 percent have a tertiary degree), compared to 40 percent in manufacturing. However, a cursory look at LAC’s exports shows that services are still far from substituting manufactures as a tradable product. While their skill content has been rising, overall levels of services exports are still very low compared to South East Asia. In sum, LAC’s policy concern should be not about the growing importance of services in the economy but rather about the productivity and tradability of the service sector.

All things considered, LAC’s domestic demand-driven growth is not necessarily flawed. The prevalence of domestic demand—and its flipside, the low savings rates—is consistent with the vigorous pro-poor redistribution and rise of the middle class that LAC experienced in the past decade. Ultimately, you cannot have the cake and eat it too. Moreover, it is unlikely that LAC will be able to re-industrialize as to become more like South East Asia, considering the
relatively low private and public savings, the appreciated currencies, and the need for further gains in social equity, all of which entails higher (and therefore less internationally competitive) wages. At this stage of LAC’s development, the quest for export competitiveness through cheap labor and undervalued exchange rates looks politically unfeasible and probably economically suboptimal.

What is next then? In the short run, most of LAC will likely continue to rely on natural resources and foreign capital to compensate for insufficient local savings. The design of regulatory and contractual frameworks that find the right balance between foreign capital-friendly policies that respect property rights, on the one hand, and a fair distribution of the rents of FDI-funded investment, on the other, remains high on the agenda, especially considering that commodity prices are subject to unexpected changes. In the long run, success will depend critically on the level and composition of investment, both in physical and human capital. Infrastructure and quality education are thus increasingly recognized as top priorities, and rightly so. More generally, if competitiveness beyond natural resource-intensive goods is to be developed without sacrificing living standards, productivity is the name of the game.
Chapter 1:
A Windless World

After an unprecedented performance in the mid-2000s and a robust recovery in the aftermath of the global financial crisis, Latin America and the Caribbean (LAC) taken as a whole entered a period of slower growth dynamics in the past two years. In fact, as documented in the previous report in this series, “The Labor Market Story Behind Latin America’s Transformation,” the region joined a generalized deceleration experienced across emerging economies that drove growth rates down by approximately 3 percentage points between 2010 and 2012.

The GDP growth deceleration observed in LAC from 2010 to 2012 is expected to be reverted somewhat in 2013. The most recent consensus forecasts put the region’s growth for 2013 at about 3.5 percent compared to the 3 percent observed in 2012. This number, however, is still well below the 5 percent average growth in the pre-crisis period or the 6 percent in 2010 (Figure 1.1, Panels A and B).

The mild acceleration in LAC’s rate of economic expansion is once again predicted to occur in line with other emerging regions. In fact, the common pattern observed across the emerging world holds not only for the direction of the change in growth rates, but also the size of this change: a 0.5 percentage point acceleration in growth rates is estimated across the board. But, behind this common pattern, growth prospects in emerging economies are displaying a larger degree of heterogeneity. China continues to lead the pack with an expected 8.2 percent growth rate for 2013. In contrast, the middle income countries (MICs) of Eastern Europe, the group of emerging economies more severely affected by the EU’s unresolved problems, is expected to underperform other emerging economies with an average growth rate of about 2.5 percent. In between, South East Asian MICs and LAC are expected to post average growth rates of 4.3 and 3.5 percent, respectively.

There is, however, an important difference between the immediate post-crisis episode and the one we see looking forward. The 2010-2012 period was characterized by a constant state of uncertainty where the news flow from the US, China, and most importantly, Europe, triggered jitters across markets and tended to put policy makers in the emerging world in crisis management mode. By contrast, today the world seems to have reached a state of numbness where, despite the structural problems faced by high-income economies, short-term global uncertainty has receded. Thanks to the more proactive action by monetary authorities in the advanced world, the probability of a systemic event that would greatly dislocate the global financial and economic dynamics has been, if not eliminated, at least postponed.

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1 See the October 2010 report in this series “Globalized, Resilient, Dynamic: The New Face of LAC” for an extended characterization of LAC’s performance in the 2000s.

2 Throughout this chapter we will benchmark LAC’s performance against four regions: Eastern European MIC’s, comprised by Croatia, Estonia, Hungary, Lithuania, Poland, Romania, Slovakia, and Turkey; East Asian MIC’s or “New Tigers”, comprised by Indonesia, Malaysia, Philippines, Republic of Korea, and Thailand; Peripheral Core Economies (PCEs) comprised by Australia, Canada, New Zealand, Norway, and Sweden.

3 An analysis of global uncertainty in the 2010-2012 period and LAC’s preparedness to face a more volatile world was presented in the April 2012 report in this series “Latin America Copes with Volatility, The Dark Side of Globalization.”
What are the consequences for LAC’s economic outlook of this new normal of modest global growth with limited tail risks? The rest of this chapter explores this question in some detail. We start with a brief description of the current juncture and quantify the effect that global factors have had in LAC’s performance – the strength and incidence of “global winds” in the past. Next, using forecasts of some of the key factors affecting the region’s growth, we build a summary index that captures the expected strength of global winds in the near future. Finally, we analyze the implications of diminishing global winds in terms of LAC’s growth heterogeneity.

**The New Normal: Modest Global Growth with Limited Tail Risk**

The economic and financial news from the world in the past six months seems to be the lack of surprising news. Or, more precisely, the consolidation of a scenario with a moderate recovery in the US, prospects of a soft landing towards a more sustainable 7 percent growth in China, and an unpromising but nonetheless stable scenario in Europe—where the more active presence of the ECB will likely smooth out the occasional shocks coming from the EU periphery. Thus, if the first post-2009 crisis years were marked by high global downside risks, punctuated by threats of a 2008 re-enactment (mostly but not exclusively, reflecting the deepening of the debt crisis in peripheral Europe), in 2013 the developed world finally seems to have arrived to a much debated—and, possibly, transitory—new normal of excess liquidity, modest growth, and stubbornly high debt.

To be sure, this scenario presents fragilities that will need to be resolved down the road to avert the risk of a new global crisis. But this does not mean that a solution to this ambiguous situation should materialize in the immediate future. Thanks to the resilience of the American economy, the momentum of China and the alert management of monetary authorities all over the globe, this delicate equilibrium, that could be characterized by a probability distribution of growth rates with a lower mean and thinner tails, could stay with us for a few years.
Latin America is taking notice that the new normal will likely be characterized by slower growth in world demand, abundant capital, and high but stable commodity prices; that is, an international environment that is supportive but will not push the region to the heights we saw in the mid-2000s. This new normal suggests that, unlike the 2000s where the region was moved forward by powerful global tailwinds, economic performance in the coming years will strongly depend (as it is already happening) on idiosyncratic country policies and fundamentals. From a macroeconomic perspective, this suggests that 2013 will look quite similar to 2012, and probably not too different from 2014. In this context, the focus is gradually shifting from external to domestic engines of growth, and from macro-financial to development policies, to consolidate and extend the economic gains of the past decade.

It is then an ideal time to take stock and try to distill the main features of Latin American macroeconomic performance from a broader perspective, to get a better sense of where the region stands after a benign and eventful decade, and where it may be heading in this brave new world.

**A Summary Measure of Global Winds**

External factors played a crucial role in Latin American growth in the 2000s: global growth from advanced economies and China fueled the external demand for, and the international price of, Latin American natural resources-intensive goods, and low financial risk helped reduce the cost of external financing and lured international capital into local currency assets. In turn, the economic and trade collapse and the spike in risk aversion in late 2008 and early 2009 triggered the opposite movement, inducing capital flight and exchange rate depreciation, and sinking the region into a significant growth slowdown, but fortunately one that was not accompanied by a domestic financial crisis, thanks to the improvements in the region’s “macro-financial immune system” that we have documented in previous reports in this series.

Looking forward, however, the context appears very different. Today, the worst of the 2008 global crisis seems to be over, the risk of a disorderly solution to the European debt crisis appears to have been postponed, mainly on account of the decision of the ECB to provide a backstop to liquidity needs in the EU periphery, and China is softly landing on a (for recent Chinese standards) moderate 7-8 percent growth range. Overall, global downside risk concerns are offset by expectations of historically low interest rates in the near future, justified in the short run by the slow recovery in advanced countries and, in the long run, by the need to manage the high debt ratios inherited from the resolution of the 2008-2009 subprime-related financial crisis. And commodity prices, though volatile, seem to be losing the strong upward directionality displayed during most of the super cycle of the past ten years, which was only briefly interrupted in late-2008 and the first half of 2009. In sum, tailwinds look contained and fairly neutral to the region.

The new international landscape can be summarily illustrated by looking at the past evolution of the global factors listed above (external demand, terms of trade shocks, and global financial risk) and by comparing that evolution with the consensus growth forecasts as a way to get a glimpse of where the world will likely be heading in the future. In the many economic studies on the subject, global macroeconomic influences have usually been captured by a few highly correlated variables—with the caveat that, because of the collinearity of the intervening variables, they may lead to imprecise estimates of their impact on Latin American growth. To mitigate this problem, we prefer to focus on external demand growth, commodity prices, and financial risk perceptions with a minimum of
controls: G7 and Chinese growth to proxy for global growth, the first principal components of changes in the international prices of grains, metals and oil to summarize commodity-driven terms of trade shocks, and the first principal component of the volatility of US equity and the high yield corporate bond spread to capture perceptions of global financial risk. The results are depicted in Figure 1.2. To project the index for 2013, we use consensus forecasts for global growth and World Bank forecasts for commodity prices; for the always elusive financial risk, we assume that it remains in 2013 at December 2012 levels.

**Figure 1.2 (Panels A, B and C)** show how the three global drivers, after years of upward and downward swings before and after the global financial crisis, now appear to be stabilizing, or at least converging towards what would amount to a summary description of the post-crisis landscape: GDP growth below pre-crisis rates, financial risk subdued by the developed countries’ expansionary monetary policy and close to historical lows, and commodity prices stable at current levels. The near term does not promise significant changes. G7 growth is expected to decline slightly in 2013 due to the persistence of the European crisis—which is already dragging down growth in less vulnerable economies such as France and Germany—and to the immediate impact of the US fiscal sequester, expected to slow down US activity in the first semester of this year. External factors and, more prominently, internal dynamics continue to interact in the deceleration of China’s growth, which seems to be soft landing to the 7 percent vicinity. And commodity prices, which rebounded in the second semester of 2012, are envisaged to remain stable at about the levels in 2013.

How would all this translate into Latin American growth? Naturally, the correlation of the local economy with the global context varies from country to country, most notably with regard to the influence of commodity terms of trade, which has been positive for commodity-exporting South American economies and negative for commodity importing Central America—with Mexico, an idiosyncratic oil producer but manufacturer exporter, in between the two. With this in mind, the simplest approximation to the previous question is provided by a regression of the common growth rate of two distinct groups within LAC—South American commodity exporters plus Mexico (SAM), and Central American commodity importers (CA)—against the global drivers previously mentioned. Data are not available to perform this exercise for the Caribbean, with the exception of the Dominican Republic, which has been included in the CA group. As expected, the fit of the regression is quite good: its specification, simple as it is, explains about 85 percent of the common

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4 There is evidence that both the correlation of G7 and Chinese growth and their incidence on developing economies have differed significantly (Levy Yeyati and Williams, 2012); therefore, we look at them separately.

5 Stock price volatility is captured by the VIX index and the bond spreads are measured by the JPMorgan CEMBI Broad High Yield Blended Spread. Note that the empirical literature tends to find growth to be positively correlated not with the level but with the secular change in terms of trade (and negatively with their volatility). As Easterly et al. (1993) argue, if fundamental determinants of growth such as institutions, geography or culture exhibit greater persistence than do the growth rates themselves, exogenous shocks such as terms of trade variations may account for the variance around those persistent fundamentals.

6 See our October 2012 report in this series “The Labor Market Story Behind Latin America’s Transformation” for a discussion of the external and domestic drivers behind China’s slowdown.

7 Common growth is captured by the first principal component of real GDP growth for the countries included in each group. Similar results are obtained by replacing the first principal component by a simple growth average or by calibrating the index based on a panel regression of individual growth rates on global drivers.
FIGURE 1.2. External Drivers and the Global Wind Index

PANEL A. G7 and China

PANEL B. Commodity Prices

PANEL C. VIX and High Yield Spread

PANEL D. Global Wind Index and SAM GDP

Panel A contains the year-over-year growth rates of real GDP for China and G7. Panel B contains the year-over-year growth rates of the commodities that were used in the construction of the Global Wind Index, while PCA refers to the first principal component of these commodities’ growth rates. Panel C contains the VIX (implicit volatility of the S&P 500), the JPMorgan CEMBI Broad High Yield Blended Spread (HY Index) and PCA is the first principal component of what we refer as risk components. Panel D illustrates the relationship between the average annual growth rate of the real GDP for South America & Mexico (SAM) and the Global Wind Index (GWI). This index has been constructed by a linear regression between the components illustrated in Panels A – C and the first principal component of the real GDP growth rates of SAM countries. Shaded areas represent forecasts. Sources: Bloomberg, Consensus Forecasts (March 2013), Haver Analytics, and The World Bank.

threads in Latin American growth (Table 1.1). If, in turn, we use the fitted values from these regressions to map global drivers onto regional growth we obtain, for each of the two country groups, an index that summarily captures how global winds have been blowing in recent years. The index follows very closely the common growth dynamics in LAC (Figure 1.2, Panel D for the case of SAM), showing, for example, that the strength of the global winds were consistent with an average growth rate in LAC of about 6 percent per year during 2003-2008.

But can we say anything about where global winds will take LAC in the coming quarters? As noted, we can use forecasts for these global drivers to project their impact on LAC’s growth and get a fairly

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8 As expected, commodity terms of trade shocks show up with the opposite sign for commodity importing CA. Predictably, the multicollinearity of most of the variables involved reduce the statistical significance of individual coefficients.
Table 1.1. Estimating the Global Wind Index

<table>
<thead>
<tr>
<th>LAC-7</th>
<th>Risk (t-1)</th>
<th>Commodities (t-1)</th>
<th>G7’s Growth</th>
<th>China’s Growth (t-2)</th>
<th>Constant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coefficient</td>
<td>-0.000048</td>
<td>0.016</td>
<td>0.292</td>
<td>0.487</td>
<td>0.011</td>
</tr>
<tr>
<td>p-value</td>
<td>(0.000)</td>
<td>(0.090)</td>
<td>(0.006)</td>
<td>(0.006)</td>
<td>(0.563)</td>
</tr>
</tbody>
</table>

| Central America | | | | | |
| Coefficient | -0.0000891 | -0.011 | 0.053 | 0.246 | 0.046 |
| p-value | (0.000) | (0.207) | (0.647) | (0.138) | (0.016) |

| South America & Mexico | | | | | |
| Coefficient | -0.0000699 | 0.008 | 0.220 | 0.525 | 0.017 |
| p-value | (0.000) | (0.497) | (0.099) | (0.018) | (0.473) |

Notes: Dependent variable for LAC-7: first principal component of the year over year real GDP growth for Argentina, Brazil, Chile, Colombia, Mexico, Peru, and Uruguay from 1Q 2001 to 3Q 2012 (47 observations). R²: 84.5 percent. Dependent variable for Central America: first principal component of the year over year real GDP growth for Costa Rica, Dominican Republic, Guatemala, Jamaica, Panama and El Salvador. R²: 84.7 percent. Dependent variable for South America & Mexico: first principal component of the year over year real GDP growth for Argentina, Bolivia, Brazil, Chile, Colombia, Mexico, Paraguay, Peru, Uruguay and Venezuela. R²: 80.43 percent. Independent variables: Risk (t-1) is the first principal component for the VIX index and the High Yield Spread Index lagged one quarter, Commodities (t-1) is the first principal component for commodities lagged one quarter, G7’s Growth is the year over year growth rate of the G7 economies, China’s Growth (t-2) is the real GDP growth of China lagged two quarters while Constant is the constant of the linear regression.

The interpretation of these results goes beyond a mere description of a short-term view of a world where real and financial determinants lack a clear direction. Needless to say, the correlation between the index and growth does not imply that economic performance in the region can be exclusively attributed to external factors: at the very least, locals factors explain the significant deviations of individual growth rates from the common trend. And our summary measure of global winds, by focusing on risk premiums, may be leaving aside the benign effect of persistently low interest rates levels that reduce the financing costs of (and channel investment flows into) emerging economies in general. But these findings do highlight a quantitative difference between the strength of the tailwinds in the last decade and the current global outlook. If in the period from late 2003 to mid-2008 the global index of tailwinds for the SAM group oscillated around 6 percent, now it looks comfortably settled in the 3.5-4 percent range—a step down, largely in line with the group’s recent growth performance. The same is true for CA, which saw its own global index decline almost by half since its 6 percent peak in 3Q 2007, and now faces 3.6 percent for the year.

A “windless world” is a situation in which global factors make regional growth rates remain stable at their average levels. Tailwinds would be a situation where global factors accelerate regional growth rates to higher levels, and headwinds would be a situation in which global factors decelerate regional growth rates, dragging them to relatively low levels.

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In short, the external factors that were closely linked to LAC’s growth performance in the recent past seem now to be muted—neither facilitating robust growth rates as they did until mid-2008, nor dragging down the region’s performance as they did in the global financial crisis. Everything else equal, the world environment would now be consistent with growth rates that are about 2.5 percentage points lower than pre-crisis records. If Latin American countries want to go back to those promising growth prints, or at least rise above current growth rates, they cannot rely on global forces. They will need to look for growth engines within themselves.

Is LAC’s Growth Becoming More Idiosyncratic?

In the early 2000s the combination of solid external demand, ample global liquidity and, in the case of commodity exporters, positive terms of trade shocks drove the growth-stability mix in Latin America to historical highs. All of a sudden, in the period 2008-2009, the global crisis triggered a severe slowdown in the region, followed by a quick rebound to near pre-crisis levels. In both cases, the sheer intensity of these global swings simply dwarfed the idiosyncratic cross-country differences in policies and fundamentals: as differences in economic policy performance blurred, much of the macroeconomic action could be traced to external factors—a somewhat discouraging finding for reform-oriented policymakers.

Not anymore: without global winds, countries are starting to show their differences, reflecting the diversity in economic fundamentals and policies, as well as in the phase of the development cycle they are in. For example, the residuals of a country-by-country regression of growth on global drivers similar to the one reported in Table 1.1 have been growing since the 2010 recovery (Figure 1.3, Panel A). More precisely, the share of LAC growth that is not explained by common global influences has been on the rise, first mirroring the diverse timing of the recovery from the 2009 slowdown, and now reflecting the different growth paths followed by individual economies in a context where global determinants have cooled down or, as is often the case, cancel each other out. Interestingly, the same can be said, even more so, for the rest of the world: growth divergence in other regions has increased dramatically in the post-crisis period (Figure 1.3, Panel B).

The heterogeneous growth paths unmasked by this windless world are also illustrated by the 2013 growth estimates for countries in the LAC region (Figure 1.3, Panel C). Expected growth vary from rates as low as 0.1 percent and 1 percent in Venezuela and Jamaica, to the “Asian-style” rates of 6 percent for Peru, the 9 percent in Panama, or the 11 percent in Paraguay (bouncing back from a negative 1 percent growth in 2012). Others, like Bolivia, Chile and Colombia, continue to beat the regional average with reasonably robust and stable growth rates of 4-5 percent. By contrast, two of LAC’s largest economies, Argentina and Brazil, continue to underperform the regional average despite bouncing from rates below 2 percent in 2012 to expected rates of close to 3 percent in 2013—a comeback that in part reflects the recovery from a poor harvest in 2012.10

The heterogeneity within LAC is also evident when we compare pre-crisis growth rates with 2013 forecasts. Many of the top performers in the mid-2000s, like Argentina, Trinidad and Tobago, or Venezuela, are among today’s underperformers. LAC’s two largest economies, Brazil and Mexico,

10 The 2013 growth projection for Argentina reflects the latest Consensus Forecast. However, recent developments (such as the fire in YPF’s refinery in Ensenada) and adverse weather conditions might lead to a downward revision of this number.
have also experienced a reversal of fortunes compared to the 2000s. The former, once hailed as one of the most dynamic emerging economies of the 2000s, is now entangled in a low growth dynamic that is proving harder to escape than initially thought. Mexico, in turn, which posted an underwhelming 3 percent average annual growth in heights of the 2000s growth cycle and struggled to consolidate its recovery in the aftermath of the global financial crisis, is now expected to print above-average figures for a second year in a row.\footnote{The change of heart over the Brazilian and the Mexican economies reflects to a large extent domestic dynamics and structural issues such as the decisiveness with which each of these countries has tackled growth-enhancing structural reforms. Nevertheless, global factors have also played a major role in the reversal observed over the past two years in LAC’s largest economies: for example, rising labor costs in China and the steady recovery of the US relative to the EU markets benefited Mexican manufactures over Brazilian natural resource-intensive exports.}

Should LAC worry about the persistence of this windless global environment? The answer to this question depends on the role assigned to national policies. A priori, the new muted international

\begin{figure}
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\includegraphics[width=\textwidth]{figure1_3.png}
\caption{Is LAC’s Growth Becoming Less Global?}
\begin{description}
\item[Panel A. Deviations From the GWI] Standard Deviation of Residuals by Regions
\item[Panel B. Deviation From Average Growth Selected Regions] Period Averages
\item[Panel C. Real GDP Growth and Forecasts Within LAC] Real GDP Growth and Forecasts Within LAC
\end{description}
\end{figure}

Notes: Panel A contains the standard deviation by regions (LAC7 and Central America & The Caribbean) of the residuals that result from regressing each country’s real GDP annual growth rate against the independent variables of the Global Wind Index (GWI). Panel B illustrates the coefficients of variation (standard deviation (σ) / mean (x)) of the real GDP growth of the different regions. In Panel C, 2003 – 2007 is the average GDP growth for the countries in this period. Sources: LCRCE from Haver Analytics, Consensus Forecasts (March 2013) and WEO (October 2012 and April 2013).
context is not necessarily bad news. The growing diversity of current and future growth prospects within the region suggests that the ability of Latin American countries to grow at reasonably high and noninflationary rates depend critically on themselves. Indeed, this soft new normal for the external environment put a premium on local policy over external shocks—or luck—as the key determinant of growth. This should introduce the right incentives to adopt long planning horizons and undertake reform strategies that go beyond the short run.

With that in mind, the change in the global landscape is also a reason to take stock and reassess some of the most relevant singularities of Latin American growth, as well as its limitations, as an essential first step towards understanding the ways in which Latin America can consolidate the growth with social equity achievements of the past decade and move forward. The next chapter is our preliminary attempt in this direction.

Box 1.1 Currency Wars and Nominal Cushions in LAC-7

Two concerns have been at the center of the macroeconomic policy debate in LAC in the post-global crisis environment. On the one hand, the fact that, after the counter cyclical effort in 2009, LAC economics may now enjoy a narrower monetary margin to cope with additional global headwinds if they eventually materialize. On the other hand, the incidence of expansionary monetary policy in advanced countries (the US, Japan and, more recently, the EU) on global liquidity and, particularly, on the direction of international capital flows.

The first concern relates to the monetary muscle that Latin American economies can count on in the event of renewed global distress or if the local growth momentum stalls. On this front, there are differing views. Now that Brazil, after years of exhibiting by far the highest real interest rate among the LAC-7, has finally brought down its policy rate (the SELIC), real interest rates in LAC’s inflation targeters (Brazil, Chile, Colombia, Mexico, Peru, and Uruguay) lie within the 1-3 percent range (Figure B1.1, Panels A and B). And inflation, while still stubbornly above the midpoint of the target zone in Brazil and Uruguay, remains in general anchored. Does that mean that these countries now have a more limited scope for monetary action? Not necessarily. Real interest rates are now lower than prior to the crisis, but remain clearly in positive territory and have not declined vis-a-vis the rest of the world. Perhaps more importantly, they are still high in nominal terms: inflation rates in the LAC inflation targeters are generally above those in advanced economies, from a high of 8.5 percent in Uruguay and 6.3 percent in Brazil to the low of 2.6 percent of Peru (the exceptions are Chile and Colombia, with 1.3 percent and 1.8 percent, respectively). Accordingly, inflation targets (and nominal interest rates) are all above the 2 percent ECB ceiling or the 2.5 percent mark recently set by the FED as its quantitative-easing comfort zone: the tighter inflation target zone, Peru’s, goes from 1 to 3 percent. This may be a blessing in disguise should global turmoil materialize: real interest rates in LAC inflation targeters still have a long way down to go should further monetary stimulus be needed. And from a countercyclical policy perspective, real interest rates are currently close to neutral levels consistent with a moderate-to-fast growth performance, and have room to decrease if activity slows down—even in Brazil, where the new lower SELIC is still in a testing phase and may be temporarily hiked, albeit slightly, to accommodate inflation pressures.

A second macroeconomic concern is associated with the so-called “currency war”, a term that refers to the substantial monetary easing initiated by the Fed in 2009 (soon followed by other
PANEL A. Real Monetary Policy Rates

PANEL B. Nominal Monetary Policy Rates

PANEL C. Terms of Trade

PANEL D. Nominal Exchange Rates

PANEL E. Reserves and REER

PANEL F. Real Effective Exchange Rates

developed countries) and the ensuing tsunami of dollars (and yen and, possibly, Euros) flowing from low-interest rate, low-growth core economies to high-interest rate, fast-growing emerging economies. These capital inflows can threaten to choke the production of tradable goods in recipient countries through an excessive real exchange rate appreciation. While this scenario may have been a more precise characterization of the period of quick global rebound (and, perhaps even more so, of the pre-crisis capital bonanza), the past six months painted a more nuanced picture, with fairly stable terms of trade and exchange rates, and a moderation of foreign exchange intervention and reserve accumulation (Figure B1.1, Panels C, D, and E). This relative stability, naturally, does little to undo the past: countries like Brazil and Colombia and, more recently, Uruguay face significantly appreciated real multilateral exchange rates compared to the levels of the early 2000s (Figure B1.1, Panel F). Not surprisingly, these are the countries where “fear of appreciation” represents a clear and present danger to economic performance. And, while the consensus view indicates that further nominal appreciation (that is, another round in the currency war) is not likely in the cards, there are no grounds to believe that the situation would be reversed any time soon.

What to do? The answer would depend, among other things, on the source and persistence of the real appreciation pressure. As we argue in more detail below, capital flows in most LAC have been primarily FDI flows. But in a few countries (Brazil in 2011, more recently Colombia and Uruguay) portfolio investment is often almost as important as FDI (Figure B1.2). And while FDI flows tend to finance imports of capital and intermediate goods, thereby cancelling out part of the currency effect, portfolio flows can only be mitigated through sterilized interventions: typically, through central bank sales of local currency paper in exchange for the foreign currency flows, thereby meeting the speculative demand for local assets without altering the money supply. Indeed, The Central Bank does not need to be alone in this effort: a similar effect could be achieved if it is the Treasury that sells local currency debt to buy the inflows, and use the latter to prepay external debt or to invest in foreign assets (as in the Chilean Copper Fund).12 There is no reason to restrict this option to fiscal surplus countries: any government could in principle attenuate appreciation by buying dollar assets with peso debt, increasing the long foreign currency position of its balance sheet. The cost and effectiveness of these interventions would depend, again, on the nature of the flows. If real appreciation pressures are permanent or very persistent, intervention amounts to taking the wrong side of a currency carry trade, and the fiscal cost ultimately realizes in the form of valuation losses on the government’s dollar holdings. However, if portfolio inflows are seen as the transitory consequence of transitory policies abroad (such as quantitative monetary easing in the North) then a leaning-against-the-wind policy of “buying in the dips” (namely, selling peso debt to buy dollar assets) should not be so costly over a medium term horizon and could even be profitable if the interest rate differential is not too large and the transitory flows reverse (Cárdenas and Levy Yeyati, 2011).

In sum, in most LAC economies, the combination of subdued capital inflows and positive real interest rates should dispel doubts about the space of monetary policy to play its stabilizing role. But portfolio inflows are still a serious policy concern in a few countries, where options beyond central bank FX intervention should probably be considered.

12 In practice, the Central Bank seldom issues its own paper; rather, it mops up the monetary expansion form its dollar purchases by reducing its stock of Treasury securities. Alternatively, the government could resort to sand-in-the-wheel measures to fend off inflows, such as capital controls, Tobin taxes or differential reserve requirements. See Cárdenas and Levy Yeyati (2011) for a taxonomy.
FIGURE B.1.2. Composition of Net Inflows

Note: The Panel represents the accumulated foreign direct investment, portfolio investment and other investment net inflows, from 3Q 2011 to 2Q 2012 as a share of the total of these inflows. The definition of inflows is according to the Sixth Edition of the IMF's Balance of Payments and International Investment Position Manual. Source: IFS.
Chapter 2: Searching for the Latin American Path to Growth

The new normal described in the previous section poses a challenge for Latin America and the Caribbean (LAC): to find its own way to tread these calmer waters without losing the growth momentum gained in the good times. But how can a region that has been historically bounded to per capita growth rates that have not systematically exceeded those in the advance economies break free from its own past and turn on the domestic engines of growth for good?13

Answering this question is far from trivial, as it requires a detailed understanding of the distinct characteristics of LAC’s economies. In other words, to reach a path of sustained high growth in the future we must start by understanding what distinguishes LAC’s current economic pattern, its strengths and its limitations.14 But the story does not end there. A complete roadmap of LAC’s transformation to a high growth region would demand a deep analysis of the reforms needed to unblock the traditional bottlenecks that have maintained the region’s productivity stagnant, an analysis that deserves a report of its own and goes beyond the scope of this chapter.15

Here, we aim at a more modest goal: a broad characterization of LAC’s economic performance in the past decade. To do that, we proceed in steps. First, we distinguish the two LACs: on the one hand, one rich in natural resources and main beneficiary of the boom in commodity prices, which includes LAC-7 but also other South American commodity exporters such as Bolivia, Ecuador or Uruguay; on the other hand, commodity-importing Central America and most of the Caribbean.

Next, we look into the composition of demand and supply over time to highlight three nontrivial aspects that had the first group of countries “playing against character” (that is, against the conventional view of commodity export-led growth). The first of these aspects is the prevalence domestic over external demand, despite the historically high terms of trade experienced by many LAC countries throughout the 2000s. The second aspect is the source of financing of LAC’s growing domestic demand, particularly the links between FDI inflows, imports and factor payments that underlie LAC’s growing net factor payments abroad and negative current account balances. Finally, we document the gradual process of “tertiarization” (the growing importance of the service sector in the creation of value added, in contrast with, albeit related to, the “primarization” of goods exports).

Although we discuss each of these three aspects sequentially, they should be seen as a whole that describes the LAC-specific modality of aggregate economic growth that stands in sharp contrast with that of the East Asian countries. Ultimately, this characterization, while still at the descriptive level, should illuminate the way in which in the 2000s the supportive global factors were metabolized.

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13 LAC’s 20th century economic history has been characterized, among other things, by a lack of convergence towards high-income living standards (more specifically in terms of per capita GDP), in contrast with the experience of the so-called East Asian Tigers. For a detailed discussion of LAC’s “100 years of solitude” (namely, its lack of convergence), see the October 2011 report in this series “LAC’s Long-Term Growth: Made in China?”

14 A characterization of LAC’s connections to the world and the limitations of such connections was done in the October 2011 report in this series “LAC’s Long-Term Growth: Made in China?”

15 Pagés-Serra (2010) provides a broad exploration of this point.
by most LAC countries to substitute for their historically low savings and capital accumulation. And looking forward, it should point at the limits and challenges that the region faces to keep the engine running.

**Domestic-Led Growth: The Latin American Path**

If one thing stands out when we compare the composition of aggregate demand in LAC to that of other emerging regions, it is the prevalence of domestic over external demand. For all the debate about the commodity boom in the 2000s, the fact is that the improvements in the current accounts of LAC’s commodity exporters was in most cases rather short lived: current account surpluses were virtually gone by mid-2008, and only temporarily recovered in 2009 as an undesired consequence of the global trade collapse. At any rate, by end-2011, only Bolivia and Venezuela (2 out of the 11 Latin American commodity exporters) were able to show a current account balance in positive territory. Indeed, rather than the traditional natural resource-driven Dutch Disease, the broad picture of the external front looks closer to a case of “financial” Dutch Disease caused by sustained inflows of capital that fueled domestic demand, put appreciating pressures on the exchange rate, and boosted import competing activities.\(^\text{16}\)

For an accurate comparative picture of the level and evolution of domestic demand and its components in LAC we make two methodological choices. First, we use real values for GDP as well as for each of its components: consumption, investment, exports, and imports. That is, each component is deflated by its respective deflator. Since real variables are sensitive to the choice of base year, we use national accounts data collected by the U.N. Statistics Office and reported in the same base year, making real values comparable across countries. Therefore the shares of, say, investment and other components of domestic demand we use differ from the commonly used nominal shares that are shown in other publications including previous reports in this series. Working with these real values is essential to get an accurate picture of aggregate demand dynamics in times of significant changes in terms of trade. For example, when terms of trade rise, the share of investment to GDP will be underestimated by nominal variables because the denominator (GDP) contains exports, whose price are rising, while the numerator (investment) will contain imports, whose price are falling relative to the price of exports.

The second methodological choice, already mentioned, is the distinction we make throughout the analysis between South America and Mexico (henceforth, SAM) and Central America (CA).\(^\text{17}\) In the latter group, real domestic demand has been typically large despite low and declining investment, reflecting the incidence of consumption shares (close to 80 percent and growing) traditionally funded by a solid and stable flow of remittances. In SAM, by contrast, real domestic demand as share of GDP has grown by about 5 percentage points since the late 90s (Figure 2.1, Panel A).

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\(^{16}\)The term “Dutch Disease” was originally coined by The Economist in 1973 to refer to the decline of the manufacturing sector in the Netherlands after the discovery of a large natural gas field in 1959, and is often used to refer to an increase in revenues from the booming primary sector that appreciates the currency, resulting in a loss of competitiveness (and, ultimately, a decline in production) in the lagging manufacturing sector. It is useful to distinguish between the traditional Dutch Disease in which a growing trade surplus in the primary sector offsets a growing trade deficit in the manufacturing sector, as the real exchange rate adjusts, from a “financial” Dutch Disease driven by capital inflows such as FDI and portfolio flows at the expense of a generalized loss of competitiveness and a current account deficit. See Cárdenas and Levy Yeyati (2011).

\(^{17}\)We exclude Caribbean countries from this analysis because of the lack of consistent and comparable data.
FIGURE 2.1. A Comparative Look at LAC’s Growth Pattern: The Demand Side

Notes: Demand components are measured in constant 2005 LCU. SAM: Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Mexico, Peru, Paraguay, Uruguay. Venezuela is excluded due to the large spike in investment in the period we study, which distorts the regional averages. CA: Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras and Nicaragua. Caribbean: Antigua & Barbuda, Barbados, Grenada, Jamaica, Saint Kitts & Nevis, Saint Lucia, Saint Vincent & the Grenadines, Suriname and The Bahamas. SEA MICs: Indonesia, Malaysia, Philippines, South Korea, and Thailand. EE MICs: Croatia, Estonia, Hungary, Lithuania, Poland, Romania, Slovenia and Turkey. PCE: Australia, Canada, New Zealand, Norway and Sweden. For the Caribbean we have used the nominal share of demand components over GDP, for the latest available year, given the lack of comparable data in real terms. Source: LCRCE from UN Statistics.
The uniqueness of SAM’s domestic demand pattern becomes clearer when we compare it to other regions. First, SAM countries, together with other peripheral core countries (PCEs), are among the few to exhibit a steady growth in domestic demand since the mid-1990s. Second, the large prevalence of domestic demand, as opposed to external demand, contrasts with what we observe in other emerging regions like the South East Asian MICs (SEA). Part of the comparatively higher domestic demand observed in SAM relative to other regions can be explained by the large share of GDP accounted for by private consumption: SAM’s consumption share stands close to 67 percent (only beaten by CA’s 75 percent) while in other economies this ratio goes, on average, from 55 percent in the PCEs to 61 percent in Eastern European MICs (EE) (Figure 2.1, Panel C). Even the investment to GDP ratio, once LAC’s Achilles heel when it comes to growth, has been on the rise, increasing by about 5 percentage points since the early 2000s and reaching levels closer to those observed in other emerging economies and the PCEs by the late 2000s (Figure 2.1, Panel E).

And while the evolution of consumption shares within SAM has not been homogenous (private consumption shares grew significantly in Brazil, Chile, Ecuador, Mexico, and Paraguay, but remained stable or declined in Argentina, Bolivia, Colombia, Peru, and Uruguay), investment ratios increased across the board, albeit from modest levels (Figure 2.2).

**FIGURE 2.2. Benchmarking the Composition of LAC’s Real Domestic Demand**

Note: Consumption, Investment and GDP are in real terms, in constant 2005 LCUs. SAM: Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Mexico, Peru, Uruguay. Venezuela is excluded due to the large spike in investment in the period we study. CA: Costa Rica, Dominican Republic, El Salvador, Guatemala, and Honduras and Nicaragua. PCE: Australia, Canada, New Zealand, Norway, and Sweden. Rest: Croatia, Estonia, Hungary, Indonesia, Lithuania, Malaysia, Philippines, Poland, Romania, Slovakia, South Korea, Thailand, and Turkey. Source: LCRCE from UN Statistics.

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18 Throughout this chapter we will benchmark LAC’s performance against four regions: Eastern European MIC’s, comprised by Croatia, Estonia, Hungary, Lithuania, Poland, Romania, Slovakia, and Turkey; East Asian MIC’s comprised by Indonesia, Malaysia, Philippines, Republic of Korea, and Thailand; Peripheral Core Economies (PCEs) comprised by Australia, Canada, New Zealand, Norway, and Sweden.

19 Notice that most of the increase in SAM’s real investment to GDP ratio occurred in the second half of the 2000s. If we took the average for the decade as whole the differences between SAM and other regions would be larger.

20 Public consumption shares remained generally stable in real terms throughout the period.
Perhaps as a result of the strong domestic demand, these countries remain relatively closed, with export and import ratios below their peers (Figure 2.1, Panels B, D, and F) and, despite the commodity boom, net exports contributed negatively to growth in the 2000s in virtually all SAM economies (Figure 2.3). This does not deny the positive contribution of exports; rather, it reflects a mix of slowly growing export volumes with fast-growing import volumes (as noted, facilitated by

**FIGURE 2.3. Domestic Demand, Exports and Imports: Contributions to GDP Growth**

**PANEL A. LAC**

![Accumulated Contribution to GDP Growth - 2003 to 2011](image)

**PANEL B. East Asian MICs**

![Accumulated Contribution to GDP Growth - 2003 to 2011](image)

Notes: Components of domestic demand, exports, imports, and GDP are in real terms, in constant 2005 LCU. Venezuela is excluded due to the large spike in investment in the period we study. GDP Growth corresponds to the accumulated growth between 2003 and 2011 while Domestic Demand, Exports, Import and Net Exports stand for their respective accumulated contribution to GDP growth in the same period. Source: LCRCE from UN Statistics.
larger export prices and mostly related with capital and intermediate goods). And highlights that the major terms of trade gains experienced by LAC’s commodity exporting countries were transformed into a growth dynamics centered in domestic spending, both on domestically produced goods as well as on imports. It is in that sense that, at least at a descriptive level, one could start to define the common traces of LAC’s growth pattern as a domestic demand-led growth, in contrast with the export-led growth model characteristic of Asian tigers, old and new.

Where did LAC’s commodity-induced trade balance improvement go? How to square the terms of trade gains in most of SAM countries with the tendency for their external current accounts to be in deficit? How are the rising domestic demand and the associated current account deficit being funded? And how were the global tailwinds channeled into domestic demand expansion?

Box 2.1. Consumption, Investment, and the Rise of the Middle Classes: Cause, Effect or Coincidence?

What was behind this domestic demand-driven growth in many SAM countries? Was the rise of the middle classes one of its causes, or was it rather the effect of the deepening of credit markets or generalized rise in incomes due to a decade of solid growth? We address this question distinguishing between consumption, which has been growing unevenly within the group, and investment, which has strengthened across the board.

Regarding consumption, from the combination of the pent up demand from the new middle classes (the rise of which has been documented extensively in our 2012 regional flagship study titled *Economic Mobility and the Rise of the Latin American Middle Class*)21 with the pro-consumer finance bias of the new banking business model (discussed at length in our 2011 regional flagship study titled *Financial Development in Latin America and the Caribbean: the Road Ahead*), one would expect a change in the consumption basket of the average household: less food, more non tradable (services) and durables. Indeed, a quick look at automobile sales points in this direction (Figure B.2.1, Panels A and B). The same can be said of the growth of household (and consumption) credit as a share of total credit, despite the rather minor rise in mortgage lending (Figure B.2.1, Panels C and D). In this light, one could think a priori that consumption shares were pushed higher by a mix of higher income, fewer poor households and a broader middle class (all reflections of the same pattern: pro-poor growth that reduces poverty and inequality, as shown in Figure B.2.2, Panel A), aided in varying doses by a deepening, pro-consumer financial system (driven by nominal stability and by the recent trend in banking towards consumer lending, and away from corporate lending).

How does this hypothesis fare in the data? Table B.2.1 reports the results of panel regressions of consumption shares over per capita income, the share of the middle class in total population and different credit measures. The results are mixed. The consumption share appears to be explained by the increase in per capita GDP: the income elasticity of consumption is not significantly higher in SAM than elsewhere (column 1) and the share of middle class and the household credit-to-GDP ratios are negatively correlated with consumption once per capita income is controlled for.

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21 Our regional flagship studies can be found at www.worldbank.org/laceconomist
When we replicate the exercise for investment ratios, the latter does appear to be more sensitive to income in SAM although, again, it does not respond significantly to neither the rise of middle class or to variations in total credit-to-GDP ratio. In short, a first pass at the determinants of consumption and investment in SAM suggest that they reflected mainly the consequences of rapid growth in the 2000s, consistent with the evidence for a broader group of countries. The concomitant suggestion is that the substantial reduction in poverty and rise of the middle class were likely to have been the effect rather than the cause of the rapid, domestic demand-driven growth.

**Income equality without savings: Wealth inequality?**

One question behind the significant reduction of income inequality throughout the region is whether it translated into a more equal distribution of wealth. In other words, how much of the relative rise in income of the low and middle classes was saved for the rainy days (or for retirement) or invested in the children’s education, as opposed to consumed or, in the worst case, pledged and leveraged
through the banking system to finance even greater consumption (that is, spent in advance). This is particularly relevant to address the vulnerability of the middle class to a cyclical slowdown with a concomitant decline in real wages and employment—already a policy concern in countries like Brazil where relatively low growth now coexists with low unemployment and high household indebtedness.

The reason why this question has not been empirically addressed is simple: we do not have detailed information about assets holdings of households by income level. But a cursory look at micro data from household surveys gives a flavor of the problem. Figure B.2.2, Panels B-D show, for selected LAC countries, the change in the share of households that own consumer durables and property, by income quintile. As can be seen, with a few exceptions, TV’s have become common across the board (particularly in low income households), and the same applies, to a smaller degree, to cars. However, the housing ownership share has declined in most countries. Inasmuch as housing is the quintessential savings vehicles of the middle classes, this very preliminary evidence flags a potential downside of measuring the rise of the middle class exclusively based on current income. Is it possible that, because of the lack of appealing savings

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**FIGURE B.2.2. Income Growth and Consumption Across Income Groups**

**PANEL A. Incidence Curves in LAC**

*Changes between early 2000s to late 2000s*

**PANEL B. Consumption of TV’s**

*Changes between early 2000s to late 2000s*

**PANEL C. House Ownership**

*Changes between early 2000s to late 2000s*

**PANEL D. Car Ownership**

*Changes between early 2000s to late 2000s*

Notes: In Panel A each bar represents the annualized growth of income for each income group and country. In Panels B-D each bar represents the change in the share of households owning TV’s, houses, and cars for each income group and country. Source: LCSPP and LCRCE from SEIDLAC.
instruments, middle class income gains are largely consumed and, hence, ultimately tend to accrue to corporate profitability (and corporate shareholders) leading to a regressive redistribution of wealth? While we wait for the data, we can only speculate that a deepening of the mortgage market that redirects income away from durables and into housing should help mitigate this potential downside.

Table B.2.1 Determinants of Consumption in LAC

<table>
<thead>
<tr>
<th>VARIABLES</th>
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<th>(3)</th>
<th>(4)</th>
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<td>C/GDP</td>
<td>C/GDP</td>
<td>I/GDP</td>
<td>I/GDP</td>
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<td>Per capita GDP</td>
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<td>SAM</td>
<td>Full Sample</td>
<td>SAM</td>
</tr>
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<td></td>
<td>1.67e-06**</td>
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<td>2.72e-06***</td>
<td>6.38e-06*</td>
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<td>(0.00000367)</td>
<td>(0.000000688)</td>
<td>(0.00000294)</td>
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<tr>
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<td></td>
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<td>(0.000917)</td>
<td></td>
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<tr>
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<tr>
<td></td>
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<td>(0.0000169)</td>
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</tr>
<tr>
<td>Constant</td>
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<td>0.631***</td>
<td>0.163***</td>
<td>0.117***</td>
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<td>(0.00873)</td>
<td>(0.0262)</td>
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<td>Observations</td>
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<td>72</td>
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<td>67</td>
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<td>R-squared</td>
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<td>0.186</td>
<td>0.291</td>
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<td>Number of countries</td>
<td>32</td>
<td>7</td>
<td>32</td>
<td>6</td>
</tr>
</tbody>
</table>

Note: Clustered standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1. For each specification, dependent variables are shown in the first row of the table and independent variables are shown in the first column of the table. All regressions are estimated using a panel regression approach using EEMICs, LAC, PCE, and SEA MICs countries with available data from 1990 to 2010.

The Other Side of Domestic Demand-Led Growth: FDI, Imports and Dividends

Latin America has often been described as a commodity exporting region benefitting from a super cycle of terms of trade gains. However, a quick look at the external sector shows that, despite the unprecedented commodity bonanza prior to the 2008 slowdown, the region exhibited, on average, only modest and rapidly declining current account surpluses. Indeed, right before the global financial crisis, with commodities and terms of trade at all-time highs, LAC-6 recorded an average current account deficit of 1.3 percent of GDP in 2008, marking a trend that was temporarily contained and reversed thanks to the collapse of global imports and the contraction of aggregate demand during the crisis, but that was already back on track by end-2009 (Figure 2.4.A).
FIGURE 2.4A. The External Side of LAC’s Domestic-Driven Growth: Benchmarking LAC’s Balance of Payments

PANEL A. LAC-6 Current Account

PANEL B. LAC-6 Financial Account

PANEL C. SEA MICs Current Account

PANEL D. SEA MICs Financial Account

PANEL E. PCE Current Account

PANEL F. PCE Financial Account

Notes: In Panels B, D, and F positive values of the financial account represent inflows. LAC-6: Argentina, Brazil, Chile, Colombia, Mexico, and Peru. SEA MICs: Indonesia, Malaysia, Philippines, South Korea, and Thailand. PCE: Australia, Canada, New Zealand, Norway, and Sweden. Source: LCRCE from IFS.
A quick glance at the balance of payments reveals important differences with both the export-led countries in SEA, and the more developed commodity exporters in our PCE group. For starters, both groups exhibit trade and current account surpluses—large but declining in the first case (currently at 3.7 percent on average); modest but stable in the second (2.2 percent). The difference between LAC-6 and these two other groups seem to lie in the income account, which in the case of LAC-6 reflects an important outflow associated to factor payments: interest rates and, most notably, corporate dividends (Figure 2.4.A). \(^{22}\)

The difference in factor payments relates, in turn, to a critical source of foreign funding in LAC: FDI. As Figure 2.4.B, Panel A illustrates, factor payments are indeed correlated with past FDI: the more FDI received in the past, the larger the dividend payments today. This is a direct consequence of the fact that, somewhat at odds with the conventional view, LAC’s growth on average has not been financed, at least not directly, by the commodity boom nor by large and steady portfolio capital inflows, but rather by a strong and stable inflow of FDI.\(^{23}\) Moreover, FDI, more than private consumption, has been a main driver behind the rapid growth in imports that underlies the narrowing trade surplus: capital goods and intermediate inputs that are in line with cumulative FDI flows (Figure 2.4.B, Panels B, C, D, and E).

In sum, we have a narrowing (and, presently, mostly negative) current account balance, whereby imports of capital and intermediate goods are financed by foreign capital (especially, and in contrast with conventional wisdom, FDI flows) that eventually gets repaid in the form of large factor payments that subtract from the trade balance, placing the current account in negative territory. In other words, LAC seems to illustrate the reversal of the Lucas paradox: foreign capital flows into countries with good growth prospects to fund profitable investments and bring the profits back home.

How can we reconcile the incidence of global growth drivers documented in the first section with this domestic demand-led, FDI-financed Latin American path to growth? One could conjecture that sustained FDI flows were the indirect result of commodity terms of trade that fuelled investment in oil, mining, land and the associated transportation infrastructure. However, again, reality is more complex than convention. FDI flows were not exclusively channeled to those sectors: a large share of foreign capital went to fund investment in services and manufacturing; most notably, in the two largest economies in the region, Brazil and Mexico (Figure 2.4.B, Panel F). But, while FDI flows have been sensitive to both the local and the global business cycle (Levy Yeyati et al. (2007)), in the 2000s they have displayed a remarkable resilience—and, in countries such as Bolivia, Colombia or Peru they have grown in importance.

Why all the FDI? For starters, the trade surplus, which did grow significantly in the 2000s, provided LAC countries with the foreign exchange needed to meet the consumption and investment boosts, in economies more prone to real exchange rate appreciation than its Asian peers. In many cases, such surpluses also added to the public savings needed to deleverage and de-dollarize the economy.

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\(^{22}\) Remittance inflows, captured in the secondary income account as transfer payments, are also sizable but relatively smaller than in SEA (or in CA). For many Central American and Caribbean countries, remittances vastly exceed FDI.

\(^{23}\) While portfolio flows have tended to move procyclically, recording net inflows and outflows in good and bad years, respectively, FDI net inflows for LAC6 have averaged 2 percent to 4 percent of GDP every single year since 1995, with the exception of 1992, where they posted a much more positive number, possibly reflecting the enthusiasm generated by the Brady plan.
FIGURE 2.4.B. The External Side of LAC’s Domestic-Driven Growth: FDI and the Current Account

PANEL A. FDI and Factor Payments

PANEL B. LAC-7 Imports

PANEL C. FDI and Intermediate Goods Imports

PANEL D. FDI and Capital Goods Imports

PANEL E. Consumption Goods Imports and Private Consumption

PANEL F. Composition of FDI Flows

away from financial fragilities. But it is the low international interest rates, the record highs in the terms of trade and, possibly, the rising foreign currency position of LAC’s sovereigns that come to mind to explain the renewed investment appeal of natural resource-rich economies. In other words, global tailwinds were not innocuous; they were indeed metabolized into domestic demand expansion, public sector deleveraging and overall healthier economies. And, given low interest rates and abundant global liquidity, LAC was able to lure foreign savings to fuel growth and compensate for the region’s historically low savings ratios.

**Growth’s Anatomy: The Tertiarization of LAC’s Economy**

To complete the characterization of LAC’s domestic demand-led growth, we need to look at the evolution and composition of supply. Here there are not many surprises: despite the popular reference to the primarization of exports in most SAM economies, the term that better describes the dynamics of supply in recent years is “tertiarization”. Propelled by domestic demand and appreciating real exchange rates, economic activity has gradually shifted from tradables to non-tradables and, more specifically, from manufactures to services, which went from representing an average 60 percent of total value added in 2000 to about 64 percent in 2011 (Figure 2.5, Panel A).

There was, indeed, an acceleration of the growth rate of services in the 2000s. Value added in services (broadly defined) saw the largest jump in annual growth rates from the 1990s to the 2000s of all the sectors of the economy—a 1.15 percentage point increase. In fact, services went from trailing behind the primary sector and construction in the 1990s (in terms of annual value added growth) to growing almost at the same rate as construction, the leading sector in the 2000s (Figure 2.5, Panel B).

The distribution of growth inside the service sector is relevant: skilled services have trailed behind non skilled services (and construction) but have grown ahead of manufactures. The shape is remarkably similar to that for PCEs, perhaps the group more economically affine to SAM. Interestingly, the same is true for export-led SEA economies, although both manufactures and skilled services fared relatively much better.

Thus, a perfunctory look into the service sector shows that the contributions to value added growth in Latin America has not been circumscribed to low-skilled activities or construction; on the contrary, it is in high-skilled services that growth contributions have been more significant in the past decade, in line with both SEA and PCEs (Figure 2.6). In other words, the story on the tertiarization of LAC needs much more nuance than normally told, for it entailed more than just the proliferation of unsophisticated kiosks attended by an unskilled labor force.

**Is Tertiarización Going Too Far? Benchmarking the Service Sector in LAC**

In light of the growth factoids presented above, should we worry about tertiarization as a deviation from Latin America’s virtuous industrial destiny, or should we focus our attention on fostering competitiveness of sophisticated, high-skilled services that can help sustain the gain in real wages of the 2000s? And, more generally, is tertiarization a Latin American version of the Dutch Disease or rather a natural development in the growth path of middle-income economies?

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24 Similar to SAM countries, PCEs are commodity producing economies.
The combination of high terms of trade, locally driven growth and declining industrial participation outlined above has fuelled concerns about the quality of growth, specifically noting that the current pattern seems to describe a process wherein high productivity manufacturing sectors are losing out against less productive service activities (including construction) that have low skill content. This is ostensibly true when we compare growth rates of value added by sector in LAC with that in Asia, which has been and still is the standard against which Latin American performance is often measured.
There are, however, some nuances worth mentioning. First of all, the SEA MICs (“new tigers” such as Malaysia, Indonesia or the Philippines) display a sectoral pattern of value added growth that does not differ significantly from the pattern in LAC. Second, valued added figures in the more advanced primary producers grouped under PCE print a similar shape, albeit at a lower rate (Figure 2.5, Panel C).

On the other hand, it is apparent that the share of manufacturing in the GDP (i) typically declines with the degree of development; and (ii) with a few exceptions, has been declining steadily over time, independently of the degree of development (Figure 2.7, Panels A and B). Thus, from a broader perspective, tertiarization can appears less as an undesired by-product of the commodity boom and more as a natural consequence of the region’s development.

A quick glance at the share of services over GDP in the world and over time suggests that LAC countries have not deviated from a virtuous industrialization dream but rather have converged towards the average development path, one in which the relative share of manufactures, both in terms of value added and employment, declines with per capita income (Figure 2.7, Panel A). With some exceptions like Brazil or Uruguay, most LAC-8 (LAC-7 + Uruguay) countries lie close to or below the share of services in value added predicted by their per capita income levels; some, like Argentina, Chile or Venezuela have shares of services well below their expected value. Indeed, most countries in LAC, which started the 2000s with values that were above the empirical relation between share of services and GDP, witnessed a steady convergence towards levels that, given LAC’s per capita income, are more in line with the international benchmark (Figure 2.7, Panel C). In all, the data tends to dispel the often heard fears of excessive tertiarization.
What about employment in services? A similar exercise to the one performed with value added suggests that by-and-large LAC countries employ a bigger share of their labor force in services than what their per capita income levels (and their service value added) would predict: service sectors in LAC are either more labor intensive or less labor productive than in countries with comparable per capita incomes. This observation was raised in the October 2012 report in this series “The Labor Market Story Behind LAC’s Transformation” and is illustrated in Figure 2.7, Panel B. A dynamic view of this empirical relation, however, shows that the gap between the observed labor shares in services and those predicted by income have also declined in the 2000s in LAC (Figure 2.7, Panel D).

The fact that industrial shares are declining (and tertiarization growing) over time and across the board suggest that, besides being part of the development cycle, the tertiarization trend may be...
capturing a different, more general trend not necessarily related with the anatomy of growth in specific regions. In fact, the notion of a steady relation between services and income and of “stages of economic development” may be turning obsolete in a globalized world where the production process has become more modular. There are reasons to believe that, because of outsourcing, measures of industrial share may not be comparable over time. Vertical disintegration through outsourcing and offshoring imply that many activities that in the past were performed inside the industrial firm (transportation, telecommunications, security, catering, health services, mailing, etc.) now are provided by outside service firms, and are accordingly grouped under services at the expense of the industrial product. Ultimately, the declining secular trend in the industrial product could be conflating both long-term development dynamics and more pedestrian statistical factors.

In sum, the discussion thus far does not imply that we should stop worrying about the faltering industry; it simply puts the phenomenon under a different light. While tertiarization may reflect to some extent the consequence of the commodity boom and the associated appreciation of SAM’s currencies, it may also, and perhaps more fundamentally, be the reflection of the combination of economic development, globalization and corporate outsourcing. We should worry not so much at the smaller industrial share but rather about the productivity and tradability of the service sector.

**What’s Wrong with Tertiarization? Productivity and Skills**

So far our discussion of the growing tertiary sector has centered on employment and value added. But in order to assess the growth prospects of an economy with a relatively large service sector, it is inevitable to address its implication for two of the engines of growth: productivity and human capital.

There is a widespread belief that productivity growth is slower in services than in manufactures. This view, which dates back at least to Baumol’s 1967 work, regards services as a stagnant sector of the economy. Because of this, defendants of industrialization seem to start from the prior that the primary sector and, most notably, service sectors (the beneficiaries of the composition shift in most countries in the region in the past decade) are characterized by a lower productivity and a weaker demand for skilled labor. This may give grounds to the hypothesis that real currency appreciation supported by higher terms of trade, by hampering the price competitiveness of the local industry, is hampering productivity as well as depressing the skill wage premium and returns to education, leading Latin America to a developmental cul de sac. However, this view of the effects of “tertiarization” in the labor market may be misinterpreting and understating the role of the service sector in the big development picture.

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25 The notion of “stages of economic development” was enunciated by U.S. economist Walt Rostow and involves a series of transitions from primarization, to manufacturing, and finally to services (tertiarization) as countries become richer.

26 The related literature is scarce. Of particular interest is Carranza and Moreno (2013) where the authors estimate value added correcting for outsourcing and find, contrary to conventional measures, no loss in industrial participation in aggregate value added, and, at a more general level, Antrás, Garicano y Rossi-Hansberg (2006), which argue that recent technological shocks have favored vertical disintegration.

27 Although this view was backed by the US data in the 1970’s, recent work suggests that Baumol’s hypothesis has been reversed. See Triplett and Bosworth (2003).
Are services necessarily less productive than industry? In order to test this hypothesis empirically one would need to have empirical estimates of productivity at the sectoral level. This is a rather difficult and, if anything, controversial endeavor. At the aggregate level, the most common measure of productivity is total factor productivity (TFP): with all the caveats this measure poses, it gives us the best measure of the part of growth that is not accounted by factor accumulation. There are, however, major challenges to calculate this measure of productivity for the service sector. In particular, it is very difficult to estimate TFP at the sectoral level because of the lack of disaggregated information on capital stocks (or, for that matter, investment). To come around these issues, the profession has settled in using sectoral labor productivity (that is, value added over employment) as a proxy for total factor productivity, despite the obvious drawbacks of the former.28

With these caveats in mind, we use labor productivity growth to assess whether the conventional view (Baumol’s) holds in LAC. The evidence in Pagés-Serra (2010) seems to support this hypothesis. But while the long-run perspective places services far behind manufactures (which, in turn, lags the primary sector, the beneficiary of the important technological advances in production methods, machinery and inputs in the late 1990s), the past decade shows a new and brighter face of productivity in the services sector (Figure 2.8). Thus, Baumol’s view gets mixed scores: despite underperforming in terms of labor productivity in the long-run, services have been far from stagnant in recent years.

![Figure 2.8. Annual Labor Productivity Growth in LAC by Sector](image)

Notes: LAC includes Argentina, Brazil, Chile, Colombia, Costa Rica, Mexico, Peru, Uruguay, and Venezuela. Primary Sector includes ISIC sectors A-G, and E in ISIC Rev. 3; Manufacturing includes sector D; Construction includes sector F, and Services includes sectors G-P. Labor productivity is measured as the ratio between value added and total employment in a given sector. Source: Timmer and de Vries (2007).

28 Labor productivity captures “true” productivity only if the production process uses labor as its only input. If it does not, labor productivity is a function of true productivity as well as other factors, mainly capital.
What about human capital and skills? Is the service sector in LAC plagued with low-skill intensive activities as some people argue, or is it closer to the sophisticated services offered in high-income economies? Here, again, the conventional view is not easily validated in the data. A quick glance at the skill composition by sector indicates that services is the sector in LAC that uses, by far, the higher share of educated labor—more than 50 percent of the labor force employed in services has at least a secondary degree (20 percent have a tertiary degree). This numbers are 10 percentage points larger than in manufacturing, the second most skilled intensive (if we use education as a measure of skills) sector (Figure 2.9, Panels A and B). Moreover, looking at the evolution of skill intensity over time we see that, if anything, the service sector (especially if one excludes construction services) has become more skill intensive than the manufacturing sector, while the primary and construction sectors have widened their skill intensity deficit with respect to manufacturing (Figure 2.9 Panels C and D). Given that technological progress tends to complement skills (Acemoglu (2002)), the skill intensity edge that the services sector (excluding construction) has over other sectors in the economy puts it in a better position to rip the benefits of technological progress.

**FIGURE 2.9. Share of Educated Workers Across Sectors Over Time in LAC-7**

**PANEL A. Education Intensity Across Sectors Over Time (Tertiary)**

**PANEL B. Education Intensity Across Sectors Over Time (Secondary +)**

**PANEL C. Education Intensity Relative to Manufacturing (Tertiary)**

**PANEL D. Education Intensity Relative to Manufacturing (Secondary +)**

Notes: All variables are calculated using simple averages for Argentina, Brazil, Chile, Colombia, Mexico, Peru, and Uruguay. We used two definitions of education intensity. The first, (called Tertiary) measures education intensity as the share of workers with a college degree. The second definition (secondary +) measures education intensity as the ratio of workers with a High School degree or more. LCRCE from SEDLAC.
The connection between sectoral skill (education) intensity and productivity can be further explored by looking at the relation between skill intensity and relative wages. If wages reflect the marginal productivity of a worker, which is a function of TFP, a positive correlation between sectoral wages and sectoral skill intensity might be a sign of a connection between TFP and skill intensity.

The evidence in LAC-7 economies suggest this is the case: non-construction services, the more skill intensive sector in these economies, pays wages that are on average higher than those in construction, the least skill intensive sector (Figure 2.10, Panel A). One can think of situations where the positive correlation between wages and skill intensity captures other types of labor dynamics. For example, it could be that a booming sector which is low-skill intensive attracts skilled workers to do low-skill tasks (a college graduate working in construction). If this were the case, one would expect sectors with large wage increases to experience the largest changes in the share of skilled workers. However, although there is a positive correlation between changes in wages and changes in skill intensity, it is statistically insignificant and close to zero (Figure 2.10, Panel B).

The evidence thus far puts the non-construction service sector in a rather bright spot, far from the unsophisticated, low-skill stereotype. But looking at the sector as a whole might lead to some misinterpretations. In fact, by looking at the skill intensity across service subsectors, one can see that there is a great deal of variation—on average, in LAC-7, only 8 percent of labor force in the commerce and accommodations sector has a tertiary degree while as much as 34 percent of the workers in “finance, insurance, and other professional services” has one.

FIGURE 2.10. Wages and Education: Levels and Changes by Sector

<table>
<thead>
<tr>
<th>PANEL A. Relative Wages and Education Intensity</th>
<th>PANEL B. Changes in Relative Wages and Changes in Education Intensity</th>
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Notes: Each dot in the scatter plots represents a pair of relative wage change and initial education intensity or the change in education intensity for each of the 63 country-sector combinations (7 countries; 9 sectors). Countries include Argentina, Brazil, Chile, Colombia, Mexico, Peru, and Uruguay. Sectors are defined as Timmer and de Vries (2007). Relative wages are measured as the ratio of the average wage in a given sector and the average wage in the economy. Education intensity is measured as the share of workers in a given sector with a high school degree or a college degree. Changes are measured between the time span between 2002 and 2010. Source: LCRCE from SEDLAC.

29 For the analysis on sectoral wages and skill intensity we use a more disaggregated, 10 sector classification similar to Timmers and de Vrie (2007).

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Could it be that the decline in the share of labor in manufacturing observed in LAC-7 in the 2000s translated into a rise in employment of low skill-intensity non-tradable sectors? And could this be perhaps connected to the puzzling decline in the returns to education (a phenomenon discussed in the October 2012 report, “The Labor Market Story Behind LAC’s Transformation?”)? If anything, the answer to these questions seems is not conclusive. On the one hand, the evidence indicates that it was the high skill-intensity sectors that increased their labor share in the period, at the expense of low skill-intensity activities (Figure 2.11, Panels A and B). In addition, the skill premium in services as a whole remained stable throughout the mid-1990s and the 2000s, suggesting that a pro-service sectoral shift in employment could not be an important determinant of the decline in the skill premium. (A detailed analysis of this last point can be found in Appendix A.) On the other hand, one would need to relate the declining trend in returns to education to the relative demand for education coming from the non-tradable sector taken as a whole, which includes but is not circumscribed to services.

In sum, non-construction services in LAC seem to be a skill-intensive sector with huge potential to gain from skill-biased technical change. Moreover, despite a bleak performance during the 1990s, the 2000s saw a rebirth of services in LAC as a dynamic, productive sector. Despite this, critics of tertiarization might still claim that exports continue to be necessary for growth and that deindustrialization may choke this engine. But, what if the ever-changing global economic setup has blurred the line between what is tradable and non-tradable?

**Can LAC Become an Exporter of Services? A New View of Trade**

At the macro level, the development debate in Latin American (and, to varying degrees, elsewhere as well) is often associated with the concept of industrialization. The conventional view is (i) to highlight the presumed virtues of manufacturing sector growth (e.g., moving up the value added chain via economic activities of higher knowledge and technological content); (ii) regard primarization with alarm or skepticism; and (iii) simply looked down on tertiarization. The concerns with de-industrialization seem at times as the single macroeconomic concern in which academics, policymakers and corporate and labor leaders coincide: the need to protect industrial output and industrial jobs.

However, with the obvious caveat that not all tertiarization is similarly “good” form a development perspective (some may be indeed entail a shift to less productive, “growth-reducing” activities), it is still worth noting that the divide between tradables and non-tradables does not always match the distinction between manufactures and services: services represent a sizable and growing share of exports in most small open economies.

Tell me what goods you export and I will tell you what you will become, seems to be the conclusion of a recent body of literature positively linking export sophistication, on the one hand, and

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30 This question is loosely related to McMillan and Rodrick (2012) who claim that labor in LAC moved from high labor productivity sectors to low labor productivity sectors.

31 This point does not discard that other growing non-tradable sector could help elucidate the puzzle. This would be consistent with the empirical analysis in Gasparini et al. (2011) and in the already mentioned October 2012 report arguing that, as a consequence of a commodity bonanza, low-skilled non tradable sectors (for example, construction) could expand and contribute to depress the aggregate wage premium.
FIGURE 2.11. Change in Labor Share and Education: Levels and Changes by Sector

**PANEL A. Change in Share of Employment and Initial Education Intensity**

**PANEL B. Change in Share of Employment and Change in Education Intensity**

Notes: Each dot in the scatter plots represents a pair of change in relative share of employment and initial education intensity or the change in education intensity for each of the 63 country-sector combinations (7 countries; 9 sectors). Countries include Argentina, Brazil, Chile, Colombia, Mexico, Peru, and Uruguay. Sectors are defined as Timmer and de Vries (2007). Labor shares are measured as the fraction of the labor force working in a given sector. Education intensity is measured as the share of workers in a given sector with a high school degree or a college degree. Changes are measured between in the time span between 2002 and 2010. Source: LCRCE from SEDLAC.

economic performance and labor market dynamism, on the other. Can we extend the argument of exported value added to the exports of services?

Perhaps it is too early to do so, not least because the classification and measurement of services is always a tricky task. But a cursory look at LAC’s exports of services relative to those of comparable economies reveals positive and negative symptoms, as illustrated by Figure 2.12. An important caveat regarding that figure is that—due to data limitations—it does not include one of the most important service export in the region, namely, tourism services. This said, it is clear from the figure that the skill content (again measured by the education levels of the labor force) of exported services in many LAC-7 has been rising in the past decade, most notably in the Southern Cone. Moreover, exports of services with a high degree of sophistication and high skill content, such as computer and information services and other professional and business services, have been increasing in LAC-7 economies relative to GDP over the last decade. On the negative side, exports of services in LAC-7 are still far from what their income levels predict, and are rising from relatively very low levels—compare, for example, the average 7 percent service share of exports for PCE (concentrated in high-skilled business services) or the 12 percent share for SEA with the 3 percent average share recorded by LAC-7 economies. Thus, if a correspondence could be traced between the quality of traded services and growth prospects, the exercise would yield a sobering conclusion: services in LAC7 are still very far from substituting manufactures as a tradable product.

Going back to our original question, we could conclude that tertiarization is not, per se, detrimental to economic performance: if anything, LAC-7 economies have moved closer to the virtual locus that links the size of the service sector and the degree of development. Thus, tertiarization could be seen, above all, as a natural reflection of the solid growth path enjoyed by the region in the past decade—

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32 See Lederman and Maloney (2012) for a comprehensive—and critical—empirical exploration of this premise.
inasmuch as the service sector can become competitive enough to follow in the steps of other fast-growing or developed economies. At any rate, rather than completely discarding it as an undesired Dutch Disease by-product, proactive development policies should embrace sophisticated services as crucial to the Latin American path to sustainable growth.

**FIGURE 2.12. Export of Services, Excluding Tourism**

**PANEL A. Exports Across Different Types of Services**

**PANEL B. Exports of Skilled Services**

**PANEL C. Exports of Services, Excluding Tourism**

Notes: In Panels A and C, LAC7: Argentina, Brazil, Chile, Colombia, Mexico, Peru, and Uruguay. EE: Croatia, Estonia, Hungary, Lithuania, Poland, Romania, Slovakia, and Turkey. SEA: Indonesia, Malaysia, Philippines, South Korea, and Thailand. PCE: Australia, Canada, New Zealand, Norway, and Sweden. Averages for each group are calculated using countries with available data. Source: LCRCE from Haver Analytics.
**Conclusion: Time to Row**

The Latin American path to growth since the early 2000s presents a pattern that does not fully fit the traditional terms of trade bonanza-Dutch disease concerns that usually appear in the popular debate. Not that commodity terms of trade have played no role; on the contrary, as we document in the first section of this report, global drivers (including external demand and generous global liquidity) help explain a big share of the performance of commodity producers prior, during and after the global crisis. But, despite the appeal that the export-led model in South East Asia often exerts in policy circles, the underlying mechanism in fast-growing LAC economies is almost the opposite of the current account surpluses and high domestic savings, and export-led growth that characterize the East Asian countries.

LAC mix, instead, has featured a narrowing and, presently, mostly negative current account balance, and imports of capital and intermediate goods financed mainly by foreign capital (again, in contrast with conventional wisdom, mostly FDI) that eventually takes its toll in the form of large factor payments abroad. In a sense, one could think of this identikit as the reversal of the Lucas paradox, with foreign savings flowing to countries with higher growth prospects. Contrary to an export-led growth, net exports in LAC have had a negative contribution to growth. LAC’s growth pattern may thus be best described as a **domestic demand-led model**, in which private consumption (aided by the improvement in real income) and, particularly, investment (fuelled as much if not more by FDI than by the trade balance) played a crucial role.

Is this a mix that can yield a sustainable path to growth for Latin America in the future? Hard to tell: as we noted, it is neither a homogenous nor a deliberate pattern. But there are reasons to believe that the identikit outlined in this report is more than circumstantial and may be a key structural trait that will accompany LAC for many years to come.

For starters, the export-led industrial pattern associated with the Asian tigers is an unlikely option for the region. First there is the lack of scale: for many reasons, Latin America has so far failed to integrate into one large market to enhance what currently amounts to a number of small scale national markets. An expanded domestic market strategy, namely, the deepening of regional integration as a first step to develop international competitiveness, while still a possibility, appears at the current juncture hampered, among other obstacles, by political mistrust, the lack of regional leadership, and a fragmented “spaghetti bowl” of partial and bilateral trade arrangements (Levy Yeyati et al., 2012). A second obstacle lies in the labor cost. The largest Latin American countries may still have pending assignments on the poverty and social equity fronts, but they have gone a long way in improving living standards, which includes a substantial improvement in real wages. Moreover, to varying degrees, whatever price advantage they may have had by the end of the financially turbulent 90s, it was largely eroded by the appreciation of the 2000s. As a result, LAC’s labor is today more expensive than the tigers were in the early 80s, or than the new tigers like Indonesia or the Philippines are today (Figure 2.13). In this light, competing with low prices through conventional industrial policies (temporary protection, subsidized credit, and import substitution) does not look like a promising proposition.

This does not mean that we need to neglect the industrial sector by opening up to foreign competition and investment; on the contrary, high-skilled services depend on the important
FIGURE 2.13. Hourly Costs in Manufacturing in Selected Countries


synergies they have with industrial activities. Besides, as we emphasized above, there is a very thin line between industry and services in a geographically integrated and vertically fragmented business world. At any rate, advanced commodity-rich economies such as the ones grouped under PCE appear a more likely target. It is optimal—and easier, both economically and politically—to invest in education and infrastructure to increase productivity and compete in sophisticated markets with Australia, Canada or Sweden, than to lower labor costs by keeping an undervalued currency. Indeed, this seems to be the direction in which many of the most dynamic regional economies seem to be pointing, judging from the renewed interest in educational reform and investment in infrastructure.

After a first stage in which LAC was able to improve educational inclusion and attainment (Figure A.3, Panel A), now the challenge lies in education quality (where the region is still visibly lacking) and in a better match with the demands from the productive sector. A cursory look at the composition of tertiary degrees suggests that we may be not producing the right mix of skills (Figure 2.14).

As global winds lose strength, some observers are starting to highlight the possibility that the region may have spent too much of the commodity windfall—the flipside of the increase in domestic demand and the dependence on FDI flows that we defined as central elements of the growth pattern in SAM. Interestingly, these concerns relate to a more fundamental dilemma between the welcome social welfare gains of pro-poor policies, on the one hand, and the fears that the region may not be saving enough in good times, on the other. To what extent did the rise of the middle class and its broader access to the banking sector, by promoting consumption, worsen the historically poor savings record in the region? More generally, is LAC spending too much? The answers to these questions are still open; the bidirectional links between domestic savings, income distribution and development are complex and remain relatively unexplored, at least in the region. However, it is unlikely that the savings rate should increase significantly in the near term. In this light, the Latin American path to growth should continue to make a smart use of foreign capital to substitute for insufficient savings and improve the quality of investment. This may imply, however, a real exchange
rate that is biased towards appreciation, further highlighting the need for LAC to crack the productivity nut. Finding the right balance between foreign capital, productivity-enhancing policies, and the need to keep onshore a fair share of the rents of FDI-funded investment (through, for example, a set of rules flexible enough to accommodate a changing environment without threatening property rights) remains at the top of the institutional agenda.

LAC has attained quite a lot in the 2000s, including macroeconomic stability, solid growth, poverty reduction, and a fairer income distribution. The challenge for economic policy is to preserve and improve on past gains, consolidating the dividends of pro-poor growth but, more likely than not, without the assistance of tailwinds that the world blew in LAC’s direction. The tailwind is gone and we can no longer sail effortlessly. It is time to row.
Appendix A

Does Tertiarization Substitute Bad Jobs for Good Jobs?

Squaring the Skill Premium Puzzle

Chapter 2 documents the rise of the tertiary sectors in LAC in the 2000s. There is a labor side of the bad tertiarization story: one that sees tertiarization as a process that trades low-skill for high-skill jobs, lowering overall productivity and placing a cap to the rise of real wages. Can this be a driving force behind the decline in the skill premium observed in the region?

There are in principle two ways in which we can measure how much more one gets paid on average (that is, controlling for other relevant variables such as gender or experience) as we accumulate human capital. The first one estimates the wage increase per year of study (more specifically, for each curricular year successfully completed). The second one controls for the highest degree attained. Because it captures in a concise way the typical nonlinearity of a degree (the fact that one gets paid proportionally more for a complete degree than for five fourths of it), for the discussion below we choose the second approach.

A first pass at the data gives us the big picture: the premium associated with a secondary school degree declined visibly and steadily since the mid-90s, although at a faster pace in the 2000s (Figure A.1, Panel A). By contrasts, the tertiary degree premium (the wage premium paid to workers with complete tertiary education relative to those with a secondary degree) has gone up and down but remained relatively stable over the period. How does this tertiary premium compare with other countries? Just as an illustration, the premium did not differ markedly from that in the US in the 90s, but showed a negative correlation in the 2000s: whereas wage inequality increased in the US, it went down in LAC7 (Figure A.1, Panel B).

The downside of the decline in wage inequality in LAC (in principle a good thing) has been highlighted by De la Torre et al. (2012): it may be attributed not to a equalizing upward move of wages at the lower end but rather to a downward move for skilled workers due to a weaker demand for skills. Could it be that tertiarization is behind the evolution of the skill premia, or are other non-tradable sectors like construction more plausible suspects? Based on a preliminary scrutiny, a number of stylized facts suggest the latter.

First, as was documented in Chapter 2, services broadly defined are on average skill-intensive sectors in LAC. So one question emerges: is there a negative association between sectoral intensity and changes in the skill premium? Moreover, although technological change is generally seen in developed economies as skill-biased and leading to a widening in the skill-premium (Acemoglu (1998) among others), the opposite may be true in services in the developing world, in which case the demand for skills may also decline, compressing the premium. Has the skill premium decline more in sectors where the demand for skills (its skill intensity) showed smaller changes?

33 There are, of course, combinations that control for both years and degree, as well as potential nonlinearities. Box A. describes the basic computations, stylized facts and main references on the subject, as well as the computation of secondary and tertiary skill premia by country and by country-sector used in this section.
The first question is explored by looking at the relation between changes in skill premium and skill intensity, for which we find a positive correlation. This finding suggests that it is the low-skill-intensive sectors that are the main force behind the fall in the skill premium (Figure A.2, Panel A). To answer the second question we do a similar exercise but looking instead at changes in skill intensity and its relation with change in the skill premium, but we find no significant link between the two (Figure A.2, Panel B).

We can perform a more direct analysis of the contribution of different sectors to the evolution of skill premia by estimating skill premia by sector over time, for each of the LAC-7 countries. The results for the tertiary and secondary premia are plotted in Figure A.2. The figure confirms the trends shown in Figure A.1: downward sloping for secondary education and more stable and disperse for tertiary education, with the premium widening in some sectors (finance) and narrowing in others (construction).

Construction deserves a special note, as it is a low-skill service activity that increased its relative wage the most in countries like Mexico or Brazil. Was the construction boom behind the evolution of the skill premium, as has been the case, for example, in countries that underwent systemic real estate booms? It may have played a role in the 2000s, when construction picked up in most LAC-7, particularly for the tertiary premium, but it is less clear that it accounts for the decline in the secondary premium given that all sectors (with the exception of the labor scarce agriculture) exhibited the same downward trend throughout the period.

All this preliminary evidence taken together cast some doubt on the premise that domestic demand-led growth—more specifically, the strengthening of the demand for non-tradable services at the

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34 As Bonhomme and Hospido (2012) document, in Spain the skill premium in construction declined markedly with the real estate bubble and rebounded accordingly when it burst, with a significant influence on the evolution of the premium for the economy as a whole.
FIGURE A.2. The Skill Premium Across Sectors

PANEL A. Education Intensity and Changes in the Education Premium

PANEL B. Changes in Education Intensity and Changes in the Education Premium

PANEL C. The Skill Premium Across Sectors - Secondary/Primary

PANEL D. The Skill Premium Across Sectors - Tertiary/Secondary

Notes: Sectoral skill premia in Panels A and B are estimated country by country according to equation A.2.4 in Box A. Countries include Argentina, Brazil, Chile, Colombia, Mexico, Peru, and Uruguay. Education intensity is measured as the share of workers in a given sector with a high school degree or a college degree. Each dot in the scatter plots represents a skill intensity, wage premium pair for each of the 63 country-sector combinations (7 countries; 9 sectors). Sectors are defined as Timmer and de Vries (2007). Changes are measured between in the time span between 2002 and 2010. Skill premia in Panels C and D are estimated according to equation A.2.3 in Box A. Source: LCRCE from SEDLAC.

expense of manufacturing—has been the main factor behind the recent decline in the returns to education.

So far, we tried to link the evolution of the premia to changes in labor demand. What about supply factors? The importance of supply shocks to explain the decline in the skill premium has been flagged before (see Lederman and Maloney (2012) and Lopez-Calva and Lustig (2013) among others), typically at an aggregate level without distinguishing by sector and age group. There are many possible reasons why the evolution of returns to secondary and tertiary education may be related to supply factors. First, we know that education attainment has been on the rise in Latin

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55 Azevedo et al. (2013) and Lustig and Lopez-Calva (2010, 2012) have studied the incidence of supply factors in explaining both movements in the skill-premium as well as inequality.
America in the past two decades (Figure A.3, Panel A). This entailed a growing share of the labor force with secondary and tertiary degrees and, accordingly, a boost to the relative supply of skills. In this context, if the demand for skills does not grow to match this larger supply, we should expect a decline in the skill premium as unskilled labor becomes relative scarce—particularly at the secondary skill premium, where attainment grew more markedly. Indeed, a comparison between the supply shock and the demand response (that is, the increase in the relative supply of secondary and tertiary skills and the change in the corresponding skill premium) points in this direction: skill supply is negatively correlated with changes in the skill premium in almost all countries in LAC-7 (Figure A.3, Panel B and C).

Furthermore, to the extent that the supply shock is initially concentrated in the young labor force, we would expect that, in the beginning of the process, the decline in the skill premium should be larger for new entrants (young workers) and their more direct competitors (middle aged workers), spilling only gradually over other age groups (as these young workers become older). This appears to be the case for the secondary premium, where the additional supply was more marked: the premium started to decline in the 90s with the younger groups and hit the older ones in the 2000s (Figure A.4, Panels A and B). Figure A.4, Panel C and D present a different take to the age factor. The secondary premium displays an age pattern that is consistent with the excess supply hypothesis: the decline in skill premium was originally stronger for the younger population and transmitted over time to the other age groups. This pattern is not present for the tertiary premium, which on average declined almost evenly across age groups.

An additional aspect that may explain the compressing skill premia is a change in the quality of the labor force, for a given level of education. We know that the process of educational inclusion involved mainly students coming from low-income households that typically display a weaker school performance. This would imply a lower average aptitude for secondary (and possibly tertiary) education groups, and would correspond broadly to a mean-reducing spread in the distribution of skills for higher education groups—or, more precisely, more disperse and, on average, lower quality of workers with secondary and tertiary degrees—a pattern that should be more visible for secondary education, for which household income may exert a stronger influence on performance.

The sector mismatch hypothesis (namely, the poor correspondence between skill supply and demand) also has a supply-side version. In this case, the mismatch would relate to the concerns, often voiced in an informal way, that Latin America is not producing the right mix of skills, either because of a poor curricular fit (particularly, at the tertiary level) or because of a deliberate career choice of students. As was shown in Chapter 2, the share of “technical” tertiary degrees is weakly but positively correlated with economic development, as measured by per capita income. Against this background, countries like Argentina or Brazil seem to be producing “too few engineers”—that

36 This data is in line (and complements) Figure 4.1 in Lederman and Maloney (2012). As we highlight at the end of this appendix, this falls short of solving the skill premium puzzle. In particular, it is still intriguing why this negative correlation did not dominate in the 1990s’ when the supply of skills was also increasing but the skill premium did not decline.

37 This type of arguments may also be used to explain the decline in the tertiary skill premium. We know that in the 90s, in many LAC7, in the context of what amounted to a liberalization of the university business, there was a surge in private and public universities generally considered of lower standard and therefore associated with inferior student placement and wages.
is, a proportionally small share of professionals in hard disciplines—thus creating, possibly, an insufficient supply of technical skills and an excess supply in other disciplines, which in turn may depress the return to tertiary education as a whole as the number of tertiary degrees rises.

In the absence of micro data that could tell us how the premia changed for different careers, there is little we can do to test this hypothesis. But, if we are ready to accept that the less skill-intense service subsectors, such as construction or commerce, would be the better equipped to absorb this excess supply (at the cost of paying less for the mismatched skills), then we should see a larger decline in skill premia in those sectors. Finally, there is the rising minimum wage effect (the increase of the minimum wage faster than the average wage), which should bunch wages at and just above the
minimum, raising the floor and thereby reducing wage dispersion at the bottom, the more so the greater incidence of minimum wage workers (which, as noted, correlates negatively with skill intensity). Again, this would imply that low skill sectors should exhibit the greater premium compression.

In sum, while many factors intervened to explain the fall in wage inequality and the evolution of the skill premium in LAC7 over the past two decades, the most likely candidates appear to be supply factors (the growth in educational attainment and, possibly, a mismatch between curricular skills and those demanded in the labor market) rather than a side effect of tertiarization.

That said, the skill premium puzzle is far from solved. In work in progress by Fernandez-Sierra & Messina (2013), they apply the classic Oaxaca decomposition to different income distribution quartiles, and find that changes in the composition of the labor force during the 2000’s contributed to increase, not to diminish, the inequality of labor earnings in the biggest Latin America’s economies.
Given that the fall in the returns to education often constitutes the main driver behind the decline in labor income inequality, this research may introduce new evidence that favor demand factors.

As a final remark, note that the characterization of the skill premium decline has important implications. If demand-driven, one could see the narrowing wage inequality as a symptom of an economic pattern that discourages investment in sophisticated skill intensive activities (and, in turn, in human capital). By contrast, if supply-driven, one could regard it as a positive achievement: while the new middle classes may not have saved much of the additional income (because they still lack an attractive menu of saving instruments or may be satisfying pent up demand for durable goods; see Box 2), they have been saving in human capital by increasing years of schooling. A relatively low-pay skilled job is still economically more rewarding than a high-pay unskilled one. Moreover, one should expect that the quantitative and qualitative mismatches behind the lower returns to education will be sorted out over time, as education adapts to the demands in the market, and the market adapts to the new composition of the labor force, a process that ultimately should benefit skill intensive activities. At any rate, the puzzle remains a policy-relevant area for future research.

**Box A. Estimating the Skill Premium**

Throughout Chapter 2 we have used the estimated values of the Tertiary/Secondary skill premium and the Secondary/Primary skill premium to examine possible explanations of its recent behavior, particularly its declining trend. In this appendix we describe alternative methodologies to estimate these premia.

Traditionally, returns to schooling have been estimated using a so-called Mincer regression of the following form

\[
\ln(wage_{it}) = \beta_0 + \beta_1 \text{(years of schooling)} + \gamma X_{it} + u_{it}; \tag{A.1}
\]

where \(wage_{it}\) is the wage of individual \(i\) at time \(t\), \text{years of schooling}_{ij}\) are years of schooling of individual \(i\) at time \(t\), \(X_{it}\) is a vector of individual characteristics which include age, age squared, gender, ethnicity, and interactions of these variables, and \(u_{it}\) is an idiosyncratic shock. In this specification \(\beta_1\) measures the additional return for an extra year schooling for individuals with similar characteristics. Moreover, (A.1) assumes that this additional return is constant. Although a useful starting point, more flexible specifications of equation (A.1) have emerged as the set of questions regarding the returns of education has broadened.\(^{38}\)

In our tests, we choose one such augmented Mincer regression pioneered by Katz and Murphy (1992) and vastly used in the strand of the literature studying the skill premium.\(^{39}\) In particular, we estimate a variant of (A.1) of the form:

\[
\ln(wage_{it}) = \beta_0 + \beta_p \text{(No Secondary)}_{it} + \beta_t \text{(Tertiary)}_{it} + \gamma X_{it} + v_{it}; \tag{A.2}
\]

\(^{38}\) Other specifications include polynomials of years of schooling as well as dummy variables for highest educational degree attained.

\(^{39}\) See Acemoglu, 2002, and Acemoglu and Autor, 2008, for good surveys of the literature.
where now $\text{No Secondary}_{it}$ is a dummy variable which takes value 1 if individual $i$ has no High School degree at time $t$, $\text{Tertiary}_{it}$ is a dummy variable which takes value 1 if individual $i$ has at least a College degree at time $t$, and $X_{it}$ includes sector fixed effects in addition to the controls mentioned above. In addition, we use a 10 sector classification similar to the one in Timmers and de Vrie (2007). In this context $\beta_T$ captures the additional wage received by a College graduate relative to a High School graduate and $-\beta_P$ measures the additional wage received by a High School graduate relative to an individual with no High School degree.

Depending on the exercise we perform we estimate 5 variations of equation (A.2):
(A.2.1) Estimates (A.2) country by country, year by year.
(A.2.2) Estimates (A.2) year by year pooling all LAC-7 & Uruguay countries together and controlling for country dummies.
(A.2.3) Estimates (A.2) sector by sector, year by year, pooling all LAC-7 & Uruguay countries together and controlling for country dummies.
(A.2.4) Estimates (A.2) country by country, year by year, and sector by sector.
(A.2.5) Estimates (A.2) age group by age group, year by year pooling all LAC-7 & Uruguay countries together and controlling for country dummies, where we define 3 age groups (25-34, 35-44, 45+).
References
