

INTERNATIONAL FLOWS TO LATIN AMERICA Rocking the Boat?

April 2014



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Foreword

This semiannual report—produced by the Office of the Chief Economist for Latin America and the Caribbean (LAC) of the World Bank—reviews the economic and financial outlook for the LAC region at a time when the brisk external tailwinds of a few years ago are clearly receding.

As usual in this series, Chapter 1 reviews the configuration of global risks and assesses the outstanding short term opportunities and challenges facing the LAC region. A special focus is placed this time around on the difference between exposure and vulnerability to exogenous shocks, with the latter assessed by adjusting exposure for a country's shock absorption policy capacity. Given the global context and associated concerns with capital flow volatility, in Chapter 2 we take a look at the comparatively more stable components of international flows: FDI and Remittances. The cyclical and volatility, as well as the joint determinants of FDI and Remittances are reviewed.

This report was led by Augusto de la Torre, Regional Chief Economist, Guillermo Beylis, Research Economist, and Jaime de Piniés, Senior Consultant. Samuel Pienknagura kindly helped in preparing several parts of this report. Substantive inputs were provided by Laura Chioda, Tatiana Didier, Samuel Freije-Rodriguez, Alain Ize, Carlos Felipe Jaramillo, Auguste Kouame, Daniel Lederman, Humberto Lopez, Zafer Mustafaoglu, Marcela Sanchez-Bender and Sergio Schmukler, as well as by members of the Regional Leadership Team of the Latin America and the Caribbean Region of The World Bank. Nicolas Kohn and Tanya Taveras provided outstanding research assistance.

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Executive Summary

Global financial markets continue to be jittery and volatile. Shifts in expectations regarding monetary policy normalization in high-income countries, particularly the U.S., are a key force behind such volatility. More recently, however, concerns about the future of the Chinese economy and the associated effects on commodity prices have significantly contributed to the jitters. Forecasts for Chinese growth in 2014 have been revised downwards in past months and worries have intensified about the implications of a deleveraging process that appears inevitable, given the dramatic post-2008 credit expansion (domestic credit in China rose from 110 percent of GDP in 2008 to 140 percent in 2012, and, if estimates of “shadow credit” are factored in, from 130 percent in 2008 to at least 190 percent in 2012).

In this global context, a wave of capital has been flowing from emerging markets (EMs) towards the safer assets in high-income countries, so much so that the U.S. yield curve has actually flattened in recent months, despite the generalized conviction that U.S. interest rates are bound to rise in a not-too-distant future. At the same time, commodity prices, excepting perhaps foods, have tended to remain flat or falling, with industrial metals having been hit particularly hard recently. The bright side in the global panorama is that growth in high-income countries is expected to endure, even if at still subdued rates, in the near term. This, together with positive but decelerating growth in China and other large EMs, is expected to sustain an expansion in global trade of around 4.5 percent in 2014.

Against this backdrop, EMs in general, and Latin America and the Caribbean (LAC) in particular, are taking a hit. For starters, a lion’s share of the recent gyrations in EM asset prices (currencies, bonds, stocks) can be attributed to global factors, i.e., factors independent of the quality of domestic policies in EMs. Moreover, economic growth in EMs is experiencing a fairly generalized deceleration—of about 3 percentage points compared to the growth rates that prevailed before the global financial crisis of 2008-09. LAC, in particular, seems to be settling in a low-growth equilibrium, with its economy expected to expand by only 2.3 percent in 2014, slightly below the already disappointing growth rate of 2.4 percent in 2013, and less than half of the 5 to 6 percent rates to which the region became accustomed in the good, pre-global crisis years. Considering the difficult global context, the forecast for LAC growth unfortunately faces more downside than upside.

There is, however, a great deal of heterogeneity in the growth outlook for countries within LAC. Growth forecasts for 2014 range from negative 1 percent in Venezuela to near 7 percent in Panama which is followed closely by the other top consistent performer in the region Peru at 5.5%. Other good performers where investment rates also increased significantly in the past decade like Chile and Colombia, continue to beat the regional average with expected growth above 3.5 percent. Mexico and Brazil, the two largest economies in the region, deserve special mention. The former is envisaged to rebound from last year’s unexpected slowdown, growing in 2014 at around 3 percent, above the region’s average. Moreover, the wave of recent bold reforms in Mexico—involving banking, education, telecommunications, tax, and energy—have raised investor optimism and improved growth prospects beyond 2014. In Brazil, consensus forecasts put growth for 2014 at or below 2 percent; a reform agenda to avoid a low-growth/low-saving/low-investment scenario has not yet fully coalesced.

LAC’s exposure to external shocks is not independent of its domestic demand-driven growth pattern. As has been discussed in previous reports in this series, LAC transformed external windfalls (high commodity prices and cheap external financing) of the 2000s into domestic demand (consumption and investment) dynamics. This pattern, which stands in sharp contrast with external demand-driven East Asia, explains why the region’s brief period of current account surpluses of the mid-2000s started to revert already in 2007, before the eruption of the global crisis, and current account deficits have re-emerged. The flipside of current account deficits is the region’s low savings rate and, hence, its systematic tendency to rely on foreign financing.

Despite its chronic need to finance its external deficits, LAC today might be better able than in the past to protect local economic activity and employment from external shocks for at least two reasons. First, exposure to external shocks, a natural byproduct of LAC's integration into international markets, does not need to translate into vulnerability. Indeed, in sharp contrast to the 1980s and 1990s, many countries in the region have become less vulnerable even as they have become more exposed, because of sturdier macro-financial immune systems built over the past decades. Indeed, the monetary, fiscal and financial magnification channels that in the past transformed external shocks into domestic crises have in many cases been turned into shock absorbers. So much so that for those LAC countries with well-established inflation targeting regimes (which jointly represent around 75 percent of the region's GDP and population), cyclical fluctuations in the future are more likely to resemble the business cycles typical of advanced economies than the boom-bust patterns of Latin America's past. To be sure, macroeconomic buffers in the region, especially fiscal, are weaker now across the board compared to where they were in September 2008, at the outset of the global crisis. Yet many of the mid-to-large countries in the region have maneuvering room—albeit in varying degrees—to engage in counter-cyclical monetary policy as needed (i.e., to lower interest rates and let the exchange rate depreciate without inflationary or adverse financial system consequences). However, a significant number of countries in the region—particularly in Central America and the Caribbean—are highly exposed and vulnerable to adverse external shocks, for they have neither the fiscal nor the monetary capacity to respond counter-cyclically.

The second reason to be cautiously optimistic about LAC's resilience to external shocks is that, in another clear break with history, the region has rebalanced its sources of financing away from portfolio and bank credit flows and towards foreign direct investment (FDI) and remittances. This shift started in the mid-1990s but was consolidated in the 2000s and is part of a major re-composition—away from debt and towards equity—of LAC's asset-liability position vis-à-vis the rest of the world. Indeed, LAC has become a net lender to the world (in large part a reflection of the accumulation of international reserves) even as it has increasingly become a recipient of FDI. This significantly reduces the region's vulnerability to rollover and interest rate risks, while the combination of exchange rate flexibility and high levels of international reserve acts as a deterrent to self-fulfilling runs. Importantly, the cyclical properties of FDI and remittances are markedly different from those of non-FDI flows. The former are more stable, less reversible, and less pro-cyclical than the latter; in the case of remittances they are actually counter-cyclical. These new features of LAC's international financial integration provide some comfort in the current turbulent times.

Notwithstanding the benign cyclical properties of FDI and remittances, they both present major challenges. These are in part associated with the fact that a surge in both types of flows worsens the current account balance, albeit through different channels. In the case of FDI, imports of capital and intermediate goods are financed by foreign capital that eventually gets repaid in the form of dividend payments that subtract from the trade balance, placing the current account in negative territory. In the case of remittances, the vast majority of resources are used to sustain household consumption, including of imported goods, thus worsening the trade balance. Regardless of the channel, however, both FDI and remittances can promote Dutch Disease-type effects, where the real exchange rate appreciates more than otherwise, eroding the country's external competitiveness and, hence, growth potential.

Nonetheless, there is a fundamental difference between the two flows. FDI has a built-in capacity to offset the loss of competitiveness by raising productivity through technological and knowledge spillovers. Remittances, by contrast, and for all of their potential benefits in terms of sheltering households from poverty, tend to lack this capacity and are therefore more likely to become a systematic drag on growth. To be sure, FDI inflows by themselves are not a silver bullet as they may not produce the desired increases in productivity. The region is indeed a place where large FDI inflows puzzlingly coexist with persistent low growth. The most obvious case is given by the Caribbean nations, which have suffered from consistently low growth even as they have also been the largest FDI recipients (as a percent of GDP).



Therefore, in examining the challenges for LAC's saving-constrained, domestic demand-driven growth pattern, it is essential to examine FDI and remittances jointly, something that economists have not typically done. From this vantage point, it is clear that the same underlying institutional and business climate factors may drive both FDI and remittances, although in opposite directions. Thus, a sound enabling environment (in terms of the quality of the human and physical capital, the reliability and clarity of contract rights, the strength of information standards, and the credibility of the rules of the economic game) pulls FDI inflows that naturally leverage the local workforce. By contrast, glaring deficiencies in the enabling environment push workers to migrate abroad, despite personal and family costs, in the search of opportunities that are not found at home. In some sense, therefore, FDI and remittances are substitutes.

All LAC countries need to improve the domestic policy and institutional context, as well as the quality of the local human and physical capital, but even more so those that rely heavily on remittances. The countries in the region that have already managed to attract considerable FDI should strive to capitalize on potential positive externalities. Maximizing the learning spillovers and technology diffusion effects of FDI will help raise productivity and offset the lower external competitiveness that tends to be a side effect of a domestic demand-driven growth pattern.

The countries in the region that rely heavily on remittances face even more daunting challenges. To start with, they should focus on innovative policies geared at incentivizing households to use at least part of their remittance income toward asset building—particularly through investments in health, education, and housing. More fundamentally, those countries should put a premium on the hard task of continuously improving their domestic enabling environments so as to attract both their own workers and FDI, and then seek to harness the productivity benefits of the efficient interaction between the two.

Chapter 1:

Exposure and Vulnerability to Mutating Global Risks

Introduction

Latin America and the Caribbean (LAC) face a challenging period. The brisk external tailwinds of past years, which provided an exogenous boost to LAC's growth, have dissipated. It has become increasingly clear since 2012 that those favorable tailwinds have been receding and now appear to be giving way to global headwinds. The increases in the cost of capital (punctuated by episodes of capital inflow reductions and reversals), declines in commodity price, and slowdown of the Chinese economy seem to be adversely affecting Emerging Market (EM) growth and its prospects. How severe these external shocks may be remains uncertain and their impact on LAC will depend on the degree of exposure and shock absorption capacity of each country in the region. Under current expectations, real GDP in LAC is forecast to grow by only 2.3 percent in 2014, below the already low rate (2.4 percent) registered last year. Unfortunately, and as discussed below, the risks to this forecast appear to remain on the downside.

What's New? Mutating Global Risks

Since the FED signaled that it was ending Quantitative Easing in May 2013, Emerging Markets (EMs) have found themselves on the defensive. The cost of capital to EMs rose with the yields on US Treasuries (**Figure 1.1, Panel A**). In addition, slowdowns and reversals in capital flows, which are documented below, followed the announcement forcing some EMs to raise policy rates and others to let their currencies depreciate, the latter partially cushioning the shock. The expectation of rising international interest rates has acted as a “pull” factor, drawing portfolio flows away from EMs towards high income countries and putting downward pressure on EM asset prices. For example, EM currencies and equity indices were in retreat after the FED announcement whereas the US dollar and high income country equity indices strengthened (**Figure 1.1, Panels B and C**). EM bond spreads over US Treasuries also rose (**Figure 1.2, Panels A and B**). These spreads are usually tightly correlated with proxy measures of global risk aversion, such as the VIX (which gauges the implied volatility of option contracts on the S&P 500).¹ But as **Figure 1.2** shows, EM spreads including those of LAC rose significantly beyond the VIX, suggesting enhanced aversion to EM risk.

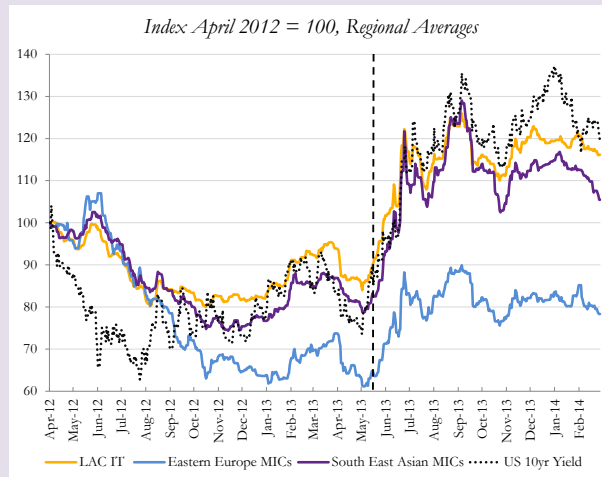
Interestingly, since our last Semiannual Report (October 2013), the US yield curve has actually flattened somewhat (**Figure 1.1, Panel D**). This may not only reflect the FED announcement in December that the taper of Quantitative Easing would be implemented only gradually. It may also reflect concerns with weaker growth prospects in China and in other large EMs (especially the so-called “Fragile Five”), which may be acting as a “push” factor that induces EM capital to find refuge in safer US assets, thereby putting downward pressure on the US yield curve.² Recent geopolitical

¹ For example, Rey (2013) finds that portfolio and credit flows are highly and negatively correlated with the VIX.

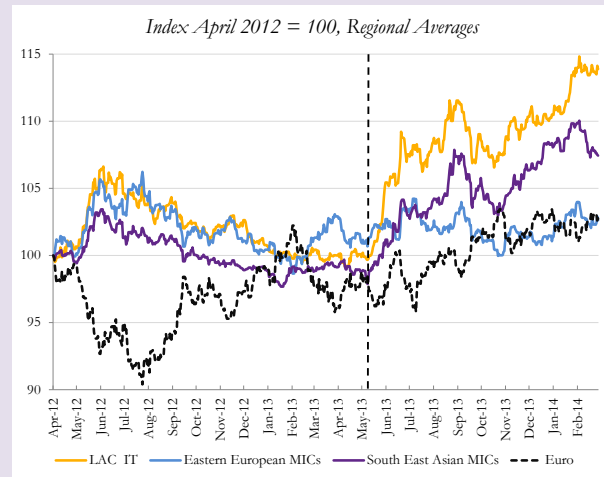
² The term “Fragile Five” was coined at Morgan Stanley during the summer of 2013 and refers to Brazil, India, Indonesia, South Africa and Turkey.

FIGURE 1.1. Financial Conditions

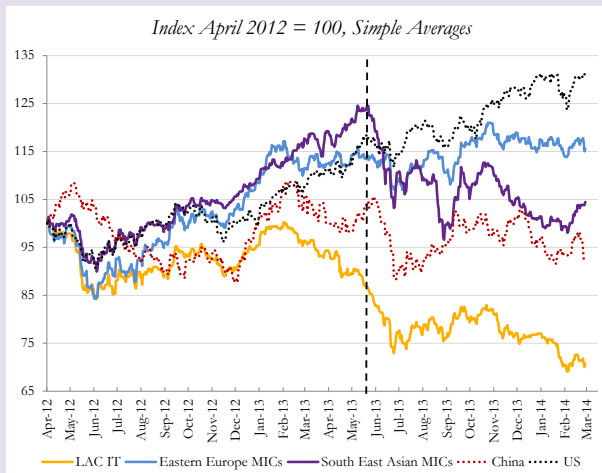
PANEL A. Sovereign Bond Yields in USD



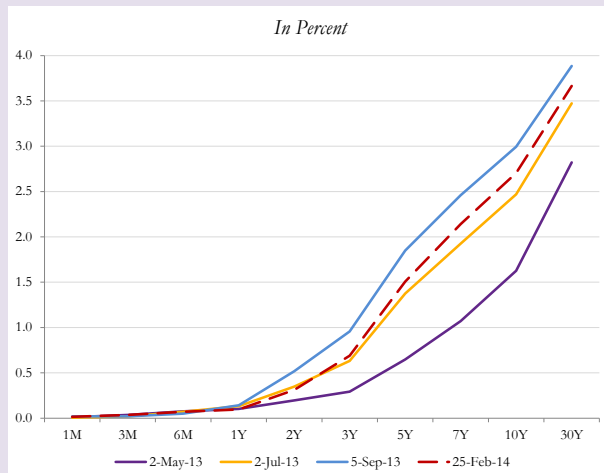
PANEL B. Currencies



PANEL C. Stock Market Indices in USD



PANEL D. US Yield Curve



Notes: In Panels A-C, the vertical dashed line corresponds to the US Federal Reserve's signaling the tapering of the quantitative easing. LAC ITs include Brazil, Chile, Colombia, Mexico and Peru. Eastern Europe MICs include Croatia, Estonia, Hungary, Lithuania, Poland, Romania, Slovakia and Turkey. South East Asian MICs include Indonesia, Malaysia, Philippines, South Korea and Thailand. Sources: Bloomberg and LCRCE.

concerns surrounding the Ukraine offer yet another flight to safety factor that can help explain why the longer end of the US yield curve has flattened slightly. Nonetheless, most observers expect that US bond yields will eventually rise as they are still well below their historic averages.³ Uncertainty over the timing of the “liftoff” of current zero policy rates in the United States—currently expected before mid-2015—also persists.⁴

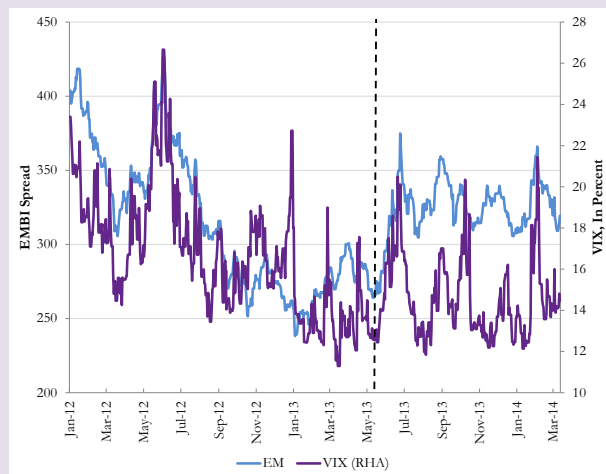
The slowdown of growth in China has drawn special attention since it is the largest EM and the

³ For example, the baseline estimation used by the US Congressional Budget Office is 5.2 percent for the 10Y bond yield by 2018 which is nearly double the current rate. See Elmendorf (2013).

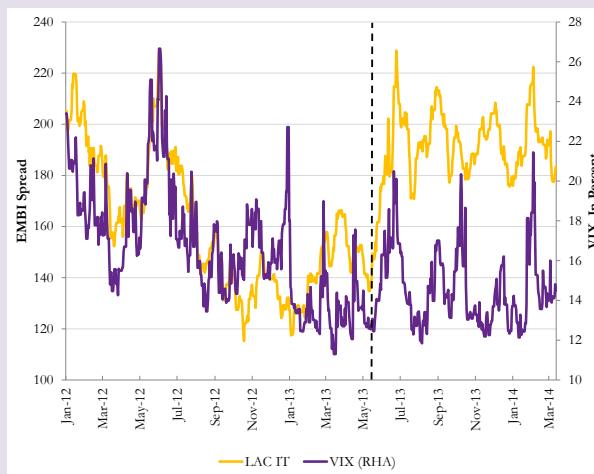
⁴ The term “liftoff” refers to the moment when financial market participants expect the US Fed to exit from near-zero rate policy. See Christensen, (2014). This research suggests that market participants expect the FOMC (Federal Open Market Committee) to start raising rates in the spring of 2015, but the exact timing is highly uncertain. Recent testimony by the new FED Chairwoman, Janet Yellen, appears to have brought that expectation nearer in time. In general, the timing of interest rate rises in the US will depend on growth prospects, employment and the inflation outlook.

FIGURE 1.2. Increasing EM Risk Aversion?

PANEL A. EMBI Spread in Emerging Markets and the VIX



PANEL B. EMBI Spread in LAC-IT and the VIX



Notes: The vertical dashed line corresponds to the US Federal Reserve's signaling the tapering of the quantitative easing. LAC IT includes Brazil, Chile, Colombia, Mexico and Peru. EM corresponds to the Emerging Markets grouping of J.P. Morgan's EMBI (which stands for Emerging Markets Bond Index). Sources: Bloomberg and LCRCE.

second largest national economy in the world. Real GDP growth in China has receded from more than 11 percent in 2010 to the current forecast of approximately 7.5 percent in 2014 (**Figure 1.3, Panel A**). This slowdown is widely interpreted to be part of a transition from an export-led to a more domestic demand driven growth model. The transition, however, may be complicated by the need for the economy to digest its excess capacity and the unwinding of an unusually strong and perhaps excessive expansion of domestic credit, both in the banking and shadow banking sectors (**Figure 1.3, Panels C and D**).⁵ Non-performing loans and defaults are clearly on the rise and concerns have intensified about a more generalized problem of solvency in the banking system.⁶ To be sure, a Western-style financial crisis with bank runs and panics is unlikely in China, given its closed capital account (nowhere to run) and the government's ample fiscal capacity to absorb losses, protect depositors, and prop-up financial institutions.⁷

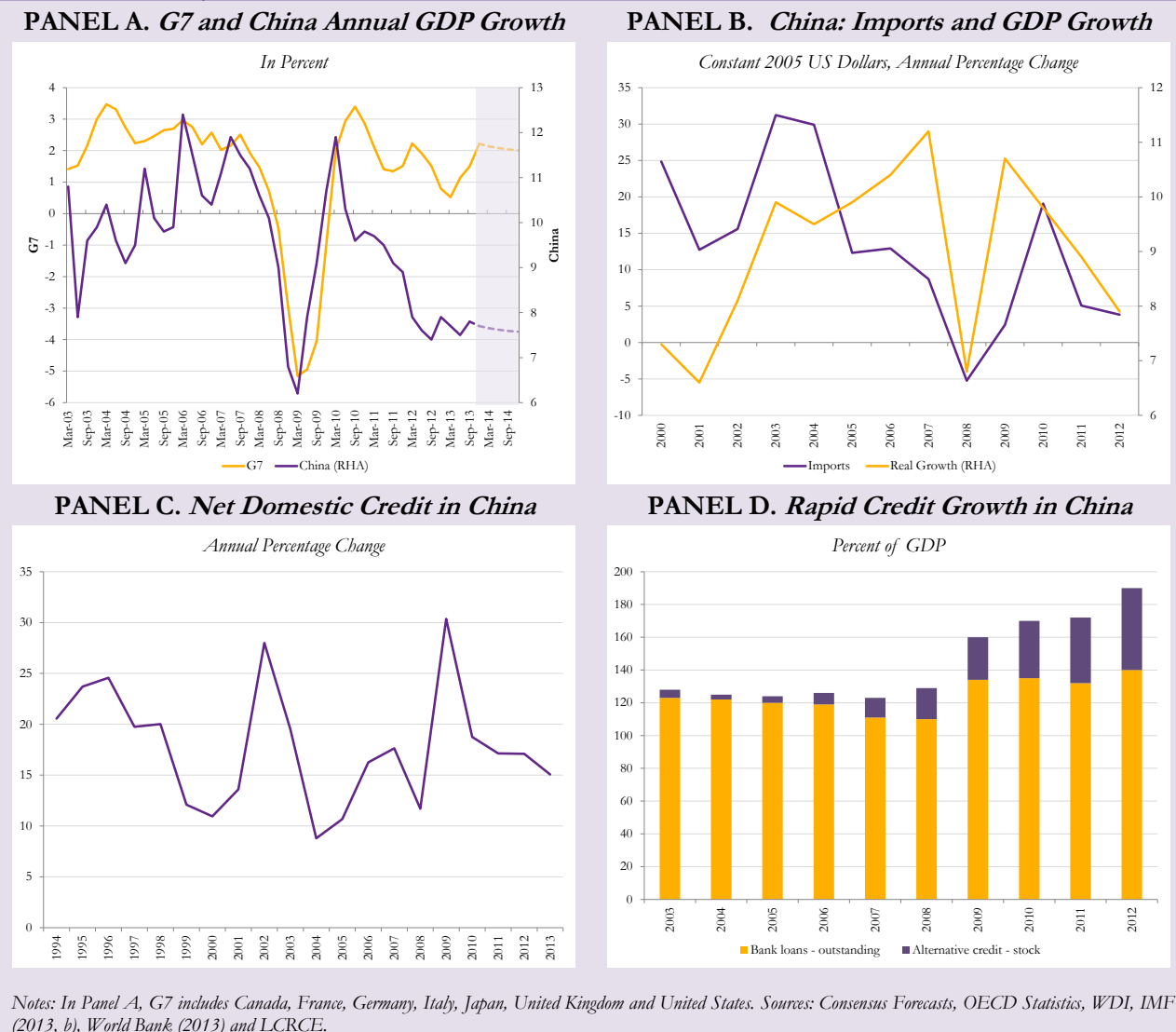
Nevertheless, a pronounced process of deleveraging in China will no doubt hinder growth, posing further downside risks to global growth and to growth in EMs in particular. This would further weaken commodity prices, especially the prices of industrial metals, not only via lower commodity import demand (**Figure 1.3, Panel B**) where Chinese import demand is closely correlated to GDP

⁵ Shadow banking can be defined as: "a set of activities, markets, contracts and institutions that operate partially or fully outside the commercial banking sector, and, as such, are either lightly regulated or not regulated at all". See World Bank (2012).

⁶ Market observers were rattled in March 2014 by the unprecedented corporate debt default of Shanghai Chaori Solar Energy Science & Technology. Premier Li Keqiang of China has been widely reported as warning that future default on bonds and other financial products are "unavoidable"; IIF Weekly Insight (2014).

⁷ The Chinese government capacity to absorb the losses is illustrated by its low debt (23 percent of GDP) and the enormous stock of foreign reserves (US\$ 3.8 trillion at the end of 2013). Recent reforms to improve the business environment and rationalize taxation may also help to support growth, even in the short run. That China has a relatively closed capital account is evidenced by its very low Chinn-Ito index of minus 1.17. The Chinn-Ito index is a measure of openness in capital account transactions which ranges from 2.44 (most open) to minus 1.86 (least). See, Ito and Chinn (2013).

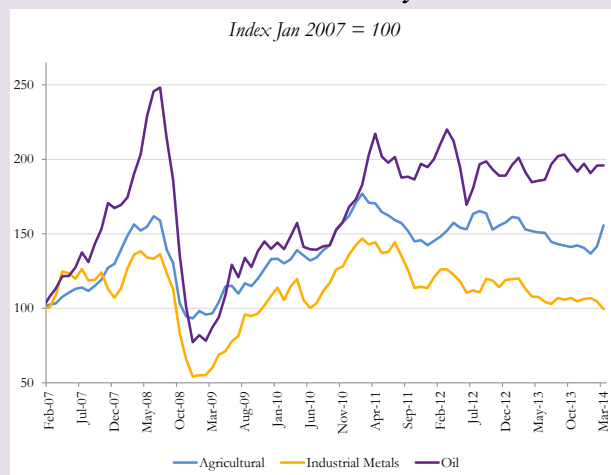
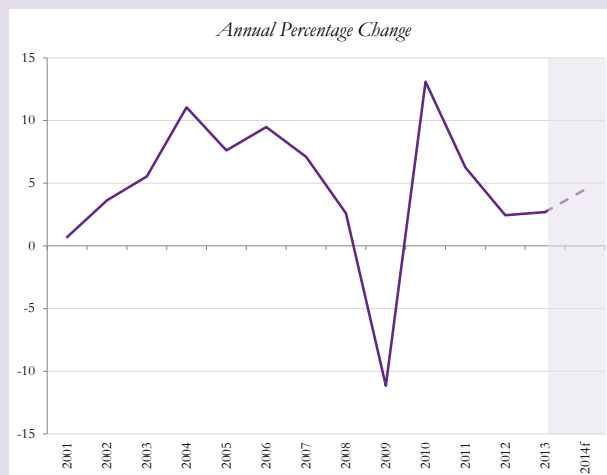
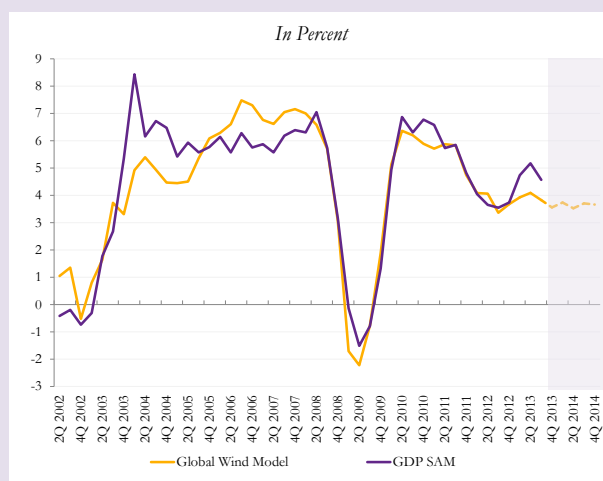
FIGURE 1.3. Key Growth Rates and Select China Indicators



growth, but also via financial channels. In effect, as growth in China recedes and corporate non-performing loans mount, the liquidation of commodity-related collateral by banks appears to have placed downward pressure on copper prices. The very recent bout of copper price weakness has been traced to this source.⁸ This would add to the ongoing softening of commodity prices, which by and large are below their 2011 highs, with industrial metals hit hardest (**Figure 1.4, Panel A**).

On the positive side, growth prospects are improving modestly for high-income countries in 2014 and beyond. The United States is expected to maintain its current, admittedly low, rate of growth, as is Japan, and Western Europe has finally begun a mild recovery. The key question for EMs is whether these positive global factors will be sufficient to offset the effects of the slowdown in China. In any case, tepid growth in high income countries may not provide support to commodity

⁸ See Hume (2014).

FIGURE 1.4. Global Factors and Wind Model Forecasts
PANEL A. Commodity Prices

PANEL B. World Trade Volume

PANEL C. Global Wind Model and SAM


Notes: In Panel A, Commodity Prices: Agricultural includes beef, coffee, cotton, fish, maize, palm oil, soybeans, soybean oil, sugar and wheat. Industrial Metals include aluminum, copper and iron ore. Agricultural and Industrial Metals are simple averages of the commodities within each class. In Panel C, The Global Wind Model regresses the first principal component of GDP SAM on global factors, which can be divided into: GDP growth of G7 economies and GDP growth of China, the first principal component of commodity prices (copper, maize, oil, soybeans and wheat) and the first principal component of financial factors (volatility of the S&P 500 (VIX), US 10 year bond yield and JPMorgan's Latin America EMBIG Spread). Shaded areas represent forecasts. GDP SAM is the (simple) average of GDP growth rates for the South American countries (Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Paraguay, Peru, Uruguay and Venezuela) and Mexico. Sources: World Bank Pink Sheet, Bloomberg, OECD Statistics and LCRCE.

prices nor significantly mitigate the ongoing jitters in international financial markets, which are largely driven by anxious shifts in expectations regarding the process of monetary policy normalization in the US and the growth prospects and macro-financial complications in the so-called Fragile Five EMs.

Given this context, the growth of global trade also hangs in the balance with the most general expectation being that trade volumes will rise from 2.7 percent in 2013 to 4.5 percent in 2014 (**Figure 1.4, Panel B**).⁹ The risks to this growth forecast for global trade are, again, unfortunately on the downside. Even at 4.5 percent, the forecast for trade volumes is subdued compared to recent

⁹ See IMF (2014).

history and reflects not just the slowdown in China but also the weakness of the recovery in Europe where fears of a Japanese style deflation are growing steadily. The swing in the periphery of the euro area from large current account deficits in the pre-financial crisis years before 2008 to surpluses may be another factor weighing on trade volume growth. These current account surpluses are expected to be maintained in the euro area in the coming years.¹⁰ The weakness of the European recovery and the relatively low growth rate of the United States have a special bearing in the LAC region on Mexico, Central America and the Caribbean nations.

Going forward, the potential for more disruptive global headwinds is a real downside risk. In particular, large swings in the most volatile components of capital flows to EMs, i.e., portfolio and bank credit flows cannot be ruled out. Neither can a less than smooth transition to a more normal monetary policy in high income countries, nor a rocky transition to a lower growth trend in China, as part of its structural shift to a more domestic demand-driven pattern. There is even the risk that Europe's timid recovery might also be punctuated with bouts of deflation. Finally, and linked to the potential of lower growth in China, there is a nontrivial risk that commodity prices fall much more than currently anticipated.

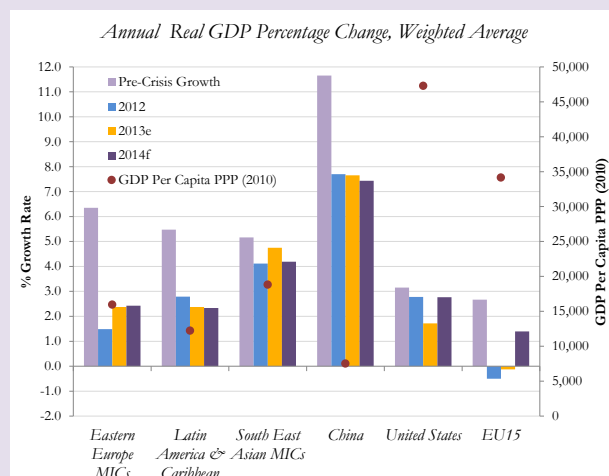
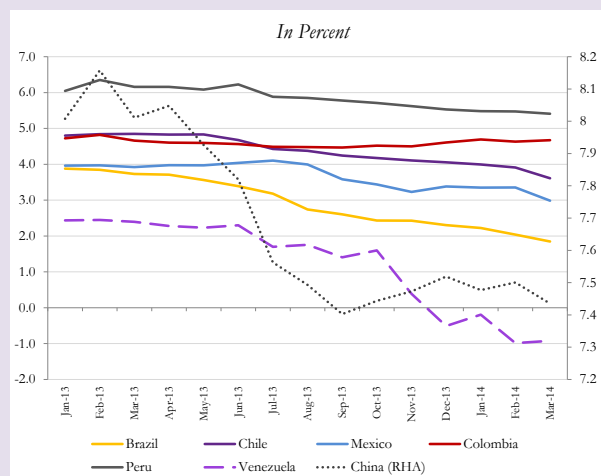
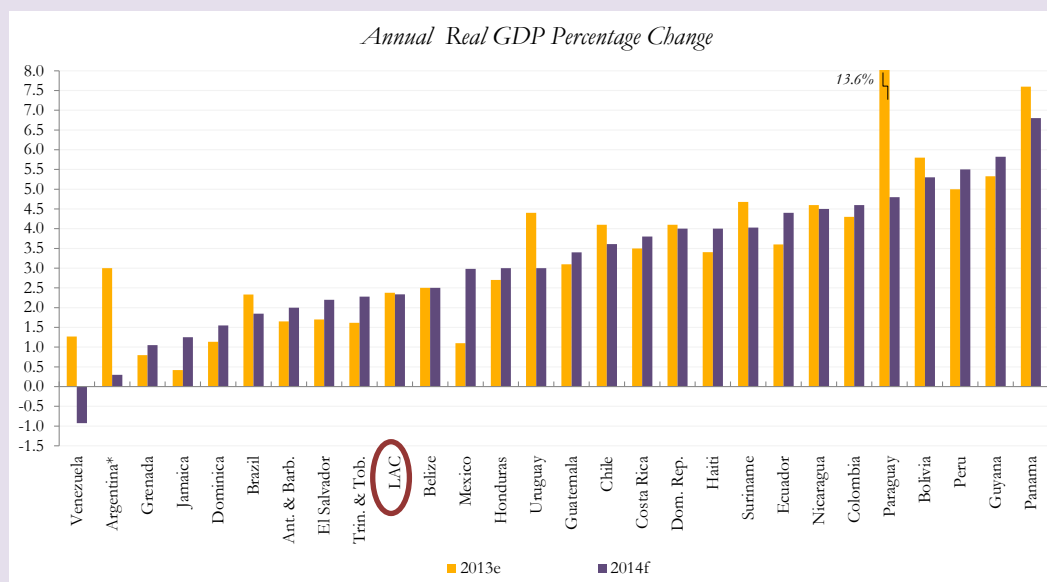
LAC Growth Forecasts: Entering a Low-Growth Phase?

As external tailwinds recede, LAC's growth is taking a toll. Under current assumptions regarding growth in the G-7 and China as well as expectations of commodity prices and US interest rates, we estimate that, *ceteris paribus*, South America plus Mexico (SAM, which represents 95 percent of LAC GDP and more than 85 percent of regional population) will grow three full percentage points below previous pre-crisis highs (**Figure 1.4, Panel C**).¹¹ According to our Global Wind model, in simulations where high frequency data was shocked by the equivalent of an additional 50 basis points in US 10-year bond yields and commodity prices reduced by 10 percent, the net effect could shave another 0.2 percentage points from the regional growth estimate for 2014.

This situation is indeed evident in the growth forecast of 2.3 percent for the LAC region in 2014, which is lower than the already low growth rate registered in 2013 and approximately three percentage points less than previous highs (**Figure 1.5, Panel A**). The decline in LAC growth performance has coincided with the “great deceleration” which has recently affected all middle-income countries--MICs. MICs experienced GDP growth declines as high as four percentage points in recent years with the notable exception of the South East Asian MICs where growth has been sustained with relatively small declines. Nonetheless, the risks to LAC's growth in 2014 are tilted towards the downside, especially considering that the tendency in recent months has been to steadily revise downward the forecast for many a LAC country, in tandem with downward revisions to the forecast for China (**Figure 1.5, Panel B**).

¹⁰ See, for example, IMF (2013b).

¹¹ With the aid of our Global Wind model we can estimate the net effect of these global factors on LAC's growth. The model is based on a regression of real GDP growth of SAM against G-7 countries' and Chinese growth together with prevailing expectations of high frequency variables, see de la Torre, Levy Yeyati and Pienknagura (2013b) for a detailed description of the Global Wind model methodology. Forecasts for the Wind model are based on GDP growth from Consensus Forecasts for G7 countries and China; commodity prices from the World Bank Pink Sheet (latest available) and financial variables which are LCRCE estimates.

FIGURE 1.5. Growth Rates and Forecasts
PANEL A. Real GDP Growth and Forecasts Around The World

PANEL B. Evolution of Forecasts

PANEL C. Real GDP Growth and Forecasts Within LAC


Notes: In Panel A, Eastern Europe MICs include Croatia, Estonia, Hungary, Lithuania, Poland, Romania, Slovakia and Turkey. South East Asian MICs include Indonesia, Malaysia, Philippines, South Korea and Thailand. EU 15 includes Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden and the United Kingdom. Pre Crisis Growth (Average of): LAC 2004-2007, EE MICs 2004-2007, SEA MICs 2004-2007, China 2003-2007, United States 2003-2006, and EU15 2004-2007. Panel B represents the monthly evolution of consensus forecasts. In Panel C, the Argentine forecast for 2014 is affected by the lack of detailed information for base GDP in 2013. An official new rate of growth for 2013 has been recently provided, but the information on levels will only be available after this report is closed. Forecasts are based on the latest Consensus and WEO estimates, and in some cases, are adjusted according to projections by World Bank's country economists. Sources: Consensus Forecasts (March 2014), IMF (Oct 2013), and World Bank.

There is a great deal of heterogeneity in the growth performance of the LAC region (**Figure 1.5, Panel C**). The forecasts for economic growth in 2014 range from approximately 7 percent in Panama to minus 0.9 percent in Venezuela. Some of the mid-to-large economies in the region, like Chile, Colombia and Peru, are expected to grow above the regional average. These are countries where investment rates increased significantly in the past decade. One of the region's giants—Mexico—is envisaged to rebound from last year's unexpectedly low growth, growing in 2014 somewhat above the region's average, although its growth projection has been reduced in the most

recent rounds of forecast revisions. Nonetheless, the wave of recently adopted, bold reforms in Mexico—involving banking, education, telecommunications, tax, and energy sector—have raised investor optimism and improved growth prospects beyond 2014. The other regional giant—Brazil—seems to be unfortunately trapped in a low-growth low-saving low-investment equilibrium, with its GDP projected to expand around 2 percent in 2014.

In addition to Colombia, Panama and Peru, the top growth performers in the region for 2014 projected to grow at 4.5 percent or above include Bolivia, Guyana and Paraguay. Venezuela is experiencing stagflation—i.e., a combination of negative growth with high inflation.¹² The Caribbean nations are projected to grow at or below the regional average, with the notable exceptions of Guyana and Suriname, which are commodity exporters, and the larger and more diversified economy of the Dominican Republic. The Argentine forecast for 2014 is affected by the lack of detailed information for base GDP in 2013. An official new rate of growth for 2013 has been recently released, but the information on the size of the economy will only be available after this report is closed.¹³

Unfortunately, and as mentioned earlier, the probability that growth in 2014 turns out to be lower than current forecasts is higher than the probability that it ends up being higher. Beyond exogenous, global developments that the LAC countries cannot control, the most important factor that can mitigate the downside risks to cyclical growth is the country's shock absorption capacity, that is, the capacity to undertake counter-cyclical policies as needed. This puts a premium on the robustness of the macro-financial policy frameworks, as we shall see below.

Exposure and Vulnerability to External Shocks: Introduction

LAC clearly will need to intensify its structural reform effort to raise long-term non-inflationary growth. The full effect of such reforms, however, will take time to bear their fruit. In the interim, the region faces adverse external financial and commodity price risks. On current expectations, FED tapering of Quantitative Easing is likely to last until at least the third quarter of 2014 and the liftoff of zero policy rates might happen in the first half of 2015. To the extent that these expectations may be revised, the likelihood of further financial turbulence is in store. Indeed, a more rapid exit from Quantitative Easing than anticipated, or a sooner than expected liftoff of zero policy rates could trigger a renewed bout of capital reversals from EMs especially if market expectations were to fluctuate strongly.¹⁴ With regard to the unwinding of the commodity super-cycle of recent years, the pace of the reduction remains critical, yet uncertain. If China's growth rate falls below its official target, commodity markets could take a further hit.

Capital Flow Swings and Commodity Price Falls

Because the potential for adverse financial and commodity shocks loom large, in what follows we shall try to discern which countries in LAC are most exposed to them and indicate what is needed to

¹² The official rate of inflation in Venezuela was an annualized 57.3 percent in February 2014.

¹³ In addition to a new official growth rate for 2013, a new consumer price index (IPCNU) was introduced in February 2014 in Argentina with help from the IMF; the new index registered a monthly rate of inflation of 3.7 percent in January.

¹⁴ Koepke (2013) econometrically shows that the Fed's impact on EM portfolio inflows depends on the pace of Fed exit relative to market expectations and the volatility of market expectations over time.

be able to respond with countercyclical policies. Several cautions are in order. First, we focus on exposure to only two specific exogenous shocks, namely a tightening of international financial conditions and a fall in commodity prices. Thus, a country might have a low degree of vulnerability if it is not exposed to these particular shocks, but it might very well be highly vulnerable with respect to other types of exogenous shocks, such as a slowdown in US growth or a natural disaster. We have selected a tightening of international financial conditions and commodity price declines as the objects of our analysis because we believe these pose the most important threats for the region in the near future.

Second, we do not attempt to compare the LAC region with other developing regions hence we assess the exposure and vulnerability position of a LAC country relative to other countries within LAC. Third, this is a partial equilibrium exercise (it holds all else constant) and takes the size of a shock as given, considering only moderate sized shocks. Larger shocks would likely affect other global variables which would require a full recalibration of forecasts. Finally, the exercise focuses on the potentially adverse implications of external shocks. The unfavorable implications of domestic policy mistakes are not examined, although we recognize that the country heterogeneity within the region is quite high in this regard.

Capital Flow Swings: Exposure and Vulnerability within LAC

EMs experienced a significant reversal of capital flows once the taper talk began. For example, mutual funds' purchase of developing country bonds plummeted following the taper talk and it has only recently begun to stabilize.¹⁵ Sudden swings in foreign investor sentiment associated with portfolio and banking flows are, of course, no surprise to the LAC region although they appear to be more pronounced now than in the recent past with regard to bond flows. LAC has in effect been the middle-income region that has been most affected by the reversal in gross capital (bond) inflows (**Figure 1.6, Panel A**). Brazil and Mexico account for more than half of these flows to the region. In addition, a recent study finds that in the last few years LAC corporations have significantly increased their US dollar denominated debt. To the extent that that these positions are not hedged, or to the extent that corresponding currency mismatches might have occurred, balance sheet and liquidity risks would have been generated as well.¹⁶

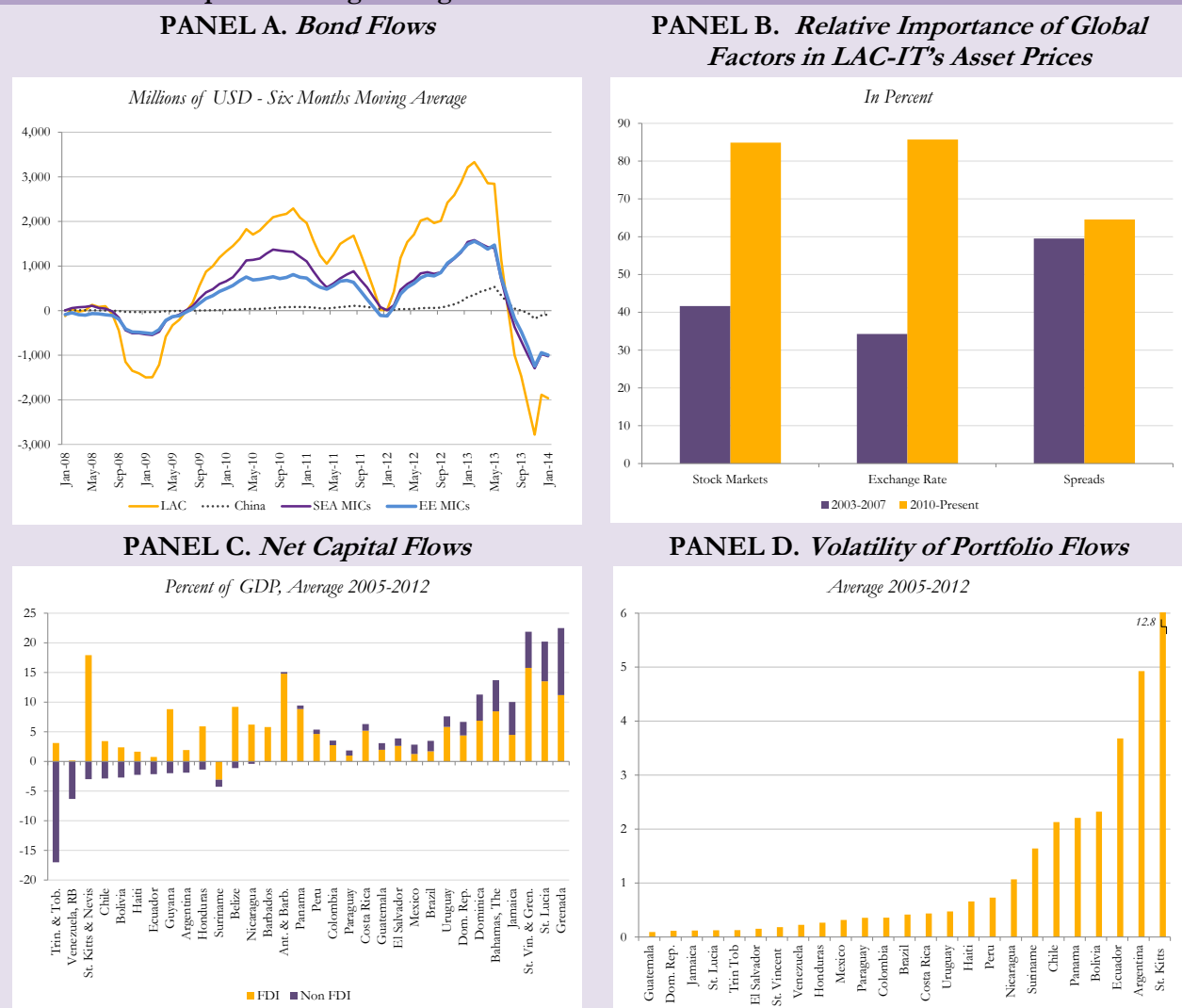
Moreover, the rising share of the volatility in capital flows to EMs appears to be due to global factors, that is, to factors unrelated to and beyond the control of the domestic economic policies of individual EMs. In other words, much of the instability of capital inflows experienced by countries in LAC seems exogenously driven. This is evident from the results we obtained from a principal component analysis exercise aimed at measuring the impact of high frequency global variables (VIX, US dollar, US 10 Y bond yield and commodity price indices) on local asset prices of LAC's main inflation-targeting countries (Brazil, Chile, Colombia, Mexico, and Peru).¹⁷ The contribution of global factors to variations in LAC asset prices is found to be much higher in the 2010-to-present

¹⁵ The IIF has recently introduced a Portfolio Flows Tracker that provides monthly estimates of total portfolio debt and equity inflows to emerging markets. This tracker's estimates show weak equity flows in early 2014, but a recovery of debt flows to emerging markets. See, Mohammed and Koepke (2014).

¹⁶ See Powell (2014). The sharp shift to external dollar bond financing and the relationship between this trend and the rise in domestic credit still needs more information and further analysis.

¹⁷ The model follows Levy Yeyati and Williams (2012).

FIGURE 1.6. Exposure to Tightening Financial Conditions



Notes: Panel B shows the coefficient of determination (R^2) of regressing the first principal component of each asset class (Stock Markets, Exchange Rates and Spreads) for LAC on global factors, which include VIX index, nominal multilateral exchange rate of the US Dollar, US 10 year bond yield and CRB Commodity price index. The regression was conducted on monthly data for the selected periods in the chart. Panel D shows the standard deviation of the ratio of Non-FDI inflows to the ratio of total capital inflows plus remittances. Sources: Bloomberg, EPFR, IFS and LCRCE.

period than during the pre-crisis 2003-2007 period (**Figure 1.6, Panel B**). Another econometric exercise we conducted suggests that about 80 percent of the recent changes in capital flows to EMs can be accounted for by global factors.¹⁸ While the co-movement of all asset prices is not unusual, the strengthened coupling in the most recent period is striking and underscores the importance of exogenous global factors in determining domestic asset prices and ultimately influencing domestic economic conditions.¹⁹

¹⁸ We estimated a model to gauge the effect of global financial variables on capital flows to EMs. It includes both local factors (measured as economic surprises) and global factors (US 10 year bond yield, risk aversion (proxied by VIX and BBB corporate spread) and a dummy variable set to one during the announcement of the taper talk). We find that 80 percent of the movement in (bond) capital inflows is due to global factors. The model in part follows Koepke (2013).

¹⁹ See for example Canuto and Ghosh (2014) for lucid accounts of the highly pro-cyclical nature of bank lending and the linkages of domestic credit to international finance.

The intensification of the coupling between local EM financial developments and global factors further motivates the need to assess the degrees of exposure and vulnerability of LAC countries to a tightening of international financial conditions. By exposure, in this case, we mean the degree to which a country is integrated into international financial markets and, hence, sensitive to the vagaries of such markets that are independent of the country's domestic circumstances and policies. But exposure does not necessarily imply vulnerability. Two countries with the same degree of exposure can have different degrees of vulnerability depending on their ability to cope with that particular shock, i.e., to absorb and cushion the domestic effects (on economic activity, employment, and financial stability). The path from exposure to vulnerability is thus mediated by shock absorbing policy capacity.²⁰

We measure a country's degree of exposure to a tightening of international financial conditions using a combination of three criteria. First, we consider the degree to which local asset prices are determined by global factors. To this end, we estimated regressions on the asset (currency, bond, and stock) prices for the eight largest LAC economies against a set of high frequency global variables.²¹ Second, as detailed quarterly data were not available, we proxied exposure by the size of non-FDI capital flows (including portfolio and credit inflows) relative to GDP as well as the volatility of these flows (**Figure 1.6 Panels C and D**). Finally, given the attention that the literature has focused on benchmark effects, we also considered whether the countries belong to one or more of the global indices such as MSCI EM, MSCI Frontiers Markets, or JP Morgan's EMBI.²²

In order to assess vulnerability, we take into account various measures of a country's policy capacity to cushion a financial external shock. To this end we used a slightly expanded version of the methodology that we first introduced two years ago.²³ In particular, we relied on a set of indicators that include the flexibility of the exchange rate regime, where Inflation Targeters (ITs) score the highest; the real policy rate (which suggests the scope for lowering it); the Output/Inflation Gap; Primary balance/GDP; banking system solvency indicators; net external debt/GDP; and current account/GDP. We combined these various factors to assess whether a country can act counter-cyclically via monetary and fiscal policies, especially using its currency and policy rate as buffers to withstand an external shock. Relative to two years ago, there has been an overall increase in vulnerability in the LAC region, with widening current account deficits and lower primary surpluses reducing the scope for policy maneuver. A few countries are also constrained by inflationary processes.

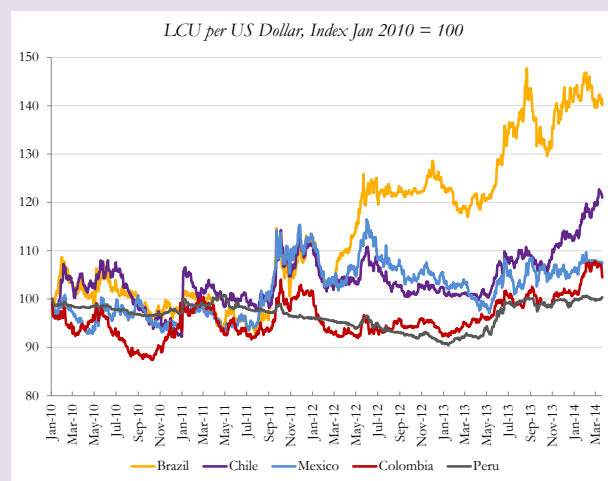
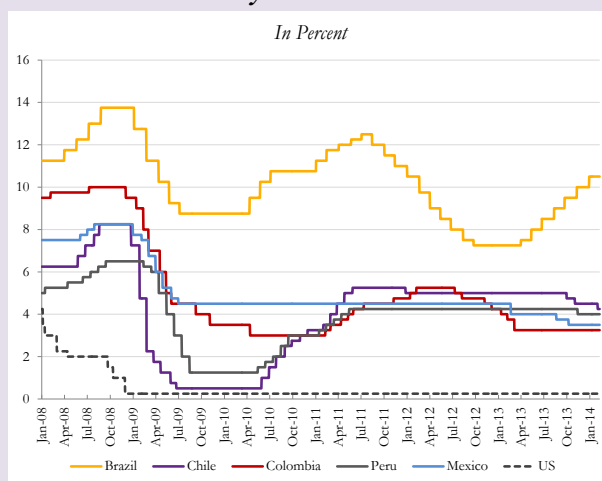
Taking both vulnerability and exposure to a tightening of international financial conditions into account, it is easy to find two groups of countries within the LAC region that are highly exposed to a tightening of international financial conditions. First, the group of larger countries of LAC that are well integrated into global capital markets. Second, many island nations in the Caribbean which are

²⁰ We can define Vulnerability to a shock "V" to be equal to Exposure "E" adjusted by Response Capacity "RC". A simple formulation such as $V_i = E_i/RC_i$ shows the inverse relation between Vulnerability and Response Capacity, for a given degree of Exposure. If the Exposure is zero, then Vulnerability is also zero.

²¹ The high frequency global factors that we used include VIX, US dollar, US 10 year bond yield and commodity price indices. The coefficients of determination explain more than 70 percent of the variation in asset prices, with only Venezuela falling below 40 percent. Quarterly data from 2003 to 2013 were used.

²² See for example Raddatz, Schmukler, and Williams (2013).

²³ See De la Torre, Didier and Pienknagura (2012).

FIGURE 1.7. Currencies and Policy Response in LAC ITs**PANEL A. Currencies in LAC-IT****PANEL B. Policy Rates in LAC-IT and US**

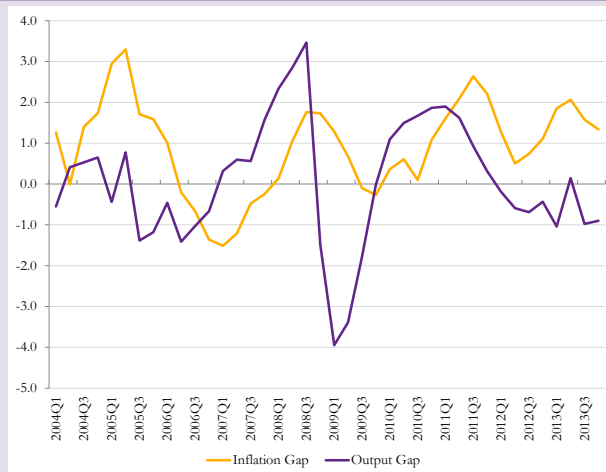
Sources: Bloomberg and LCRCE.

hosts to significant banking flows, often due to their offshore banking status. The two groups, however, display contrasting degrees of vulnerability.

The first group includes countries where inflation-targeting monetary policy frameworks are most consolidated. These are the countries in the region with greatest shock absorption capacity via countercyclical monetary policy, and include Colombia, Chile, Mexico, and Peru (**Figure 1.7, Panels A and B**). They display high exposure to an exogenous tightening of international financial conditions but, at the same time, these countries have low vulnerability, comparatively speaking. Brazil is in principle also a low vulnerability country in the region, given its monetary policy framework of inflation-targeting-cum-exchange-rate flexibility; in practice, however, Brazil's room for countercyclical monetary policy maneuvering is somewhat restricted at present by inflation pressures, with actual inflation having overshoot its target rate for the past few years (**Figure 1.8**). As a result, Brazil has been compelled to increase its policy interest rate even as economic growth has been decelerating.²⁴

By contrast, the countries in the second group are not just highly exposed but also have little or no shock absorption capacity and, hence, are also highly vulnerable to a tightening of international financial conditions. Indeed, many countries in the Caribbean tend to be highly indebted, with little or no fiscal maneuvering room, and without an independent monetary policy. At the other extreme are countries in LAC with a low degree of exposure to international financial conditions. This is because they are not significantly integrated into international financial markets and, in addition, continue to generate strong current account surpluses and, thus, do not depend—in a macroeconomic sense—on external financing. These countries, by definition, display a low degree of vulnerability to an exogenous tightening of international financial conditions. The most salient case in this regard is Bolivia.

²⁴Some observers argue that Brazil's potential GDP is a moving target and that it has fallen in recent years to as low as 3.5 percent. See for example, Kaufman and García-Escribano (2013).

FIGURE 1.8. Brazil: Inflation and Output Gaps


Note: The Inflation gap is the difference between the headline inflation rate and the central bank's target inflation (mid-point). The Output gap has been computed using a Hodrick-Prescott filter. Sources: Bloomberg, Central Bank of Brazil, and LCRCE.

Commodity Price Falls: Exposure and Vulnerability within LAC

China's remarkable growth spurt over the last decade may have been a major contributor to the unprecedented surge in commodity prices. China's growth was so strong and intensive in the use of commodities, particularly metals, that commodity prices appeared to decouple from the growth in high income countries. Indeed, GDP growth in China is shown to be the strongest positive correlate of changes in mineral commodity prices (**Table 1.1**).

As China's growth rate has receded to approximately 7.5% per year, however, the impact has been felt in commodity prices. The lackluster recovery of the high income countries has to date not been sufficient to counter the negative impact of lessened Chinese growth. Moreover, following years of rapid expansion of credit, China now faces difficult financial strains that are spilling onto commodity markets. For example, copper has been the preferred collateral used by heavily indebted Chinese corporations to secure their loans. As corporate defaults multiply, which is expected to happen by many, the risk of fire sales increase and copper commodity prices would be doubly on the receiving end.

Table 1.1: Correlation Matrix

	CRB Commodities	CRB Food	CRB Metals	Oil	Soybeans	Copper	US	China	Euro	G7	Dollar Index
CRB Commodities	1										
CRB Food	0.8594*	1									
CRB Metals	0.8160*	0.4557*	1								
Oil	0.6355*	0.5014*	0.5571*	1							
Soybeans	0.6136*	0.6974*	0.3213*	0.4934*	1						
Copper	0.7126*	0.3677*	0.9295*	0.6195*	0.2132	1					
US	0.4502*	0.2417	0.5156*	0.4567*	0.2061	0.4898*	1				
China	0.6929*	0.4063*	0.7871*	0.6213*	0.3906*	0.7120*	0.2866*	1			
Euro Area	0.6763*	0.6000*	0.6031*	0.5048*	0.3368*	0.5801*	0.7154*	0.5633*	1		
G7	0.5944*	0.4179*	0.5829*	0.5153*	0.2775*	0.5526*	0.9518*	0.4063*	0.8642*	1	
Dollar Index	-0.6861*	-0.5631*	-0.5948*	-0.5733*	-0.6350*	-0.4428*	-0.3637*	-0.4786*	-0.3939*	-0.3927*	1

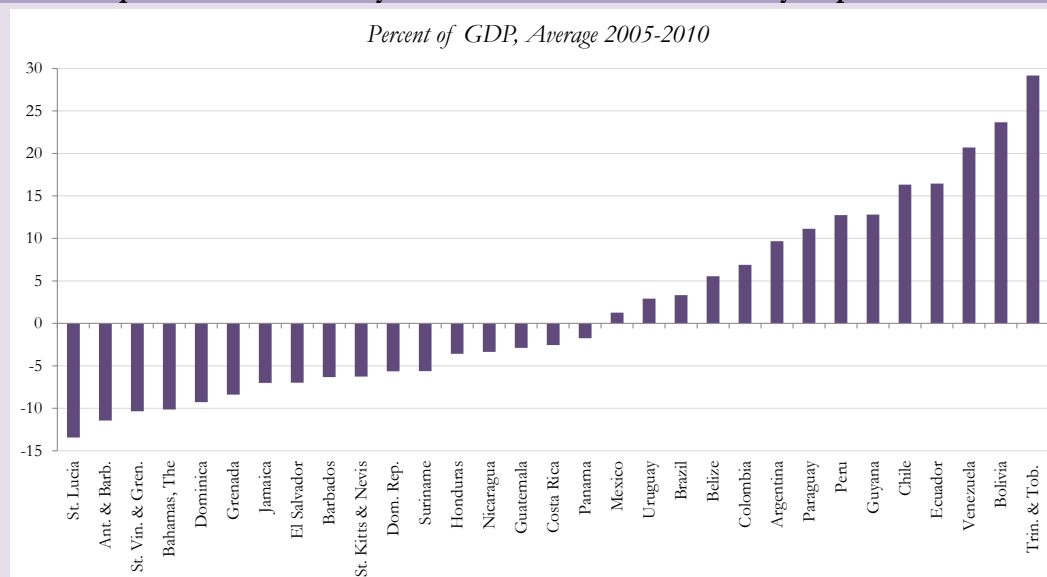
Notes: Correlation matrix between annual growth rates of commodity prices and GDP growth of US, China, Euro Area and the G7. Dollar index is the annual growth rate of the multilateral nominal exchange rate of the US dollar. (*) denotes significance at 95% or higher. Source: Source: Bloomberg, OECD Statistics and LCRCE.

The potential for future commodity price shocks suggests a second set of exposure-vulnerability pairings in LAC, this time relative to an exogenous decline in commodity prices. The degree of exposure in this case rises with the size of the country's net commodity exports as a percent of GDP, from low or actually negative in the case of net commodity importers, to high and increasingly positive in the case of net commodity exporters (**Figure 1.9**). LAC countries range from minus 13 percent in the case of commodity importer St. Lucia to 29 percent in the case of net commodity exporter Trinidad and Tobago.

As regards vulnerability, we use the same set of indicators as in our previous assessment of financial shocks because the components of a robust capacity to respond are common for the two types of shocks. For example the capacity to allow the exchange rate to depreciate without inflationary or adverse balance sheet effects allows the beneficial impact to cushion the shock of both tightening financial conditions and, if the country is a net exporter, commodity price declines.

Once again we can easily identify two contrasting groups of countries in LAC. At the one extreme are the net commodity importing countries, mainly located in Central America and the Caribbean, which have low exposure—they would actually gain from a uniform fall in commodity prices. These countries are thus not vulnerable to this particular type of external shock. At the other extreme are countries that are significant net commodity exporters, located mainly in South America that are highly exposed to a commodity price decline. Not all countries in this second group, however, are equally vulnerable. Some, such as Chile and Peru, have comparatively low vulnerability because they have significant fiscal buffers (savings accumulated during the past times of commodity bonanza) and considerable maneuvering room for countercyclical monetary and exchange rate policy. Others, such as Bolivia, while limited in monetary policy response capacity because of their much less flexible exchange rate regime, have nonetheless unusually strong fiscal and international reserve cushions.

FIGURE 1.9. Exposure to Commodity Price Declines: Net Commodity Exports



Source: LCRCE.

No Room for Error

This complicated external environment—where the turbulence seems to be mainly stemming from the process of monetary policy normalization in the advanced economies and an ongoing reevaluation of developments in China—puts a premium on good domestic policies. While this chapter has focused on scenarios where the region may be further buffeted by adverse external shocks—particularly a further tightening of international financial conditions and further declines in commodity prices—the potential for adverse domestic policy shocks is also present. Self-inflicted wounds arising from misguided policies can indeed happen and would be even more costly under the current circumstances, as they would amplify the effects of external shocks.

In the short-run, the quality of the macro-financial immune system would be the most important factor in countries' ability to cope with the vagaries of the external environment. Those countries with stronger macro-financial policy frameworks will be rewarded by being better able to weather potential storms, and hence better able to protect the social gains achieved over the past decade. Those countries that do not have significant macro-financial buffers in place, and depending on their degree of exposure to external shocks, will be faced with harsher adjustments and sharper growth downturns, thereby risking a potential reversal in social gains.

It is true that a good number of countries in the region, especially those with inflation targeting regimes, have a much better capacity to absorb shocks—i.e., to dampen their effects on the domestic economy—compared to the 1990s. It is also true, however, that buffers, fiscal buffers in particular, are not as strong in the region today as they were in 2008 just prior to the global crisis. Thus, to be better prepared to deal with external volatility, it would be ideal for LAC countries to rebalance the monetary-fiscal mix in favor of tighter fiscal and looser monetary policies. In effect, a stronger fiscal position would widen the room for central banks to lower interest rates and allow their currencies to depreciate as needed, without inflationary consequences.

One important challenge for the region, given the significant slowdown in growth that it is experiencing, is that social and political pressures are likely to mount on the fiscal process. This would be understandable, given that Latin Americans have become accustomed to a fast pace of social progress over the past decade and may be expecting that it continue into the future. Unfortunately, that would not be feasible for most countries in the region at the current low rates of growth. Hence, making room in the national budgets for well-designed social policy, while keeping the overall fiscal position sound, will undoubtedly be a major test for political leaders.

This is a somewhat somber picture for the region in the current juncture. But the future does not have to be bleak. Countries can turn somber realities into brighter futures. The first order of business will be to dampen the downturn of the cycle as much as possible while keeping inflation low and macroeconomic balances in good shape. At a minimum, countries should make every effort to avoid magnifying the cycle via misguided policies. Beyond the cycle, however, the premium will be on trying to escape the low growth equilibrium into which LAC seems to be settling. This will require vigorous growth oriented reforms. Yet, even with respect to the cycle, things may not be as somber as they may appear. In particular, when it comes to vulnerability to capital flow volatility, LAC is not in as treacherous a situation as it used to be in the 1990s. This is simply because there has been a significant change over the past decade in the composition of the flow with which LAC finances its external deficits. To this topic we now turn.

Chapter 2:

A Fresh Look at FDI and Remittances in LAC

The Return of Current Account Deficits

After a brief and modest period of surpluses prior to the global financial crisis, Current Account (CA) deficits have returned to the Latin America and Caribbean (LAC) region in recent years (**Figure 2.1, Panel A**). On average, the deficits in LAC have steadily widened over the past five years--from about 1 percent of GDP in 2008 and 2009 to close to 2 percent of GDP in 2012.

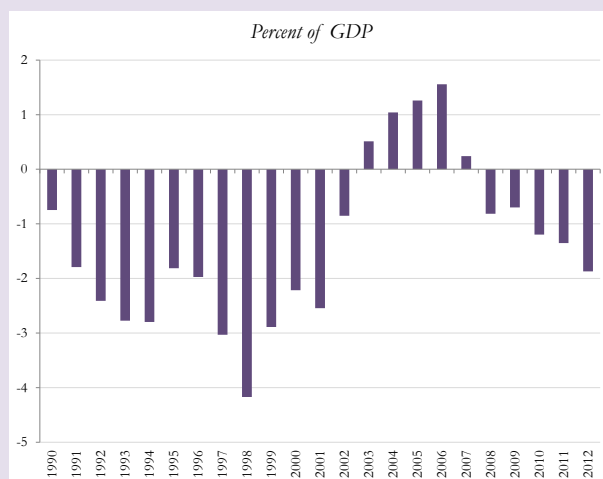
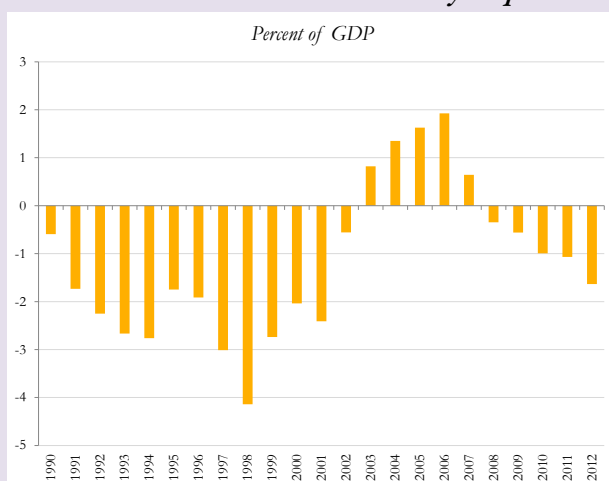
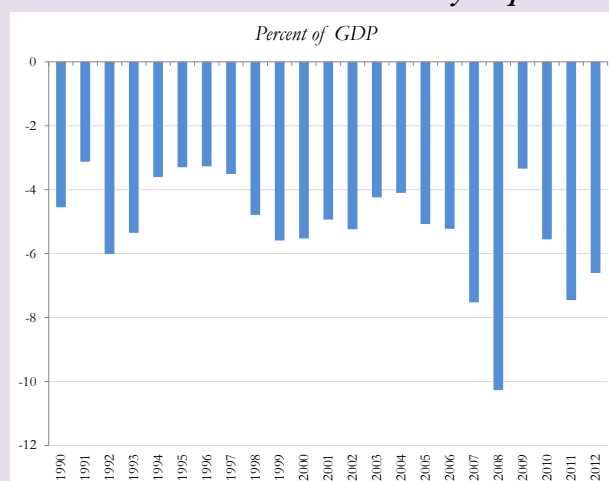
This widening of the deficit took place while commodity prices have been declining. One could thus be tempted to think that the fate of LAC's CA is unequivocally linked to commodity prices. After all, many have argued that LAC's impressive economic performance in the 2000s was not independent of the commodity price super-cycle over the same period. However, a closer look at the relation between commodity prices and LAC's CA reveals much more nuanced dynamics.

To be sure, the sharp increase in commodity prices during the early and mid-2000's undoubtedly played an important role in pushing the region into CA surpluses for the first time in decades. Indeed, the regional patterns characterized above are mainly explained by the net commodity exporters in the region, which represent the bulk of regional GDP and population (**Figure 2.1, Panels B and C**).²⁵ While both net commodity exporters and importers ran deficits during the 1990's and early 2000's, it was net exporters who achieved surpluses during the 2003-2007 period.

There is, however, a clear discrepancy between the timing of the crash of commodity prices in the last quarter of 2008, and the notable deterioration of CA balances in LAC, which started as early as 2007 and have continued to the present. The CA surplus for the region as a whole dropped from a peak of 1.5 percent of GDP in 2006 to a mere 0.24 percent of GDP by 2007, long before the onset of the global financial crisis and the crash of commodity prices. This contrast becomes clearer when net commodity exporters are compared with net commodity importers. The worsening of CA deficits for the latter continued well into 2008, reaching over 10 percent of GDP, reflecting the steady increase of commodity prices. In contrast, the CA balance of net exporters declined from almost 2 percent of GDP in 2006 to 0.6 percent of GDP in 2007, and became a deficit of 0.3 percent of GDP by 2008.

This disconnect in the dynamics of commodity prices and CA deficits in LAC, especially for commodity exporters, becomes even clearer in the aftermath of the global financial crisis. After a sudden decline at the height of the crisis, commodity prices recovered rather quickly, especially for

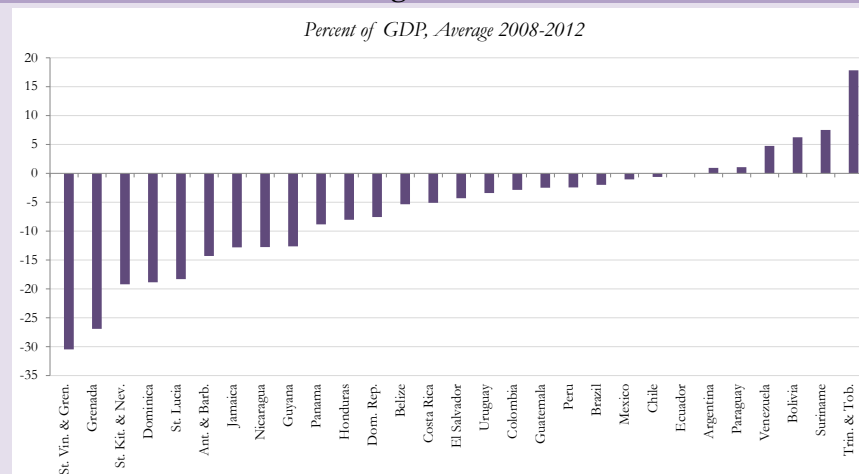
²⁵ Net commodity exporters (importers) are defined as those countries that on average displayed a positive (negative) trade balance in commodities during 2005-2010. Net commodity exporters include: Argentina, Belize, Bolivia, Brazil, Chile, Colombia, Ecuador, Guyana, Mexico, Paraguay, Peru, Trinidad and Tobago, Uruguay, and Venezuela. Net commodity importers include: Antigua and Barbuda, Costa Rica, Dominica, Dominican Republic, Grenada, Guatemala, Honduras, Jamaica, St. Kitts and Nevis, St. Lucia, Nicaragua, Panama, El Salvador, Suriname, and St. Vincent and the Grenadines

FIGURE 2.1. Current Account Balance**PANEL A. Current Account Balance for LAC 1990-2012****PANEL B. LAC's Net Commodity Exporters****PANEL C. LAC's Net Commodity Importers**

Notes: Panel A shows the weighted average for 29 LAC countries: Argentina, Antigua and Barbuda, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominica, Dominican Republic, Ecuador, Grenada, Guatemala, Guyana, Honduras, Jamaica, St. Kitts and Nevis, St. Lucia, Mexico, Nicaragua, Panama, Peru, Paraguay, El Salvador, Suriname, Trinidad and Tobago, Uruguay, St. Vincent and the Grenadines, and Venezuela. In Panel B and C, Net commodity exporters (importers) are defined as those countries that, on average, displayed a positive (negative) trade balance in commodities during 2005-2010. Commodity exporters include: Argentina, Belize, Bolivia, Brazil, Chile, Colombia, Ecuador, Guyana, Mexico, Paraguay, Peru, Trinidad and Tobago, Uruguay, and Venezuela. Net commodity importers include: Antigua and Barbuda, Costa Rica, Dominica, Dominican Republic, Grenada, Guatemala, Honduras, Jamaica, St. Kitts and Nevis, St. Lucia, Nicaragua, Panama, El Salvador, Suriname, and St. Vincent and the Grenadines. Sources: LCRCE and IMF Balance of Payments Statistics.

energy products, and by mid-2011 were once again at historical high levels. The quick rebound of commodity prices prompted a marked deterioration in the CA balances for net commodity importers, which reached a deficit of almost 8 percent of GDP in 2011. Nevertheless, CA surpluses did not return for net commodity exporters, rather they continued their downfall, reaching 1.6 percent of GDP by 2012.

Although the deterioration of CA balances for the period 2008-2012 is widespread throughout LAC, there is substantial heterogeneity in the magnitudes of these deficits. The general relationship between the average CA balance and a country's status as net commodity importers/exporters still

FIGURE 2.2. Current Account Balance, Average for 2008 - 2012


Notes: Bars represent the average current account balance for the years 2008 – 2012. Sources: LCRCE and IMF Balance of Payments Statistics.

holds for this period, that is, net commodity importers showing higher deficits than net exporters (**Figure 2.2**). Nonetheless, there is substantial heterogeneity within these two groups of countries.

For instance, with net importers, the islands of the Caribbean have registered much higher deficits than those in Central American countries. Within net commodity exporters, CA deficits have ranged from a 3.4 percent deficit for Uruguay to a 17.8 percent surplus for Trinidad and Tobago. Notably, only some of the major net exporters of energy and mineral products (such as Bolivia, Trinidad and Tobago, and Venezuela) have been able to maintain their CA surpluses.

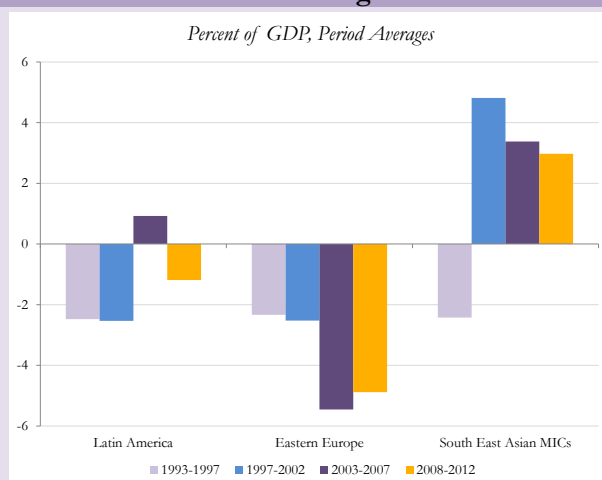
Compared to other middle-income (MIC) regions, the evolution of LAC's CA balance is quite unique (**Figure 2.3**). In the mid-1990s, LAC, the South East Asian MICs (SEA), and the Eastern European MICs (EE) were all running CA deficits of around 2.5 percent of GDP.²⁶ From that point onwards, the path of CA balances for these three regions has been markedly different. The SEA MICs morphed into an export-led growth model towards the late 90's, with sustained CA surpluses ever since. In contrast, the EE MICs followed a similar pattern of CA balances as LAC until the commodity super-cycle went into full throttle. The EE MICs, as net commodity importers, saw a dramatic worsening of their current account balance, running deficits of over 5 percent of GDP on average during 2003-2007. And they have continued to run deficits in recent years.

In sum, and as argued in previous reports in this series, LAC metabolized the strong tail-winds coming from the commodity super-cycle into a pattern of high growth of domestic demand, which in turn led to deteriorating CA balances.²⁷ This is reflected in the fact that, despite the commodity boom, net exports contributed negatively to growth in the 2000s for virtually all LAC countries. This does not deny the positive contribution of exports taken by themselves; rather, it reflects a mix of slowly growing export volumes with fast-growing import volumes (facilitated by larger export prices

²⁶ Throughout this chapter we will benchmark LAC's performance against two middle-income regions: Eastern European MICs, comprised by Croatia, Estonia, Hungary, Lithuania, Poland, Romania, Slovakia, and Turkey, South East Asia MICs, comprised by Indonesia, Malaysia, Philippines, South Korea, and Thailand.

²⁷ See De la Torre, Levy Yeyati and Pienknagura (2013a).

FIGURE 2.3. Current Account Balance in Selected Regions



Notes: Regional current account balance is the weighted average for each region. Bars represent the simple average over the years in each period. Eastern Europe MICs refers to Croatia, Estonia, Hungary, Lithuania, Poland, Romania, Slovakia, and Turkey. South East Asia MICs refers to Indonesia, Malaysia, Philippines, South Korea, and Thailand. Sources: LCRCE and IMF Balance of Payments Statistics.

and mostly related with capital and intermediate goods). Moreover, it highlights that the major terms of trade gains experienced by LAC's commodity exporting countries were transformed into a growth dynamic centered around domestic demand, whether on consumption or investment, falling both on domestically produced goods as well as imports. It is in that sense that one could define the common traces of LAC's growth pattern as domestic demand-led growth, in contrast with the export-led growth model characteristic of East Asian countries, old and new tigers. As such, CA deficits for the LAC region have returned, and they may be here to stay, at least for the foreseeable future.

Are LAC's recurring CA deficits something the region should worry about? Or are they immaterial to the region's economic performance? Crucial to the answer of these questions are the sources of financing of LAC's CA deficits. Is it mainly the case that LAC's CA deficits are financed by short-term financing, or are they financed mainly through long-term financing? Does this financing flow in via debt contracts or equity contracts? Are inflows mainly in the form of foreign direct investment flows (FDI), non-FDI flows, or Remittances? The next section will explore these issues and will try to characterize the virtues and limitations of LAC's sources of financing.

Sources of Financing for LAC

The return of current account deficits for the region in the current context of increased global risk aversion and general capital movements away from emerging markets raises the important question of the sustainability of LAC's CA deficits. As the US Federal Reserve changes and adapts its tapering policy and US government bonds yield curve steepens, financial flows towards emerging markets may dry up, and LAC will be no exception.

Yet, not all financial flows respond in the same way to changes in the global landscape. This implies that the degree of exposure of the LAC region to a global retrenchment of capital depends in part on the region's sources of financing²⁸.

As we have highlighted in previous reports, and contrary to popular belief, during the last decade or so, FDI (rather than portfolio capital) has been the primary source of financing for LAC. Nonetheless, it is worth noting that during the same period (2000-2012), the growth of remittance flows has also been significant—for the region as a whole, they are as large as about 70 percent of the size of net FDI inflows. For example, over the last ten years, average net FDI inflows to LAC were slightly over 2 percent of GDP, while Remittances represented 1.4 percent of GDP. These numbers contrast sharply with net non-FDI inflows, which have followed a strong cyclical pattern of surges and reversals. These were in fact net outflows of minus 0.14 percent of GDP on average for the period as a whole. When analyzing the magnitude of these flows to LAC during the past decade (**Figure 2.4, Panel B**) the story of how LAC is financing its CA deficit that emerges is clear: FDI flows and Remittances have played a major role as sources of financing for the region, while non-FDI flows have been relegated to a more secondary role.

These patterns of the last decade are a remarkable break from history. Non-FDI flows played a major role in financing the region during the 1990's, averaging 1.35 percent of GDP. The end of the 90's and the early 2000's was marked by major financial turmoil in global markets with the Asian and Russian crises, resulting in large swings in non-FDI capital flows that may have contributed to the currency devaluation of Brazil and the subsequent crisis in Argentina (**Figure 2.4, Panel A**). At the same time, FDI flows, which started the decade of the 1990s as a meager 0.8 percent of GDP, saw a dramatic increase during that decade reaching 4.2 percent of GDP in 1999²⁹. Remittances were also not a major source of financing during the 1990's, representing on average less than 0.6 percent of GDP.

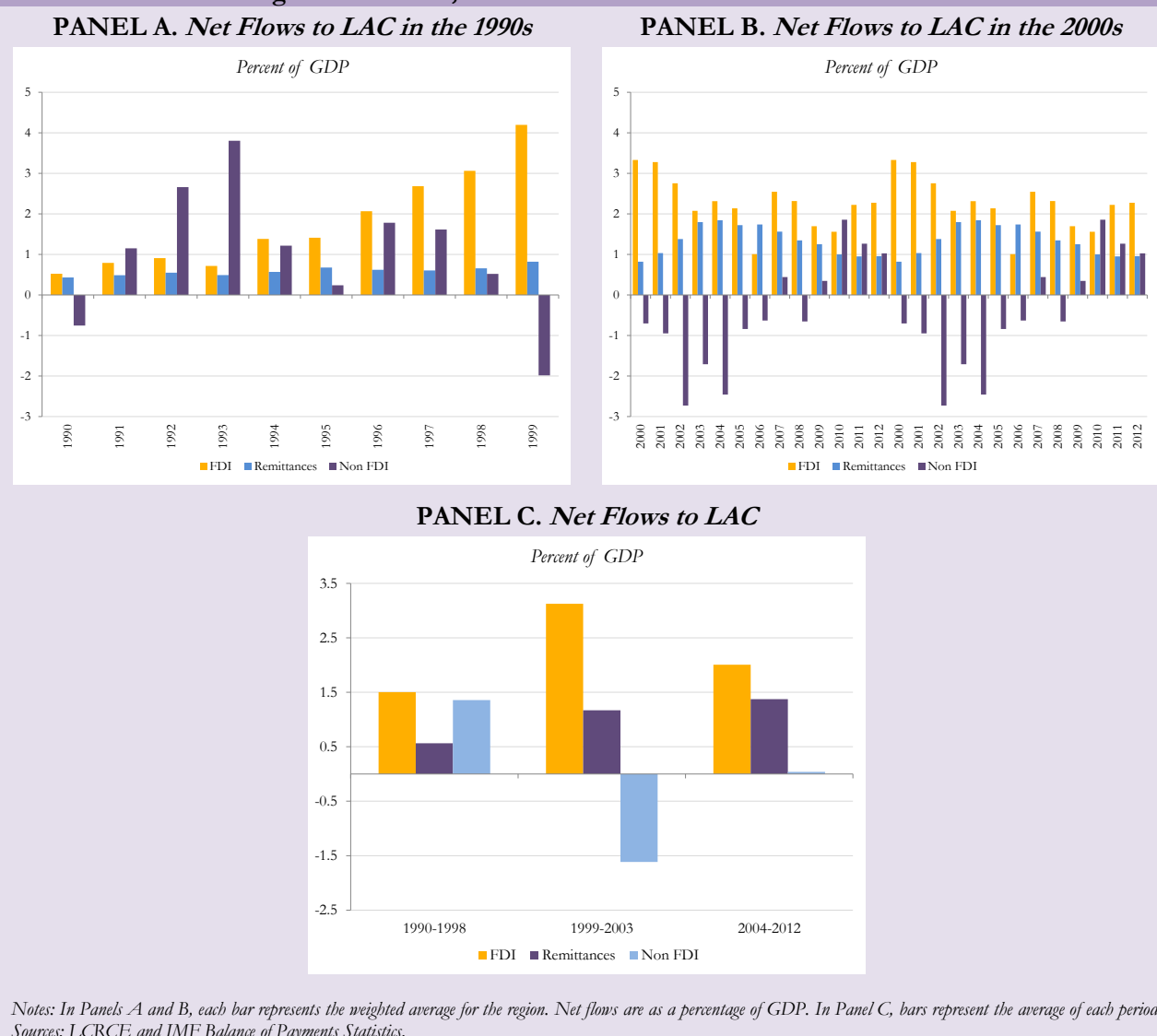
In sum, over the past 20 years LAC has shifted the financing of its external deficits from non-FDI flows towards FDI and Remittances. Comparing the importance of each flow during the 1990's and 2000's (**Figure 2.4, Panel C**), we note that FDI has become the most important source of financing—its importance has grown over time from an average of 1.77 percent of GDP during the 90's to 2.27 percent of GDP for the 2000-2012 period. Perhaps even more remarkable is the rise of Remittances as an important source of financing for the region—from an average 0.6 percent of GDP during the 90's to 1.34 percent of GDP, implying a growth rate of 123 percent.³⁰

²⁸ Broner, Didier, Erce, and Schmukler (2013) show that during financial crises, global or not, there is retrenchment in all types of flows. However, the magnitude of these effects vary depending on the country's degree of economic development and the type of flow.

²⁹ We should note that the figures of FDI are partly driven by the wave of privatizations that streamed through the region. While we don't have the actual value of FDI coming from privatizations, according to our calculations, on average, about 36 percent of total mergers and acquisitions in LAC during the 1990's can be attributed to privatizations. For this calculation, we define privatizations as all M&A investments in sectors: (40) Electricity, gas, steam, and hot water supply; (41) Collection, purification and distribution of water; and (64) Post and telecommunications

³⁰ It is important to mention two important caveats to the analysis relating to Remittances. First, as Remittances have gained importance and notoriety, countries have systematically improved the recording of these flows in Balance of Payments statistics. Therefore, part of the sharp increase in Remittance flows may be due to better recording by government agencies. Secondly, Balance of Payments statistics reflect only inflows through formal channels; after 9-11, financial transactions through informal channels have become more difficult, forcing individuals into the formal money-transfer market. Additionally, competition in this market has driven down the costs of remitting, incentivizing migrants

FIGURE 2.4. Financing Flows to LAC, 1990 -2000 & 2000 -2012



The diminishing role of non-FDI flows is also clear--flows have gone from net inflows of over 1 percent of GDP in the 90's to essentially zero, at 0.4 percent of GDP in the late 2000's.

What are the implications of this dramatic shift in financing? Will it help the region cope with the changing global context? As we moved away from non-FDI financing, how has this changed the net foreign asset position of countries? Is the region moving away from debt towards equity? We address these questions in the following section.

to switch from informal to formal channels. In sum, part of the large increase in flows may only be reflecting the formalization of this flow.

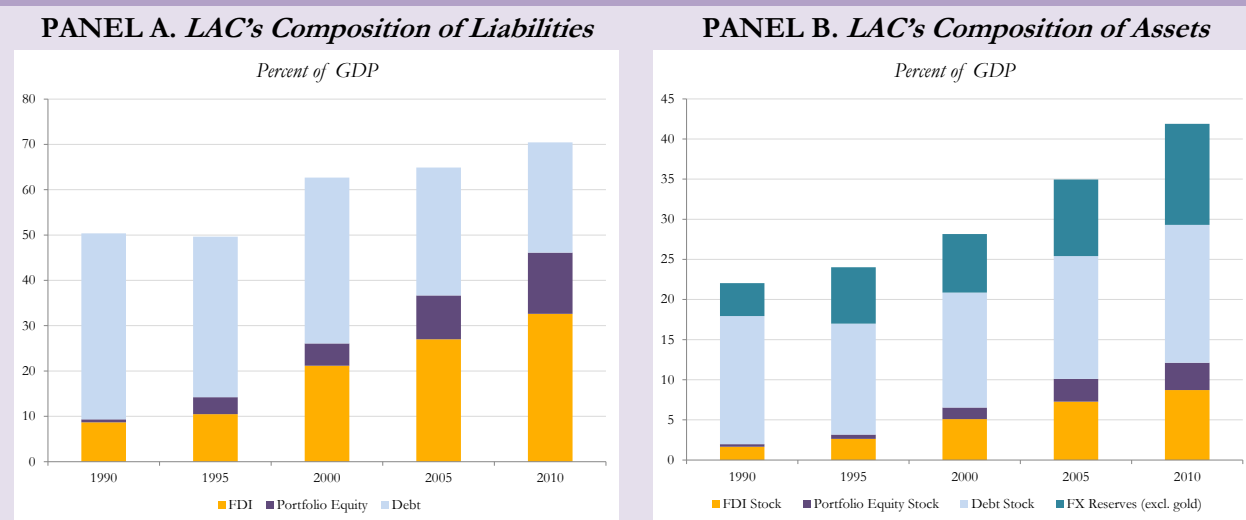
The Transformation of LAC's International Investment Position

A byproduct of the observed patterns of financing flows to LAC is the marked transformation of the composition of the region's External Assets and Liabilities. During the past decade of high growth, the region has improved its overall net foreign asset (NFA) position, but more remarkably it has shifted its composition of liabilities from debt towards equity, and has actually become a net creditor vis-à-vis the rest of the world in debt contracts.³¹

As the region shifted its financing sources towards FDI and Remittances, the composition of Liabilities changed dramatically since 2000. The region as a whole has increased its total stock of liabilities by 8 percentage points of GDP (**Figure 2.5, Panel A**), from 62 percent to 70 percent. As first documented by Lane and Milesi-Ferretti (2007), this increase in liabilities is completely driven by the increase in equity liabilities, as debt liabilities actually decreased. The stock of FDI liabilities increased from 21.2 percent of GDP to 32.6 percent of GDP. Portfolio equity also increased--from 4.9 percent to 13.5 percent of GDP. The increase in overall equity liabilities (FDI plus portfolio equity) was partially offset by a reduction in debt liabilities from 36.6 percent to 24.3 percent of GDP. Overall, countries seem to have used FDI flows, trade surpluses and Remittances to deleverage and de-dollarize the economy, thereby reducing financial fragility³².

Accompanying the shift in liabilities towards equity was a substantial increase in the region's assets, mostly in the form of foreign exchange reserves.³³ During the past decade, total asset holdings increased 49 percent, from 28 percent to 42 percent of GDP (**Figure 2.5, Panel B**).

FIGURE 2.5. Assets and Liabilities for LAC



Notes: Panels A and B, contains weighted averages for the region. LAC sample includes: The Antilles, Argentina, Antigua and Barbuda, Bermuda, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominica, Dominican Republic, Ecuador, Grenada, Guatemala, Guyana, Honduras, Haiti, Jamaica, St. Kitts and Nevis, St. Lucia, Mexico, Nicaragua, Panama, Peru, Paraguay, El Salvador, Trinidad and Tobago, Uruguay, St. Vincent and the Grenadines, and Venezuela. Sources: Philip R. Lane and Gian Maria Milesi-Ferretti; <http://www.philiplane.org/EWN.html>

³¹ Debt contracts include assets in Debt and Foreign Exchange Reserves.

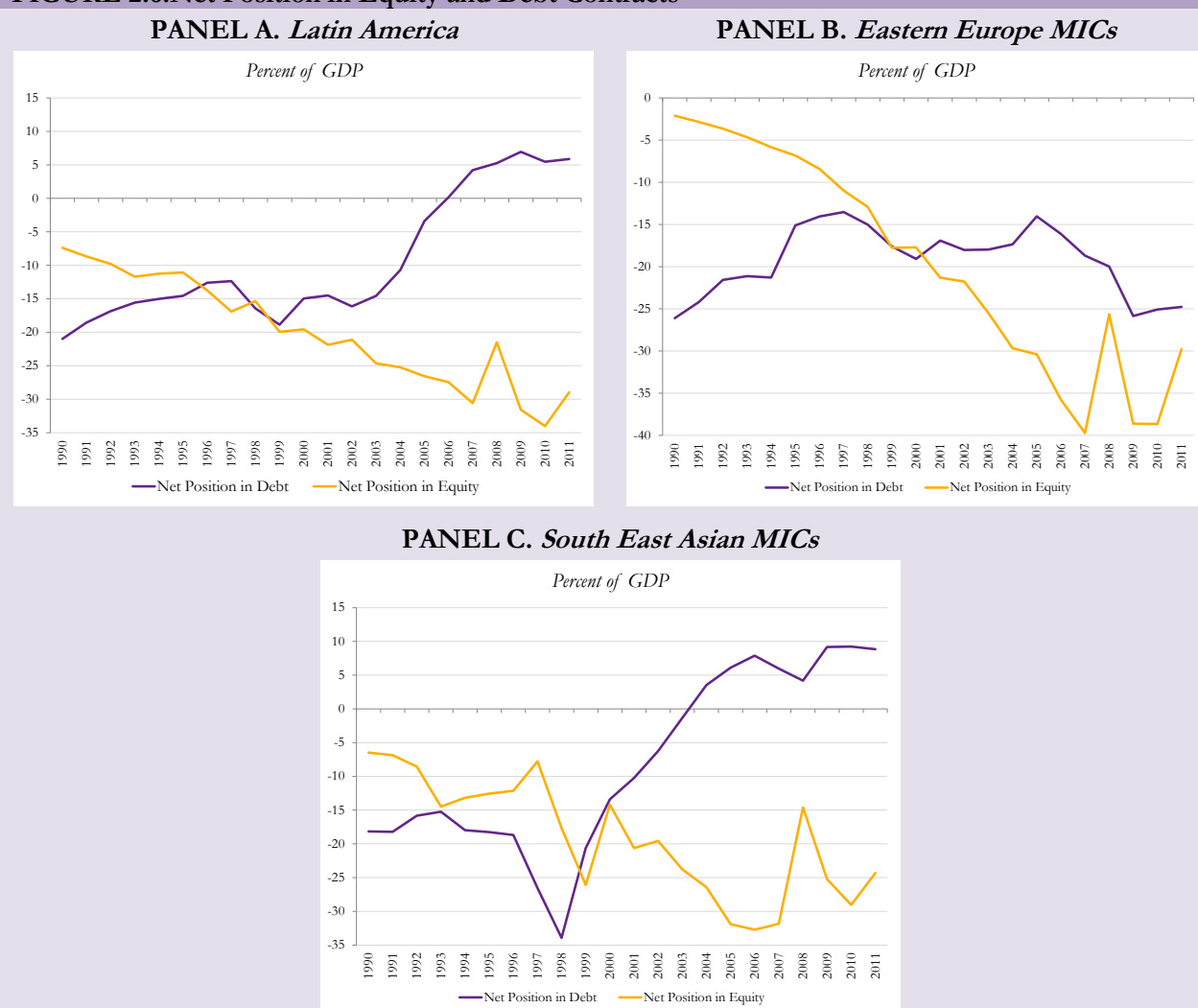
³² See Didier et al (2012) who show evidence that this new composition of liabilities has made countries withstand better the global financial crisis.

³³ The measure of foreign exchange reserves excludes gold holdings

The increase is most pronounced in foreign exchange reserves, which increased by more than 5 percentage points of GDP. Nonetheless, total equity assets (FDI + Portfolio Equity) also increased substantially from 6.5 percent of GDP to 12.1 percent of GDP.

The sharp increase in assets has resulted in an overall improvement in the region's NFA position, from minus 34.5 percent of GDP in 2000 to minus 28.8 percent of GDP in 2010, an improvement of almost 6 percentage points of GDP. But perhaps the most remarkable transformation for LAC can be seen when looking at the region's net position. While net equity liabilities have increased over the past years, LAC has become a net creditor in debt contracts vis-à-vis the rest of the world. In contrast to what we observe for the dynamics of CA balances, the patterns of the NFA composition for LAC is more similar to those observed for the SEA MICs, and less so than those observed for the EE MICs (**Figure 2.6, Panels A, B, and C**).

FIGURE 2.6. Net Position in Equity and Debt Contracts



Notes: Panels A - C, contains weighted averages for the region. Sources: Philip R. Lane and Gian Maria Milesi-Ferretti; <http://www.philplane.org/EWN.html>

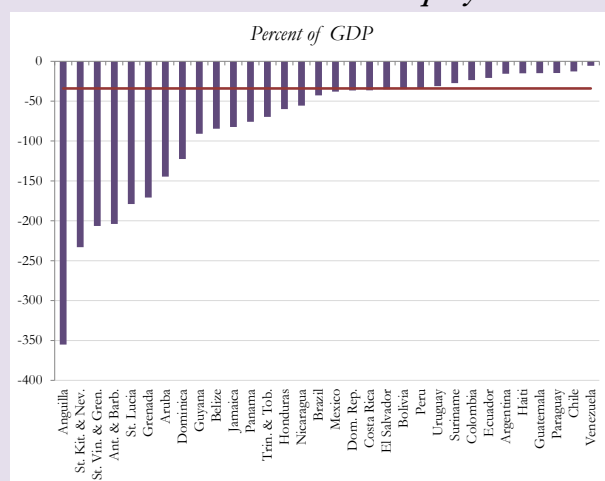
There is of course much heterogeneity within the region. Particularly as regards the net debt position vis-à-vis the rest of the world. A common feature in LAC is that every country is a net debtor in equity contracts, although in very different magnitudes (**Figure 2.7, Panel A**). This highlights the important role of FDI and the increasing importance of portfolio equity for the region. The picture is very different when we analyze the net position in debt contracts (**Figure 2.7, Panel B**). While the majority of countries have positive net positions, most of these are rather small. At one extreme are most of the Caribbean and some Central American countries with relatively large negative positions in debt. At the other extreme are countries like Bolivia, Venezuela and Trinidad and Tobago (all large net energy and mineral exporters), which present rather large positive positions, mostly due to large holdings of foreign exchange reserves. One step below, we observe Uruguay, Argentina, Haiti, Suriname, Guyana, and Costa Rica which hold positive positions above the regional average of 5.5 percent of GDP.

In sum, over the past decade, the region has relied mostly on FDI and remittance flows as external sources of finance, relegating non-FDI flows to a secondary role. This change has been so profound that it has transformed the region's composition of liabilities; LAC is now a growing user of equity finance and a net creditor in terms of debt contracts. The region has used the decade of bonanza to accumulate assets, mostly in the form of foreign exchange reserves but increasingly in equity as well. Therefore, although LAC faces uncertain weather in the future, it is now in a very different position than it was a decade ago. For the most part, this new form of international financial integration makes the region less vulnerable than it was a decade ago. In the aggregate, LAC's balance sheet has a considerably lower vulnerability to rollover, currency, and interest rate risks. However, the picture is not uniform across countries; most Caribbean and several Central American countries remain particularly vulnerable to such risks.

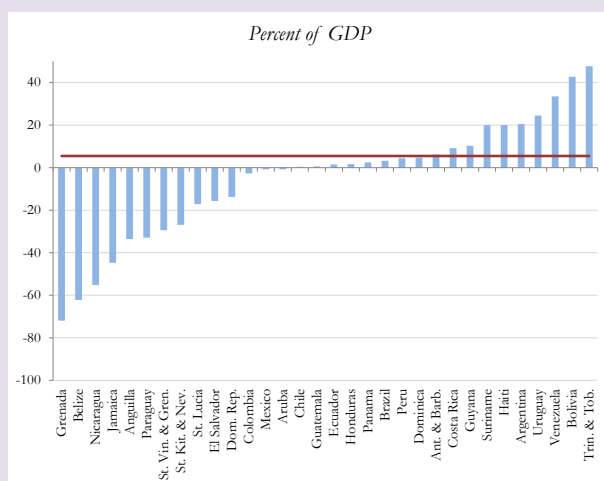
Are FDI and Remittances different in nature than non-FDI flows? Do they provide LAC with some shelter, helping the region cope with changes in global markets? The rest of this chapter will address these questions. But before turning to them, it characterizes some of the general patterns of Remittances and FDI flows in LAC.

FIGURE 2.7. Net Foreign Asset Position by Type

PANEL A. Net Position in Equity in 2010



PANEL B. Net Position in Debt in 2010



Notes: Panel A shows the net foreign asset position in equity. Equity includes both foreign direct investment and portfolio equity. The red line represents the regional weighted average equal to -34.02. Panel B shows net foreign asset position in debt, which includes debt liabilities, debt assets, and foreign exchange reserves excluding gold. The red line represents the regional weighted average equal to 5.47. Sources: Philip R. Lane and Gian Maria Milesi-Ferretti; <http://www.philipplane.org/EWN.html>

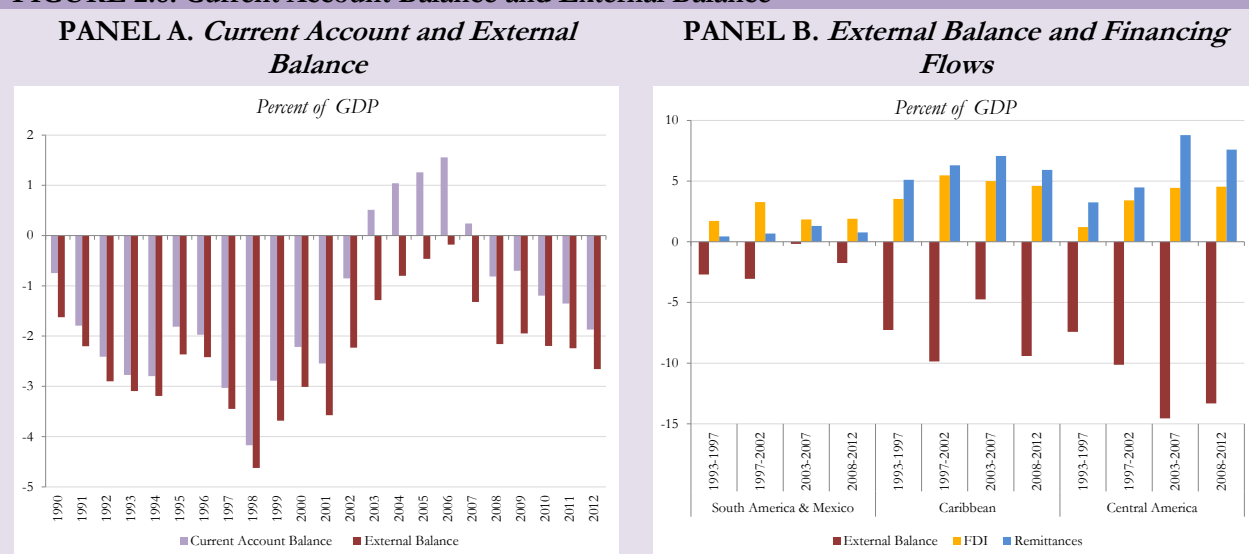
The Dynamics of FDI and Remittances in LAC

As a first pass, we present in **Figure 2.8, Panel A** the evolution of the CA for the region as a whole when we subtract Remittances, henceforth we will define it as “external balance”; what remains is essentially the trade and services balance and net payments to capital. It is remarkable that the CA surplus observed during 2003-2007 essentially disappears once we analyze the external balance. Also notable is the growing divergence over time between the CA and the external balance, a reflection of the growing importance of Remittance flows.

However, these patterns mask important differences within the region. Overall, South America and Mexico (SAM) display very different levels and dynamics than Central America³⁴ (CAM) and the Caribbean (CAR) (**Figure 2.8, Panel B**). External deficits are markedly smaller in terms of GDP in SAM than in CAM and CAR and SAM has a higher reliance on FDI than on Remittances in comparison to these other groups of countries. At the other end, CAM displays the most negative external balances as well as the highest levels of remittances. Somewhere in between, the CAR displays high external deficits, but it has a more balanced financing mix between FDI and Remittances, although Remittances remain more important than FDI. However, if Trinidad and Tobago (a major energy exporter with a substantial current account surplus) is excluded from this last group, the CAR becomes the sub-region in LAC with worst external balances.

Next, we explore these patterns country by country (**Figure 2.9**). Consistent with the sub-regional aggregates, Central American and Caribbean countries, with the exception of Trinidad and Tobago, exhibit the largest external deficits (larger red bubbles indicate larger external deficits). Interestingly, it is not the case that countries with larger deficits receive more of both flows in equal proportions.

FIGURE 2.8. Current Account Balance and External Balance



Notes: In Panel A, Regional weighted average of C.A balance, and External Balance. In Panel B, the sub-region contains their weighted average. Bars represent the average across years of each time period. South America & Mexico includes: Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Guyana, Mexico, Peru, Paraguay, Suriname, Uruguay, and Venezuela. Central America includes: Belize, Costa Rica, Guatemala, Honduras, Nicaragua, Panama, and El Salvador. Caribbean includes: Antigua and Barbuda, Dominica, Dominican Republic, Grenada, Jamaica, St. Kitts and Nevis, St. Lucia, Trinidad and Tobago, and St. Vincent and the Grenadines. Sources: LCRCE and IMF Balance of Payments Statistics and World Development Indicators.

³⁴The definition of Central America excludes Mexico.

Some countries, mostly the small islands of the Caribbean, receive large amounts of FDI, and proportionally lower levels of Remittances, while other countries with similar deficits, mostly Central American countries, finance themselves mostly through Remittances. Moreover, if we focus on countries with smaller external deficits, mostly SAM countries, the patterns are similar. For example, Panama, Uruguay and Costa Rica receive large amounts of FDI and a small proportion of Remittances, whereas countries like Ecuador and Paraguay finance their deficits mostly through Remittances rather than FDI. In between are Colombia and Peru which present a more balanced mix of financing between FDI and Remittances.

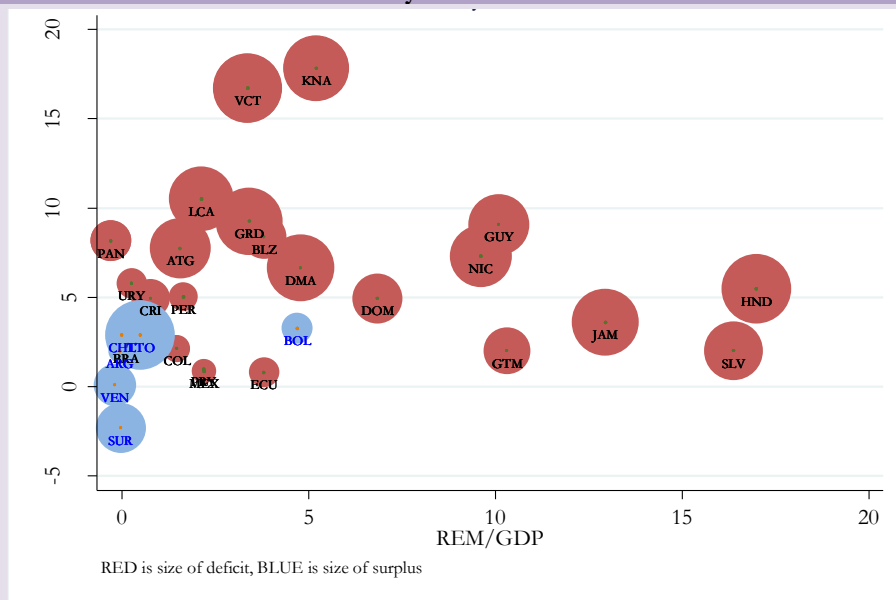
Overall, countries seem to “specialize” in a financing source. Rather than receiving larger flows of FDI **and** Remittances, it seems that countries receive larger flows of FDI **or** Remittances. This partial substitutability between FDI and Remittances is especially evident for countries with large deficits, but it is also present for those with smaller external deficits as well.

Better Financing? Characterizing FDI and Remittances in LAC

Let's go deeper into some properties of FDI and Remittance flows to LAC countries. In particular, we shed light on whether the region's reliance on these two flows, rather than on non-FDI flows, is a favorable feature of its globalization process. Do FDI and Remittance flows shelter the region, or at least not aggravate the situation, in the midst of choppy international financial waters? This issue is particularly relevant now as dark clouds gather in the horizon.

Common wisdom and anecdotal evidence suggests that both FDI and Remittances have desirable properties, especially when contrasted with non-FDI flows. Non-FDI flows are often characterized as “hot” or “dangerous” money because they are perceived to be more volatile, driven by short-term considerations that are not anchored in fundamentals and hence, the first to fly away in times of turbulence. Non-FDI flows have been indeed often blamed for the boom-bust cycles of the 1990's.

FIGURE 2.9. FDI and Remittances for LAC by the Size of External Balance



Notes: The size of the bubble represents the average size of the external balance for the years 2008-2012. Red bubbles represent a deficit, while blue bubbles represent a surplus.
Sources: LCRCE and IMF Balance of Payments Statistics and World Development Indicators.

Meanwhile, FDI is perceived as more stable, driven by long-term fundamental considerations and, hence, representing long-term commitments to its target country. FDI can thus be seen as a “bolted-down” investment—less volatile and less reversible in times of crisis. A World Bank report (1999) describes “FDI ... [as] less subject to capital reversals and contagion that affect other flows, since the presence of large, fixed, illiquid assets makes rapid disinvestment more difficult than the withdrawal of short-term bank lending or the sale of stock holdings.”³⁵

Remittances are also viewed as a stable source of financing, with little volatility and, perhaps its most attractive feature is its perceived counter-cyclical. It has become conventional wisdom that Remittances increase after a financial or currency crisis and in the wake of large natural disasters.³⁶ In this view, Remittances could be considered a reliable macroeconomic stabilizer. However, the notion that Remittances are counter-cyclical is not fully supported by empirical results. The issue remains a hotly contested debate in the literature, and it appears that there is great heterogeneity across countries in the sensitivity of Remittances to oscillations in real output; some countries exhibit pro- rather than counter cyclical behavior.

To tackle empirically the issues of stability and cyclicity of FDI, Remittances, and non-FDI flows, we begin by presenting a picture that can tell more than thousand words (or statistics). **Figure 2.10** illustrates the evolution of the three flows for a selected sample of LAC countries with available quarterly BOP data.³⁷ The series confirms that the conventional wisdom applies to LAC; on average—non-FDI net inflows are visibly the most volatile of all three flows, exhibiting the largest swings over this time period. We also observe that net FDI inflows are more volatile than Remittances, which are remarkably stable.

Similar conclusions are reached when analyzing other two common measures of volatility, the standard deviation and coefficient of variation (**Table 2.1**). We compute these two statistics for the entire sample as well as separately for good and bad times. The statistics not only confirm what is visually clear in **Figure 2.10**, but also reveal that the relative volatility of flows increases during a crisis. That is, net non-FDI inflows are more volatile than FDI during good times (over 6 times) and even more so during a crises (over 26 times).³⁸

Net non-FDI inflows also seem to be more reversible than the other net flows. At the onset of the global financial crisis, actual net non-FDI inflows dropped by 5.4 percentage points of GDP, and in the smoothed series in the graph we can observe a drop of over 3.5 percentage points of GDP.³⁹

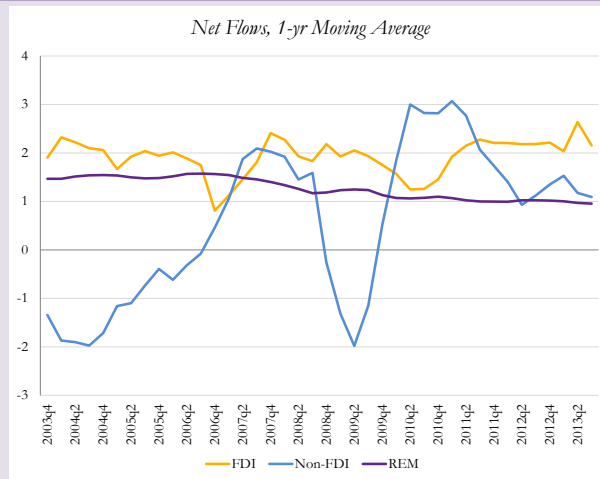
³⁵ We should note an important caveat, argued by Fernandez-Arias and Hausmann (2000, 2001). They suggest that while foreign direct investment comes in through one account, it may leave under other headings, classified as non-FDI flows. For example, foreign investors can use the physical assets of the firm as collateral to obtain a loan from banks and then place those funds abroad. An additional caveat is that there are degrees of reversibility within an investment. For example, the bricks and mortar part of an investment is clearly irreversible, but the flow of funds associated with an investment is not necessarily irreversible. Investors may accelerate profit remittances or reduce the liabilities of affiliates toward their mother companies; all these outward flows would be classified as non-FDI flows, which add to the measured volatility of these flows, while masking the true volatility associated with FDI.

³⁶ See Fajnzylber and Lopez (2008) for a review

³⁷ Countries included in the figure are: Argentina, Bolivia, Brazil, Colombia, Costa Rica, Ecuador, Guatemala, Mexico, Peru, Paraguay and El Salvador.

³⁸ Relative volatility defined as $\text{Coeff.Var}(\text{Flow X})/\text{Coeff.Var}(\text{Flow Y})$.

³⁹ This reversal is classified as a ‘sudden stop’ according to some definitions in the relevant literature.

FIGURE 2.10. Financing Flows to LAC


Notes: Weighted average for LAC. The series is calculated using a four quarter moving average. The sample contains Argentina, Bolivia, Brazil, Colombia, Costa Rica, Ecuador, Guatemala, Mexico, Peru, Paraguay, and El Salvador. Source: IMF International Financial Statistics.

Certainly, net non-FDI inflows seem to live up to their reputation as “hot” money that flees a country at the first signs of trouble. Neither FDI nor Remittances exhibit such extreme behavior. Nonetheless, net FDI inflows decreased by almost 1 percentage point from 2008 Q4 to 2010 Q1, suggesting that FDI may respond to a crisis with some lag, albeit not in the magnitude of non-FDI flows. Although not very clear because of the relative size of Remittance flows, we can observe that Remittances actually increased slightly during this crisis period.

To get a clearer idea of the magnitude of the reversibility of these flows, we use a formal measure of reversibility⁴⁰ defined in Sula and Willett (2009) and applied for LAC countries around the global financial crisis.

Table 2.1: Measures of Volatility

Country	All periods						Financial Crisis (2008-2009)						Good Times					
	FDI		Non-FDI		Remittances		FDI		Non-FDI		Remittances		FDI		Non-FDI		Remittances	
	SD	CV	SD	CV	SD	CV	SD	CV	SD	CV	SD	CV	SD	CV	SD	CV	SD	CV
Argentina	1.32	0.72	5.69	-1.63	0.02	0.15	1.07	0.57	2.74	-0.63			1.39	0.77	6.27	-1.92	0.02	0.15
Bolivia	2.91	1.32	12.36	-5.74	0.53	0.13	2.13	0.82	4.10	-4.62			3.12	1.49	13.91	-5.52	0.35	0.09
Brazil	1.56	0.89	3.12	3.13	0.02	0.09	0.90	0.56	4.45	3.90			1.71	0.95	2.74	2.87	0.02	0.08
Colombia	1.86	0.72	2.67	3.86	0.68	0.35	1.04	0.42	1.31	2.00	0.30	0.16	2.04	0.78	2.95	4.20	0.75	0.38
Costa Rica	1.70	0.33	5.25	5.25	0.14	0.11	2.01	0.36	4.69	-3.33			1.57	0.31	5.25	2.70	0.14	0.11
Ecuador	1.12	1.49	5.74	-3.20	1.57	0.34	1.28	1.49	7.82	-2.49	0.53	0.12	1.08	1.52	4.86	-3.76	1.83	0.39
Guatemala	0.61	0.35	3.43	2.33	1.20	0.11	0.29	0.17	3.73	21.68	0.99	0.09	0.68	0.38	3.31	1.81	1.26	0.12
Mexico	1.41	0.90	3.38	2.82	0.35	0.15	1.05	0.67	4.80	6.19	0.28	0.12	1.50	0.96	2.98	2.28	0.36	0.16
Peru	2.41	0.55	4.84	7.40	0.29	0.16	3.26	0.65	6.04	10.58	0.18	0.09	2.15	0.51	4.57	6.75	0.31	0.18
Paraguay	3.30	3.13	5.25	6.36	0.74	0.35	5.01	5.96	5.07	-6.65			2.53	2.23	5.30	3.73	0.77	0.37
El Salvador	3.39	1.36	8.24	6.72	1.31	0.08	3.56	1.59	7.57	11.69	1.00	0.06	3.39	1.31	8.61	6.00	1.42	0.08
LAC	0.91	0.48	2.04	3.77	0.24	0.19	0.50	0.27	2.65	7.26	0.13	0.11	0.99	0.51	1.85	3.14	0.25	0.20

Note: LAC figures represent the weighted average of the sample. Periods include 2003 Q1 to 2013 Q3. Financial crisis includes 2008 Q1 to 2009 Q4. “Good Times” is all periods excluding the financial crisis sample. SD stands for Standard Deviation. CV represents Coefficient of Variation. Source: Author’s calculations using IMF, IFS quarterly BOP data.

⁴⁰ The measure is defined as $(K_{t-1} - K_t)/GDP_{t-1}$. Positive values indicate a reversal.

This measure of reversibility is meant to capture the magnitude of the fall in the financing flows relative to GDP. A larger positive value of this measure indicates a greater reversal. We include two years in the analysis to capture the slower reversal in net FDI flows.

The results confirm the hypothesis that net non-FDI flows were the most reversible of the three flows during this latest crisis episode. Although several countries experienced an important reversal in net FDI flows during 2009-2010, these reversals pale in comparison to those of net non-FDI flows (**Table 2.2**). Taking the region as a whole, the reversal in net non-FDI flows was three times larger than that of net FDI flows. In contrast, Remittances did not show any significant reversal around the global financial crisis.

These three types of flows also have very different cyclical properties. Net non-FDI flows are highly correlated with domestic GDP growth (**Table 2.3**). Our estimates indicate that a fall in GDP of 1 percentage point below its trend would be accompanied by a fall in the ratio of net non-FDI Inflows to GDP of about 0.3 percentage points below its trend.⁴¹ In addition, non-FDI flows to LAC are also negatively correlated with growth in the G-7 countries, suggesting that growth above the trend

Table 2.2: Reversibility of Flows

Country	Year	FDI	Non-FDI	Remittances
Argentina	2008	-1.24	5.99	
Argentina	2009	1.74	-0.17	
Bolivia	2008	-1.11	-11.59	
Bolivia	2009	0.54	0.38	
Brazil	2008	-0.45	5.26	
Brazil	2009	1.15	-3.14	
Colombia	2008	-0.32	2.09	-0.17
Colombia	2009	1.23	-2.30	0.28
Costa Rica	2008	-0.69	1.84	
Costa Rica	2009	2.44	4.82	
Ecuador	2008	-1.59	2.80	1.20
Ecuador	2009	1.11	1.52	0.11
Guatemala	2008	0.32	2.53	-0.55
Guatemala	2009	0.14	2.08	1.03
Mexico	2008	0.36	1.93	0.09
Mexico	2009	1.00	-0.84	0.36
Peru	2008	-1.33	2.83	-0.05
Peru	2009	0.39	0.37	-0.07
Paraguay	2008	-1.13	-2.87	
Paraguay	2009	1.14	2.68	
El Salvador	2008	3.22	-4.46	-0.46
El Salvador	2009	2.49	3.43	1.87
LAC	2008	-0.25	3.91	0.02
LAC	2009	1.31	-1.93	0.16

Note: Reversibility of flows (K) if defined as $K_{t-1} - K_t / GDP_{t-1}$.

Source: Author's calculations using data from IMF-IFS.

⁴¹ We follow the methodology described in Acosta et al (2008) and we present the results of panel regression-based correlations between the cyclical components of flows and real output in recipient countries, controlling for changes in output of the sending countries. Trends are calculated using the HP filter.

in these developed countries tends to reduce flows to LAC. Net FDI inflows are also pro-cyclical according to our estimates, although less so than net non-FDI flows. Moreover, net FDI flows do not appear to be correlated with the growth of developed countries. In contrast, Remittances appear to be slightly counter-cyclical, a finding consistent with those in Acosta et al (2008). A drop of GDP of 1 percentage point below its trend would be associated with an increase in the ratio of Remittances to GDP above its trend of approximately 0.03 percentage points. Remittance flows are also positively associated with G-7 growth--as developed countries grow above their trend, one can expect an increase in remittance flows to LAC countries on average.

We have also examined the correlation of net capital inflows and the Libor rate and an index of commodity prices⁴². As described in the first part of this report, global financial tightening conditions and further drops in commodity prices are the most likely shocks that LAC may be facing in the near future. Our analysis suggests that net financing inflows do react in different ways to changes in the commodity price index. In the case of Remittances there is a positive correlation with the commodity index, probably reflecting that the largest remittance recipients of the region also happen to be net commodity importers, and are thus more vulnerable to price changes. In contrast, we find that there is significant and negative correlation between net non-FDI and the commodity price index, however the magnitude of this correlation is very small. We also find that, contrary to the general view, net FDI inflows to LAC are uncorrelated with the commodity index.⁴³ Therefore, we expect that the two most important financing sources for LAC would not be highly responsive to a major terms-of-trade shock caused by a decline in commodity prices.

On the other hand, we find that flows are generally more sensitive to changes in the Libor rate. For Remittances, we find that they are positively and significantly correlated--a 1 percent increase in the foreign interest rate would increase remittance flows as a ratio of GDP by 0.04 percentage points above its trend. Net non-FDI flows are negatively correlated, and strongly so, with the Libor rate--a 1 percent increase in the foreign rate would lead to a decline in net non-FDI flows as a ratio of GDP of 0.2 percentage points below its trend. For net FDI inflows, although the correlation coefficient is large and positive, it is not statistically significant.

Table 2.3: Cyclicity of Financial Flows to LAC

VARIABLES	Cycle FDI/GDP	Cycle Non FDI/GDP	Cycle Remittances/GDP
Cycle Domestic GDP Growth	0.153 (0.000)	0.306 (0.000)	-0.027 (0.056)
Cycle Foreign GDP Growth	0.025 (0.749)	-0.236 (0.166)	0.050 (0.073)
Libor	0.068 (0.185)	-0.210 (0.016)	0.046 (0.007)
Commodity Index	0.001 (0.587)	-0.004 (0.026)	0.001 (0.029)
Constant	-0.460 (0.371)	2.185 (0.012)	-0.433 (0.009)

Note: Presented are the coefficients of three separate regressions of the cyclical components of flows versus the cyclical component of Domestic GDP growth, Foreign GDP growth, the Libor rate and Commodity prices. The Hodrick-Prescott filter is used to extract the cyclical components. p-values in parentheses. Source: Author's calculations using yearly BOP data from IMF, IFS BOP data.

⁴² CRB index, from Bloomberg

⁴³ Because FDI may take more time to realize than portfolio flows, we also analyzed the correlation with 1 and 2 year lags. Nothing appeared significant.

Therefore, our results suggest that as global interest rates increase, net non-FDI flows would deepen their retrenchment from emerging markets, but this effect would be partially offset by a possible increase in remittance inflows.

In sum, our analysis suggests that FDI and Remittances have more ‘benign’ properties than non-FDI flows. First, both FDI and Remittances are significantly less volatile than non-FDI flows, and Remittances remarkably so. Secondly, although FDI is found to be pro-cyclical, it is considerably less pro-cyclical than non-FDI. Remittances are actually slightly counter-cyclical, suggesting that they can be helpful as macroeconomic stabilizers during economic downturns. Finally, even though we find that FDI did have a reversal following the financial crisis, the reversal was about one third the magnitude of the non-FDI reversal. Remittances, on the other hand, displayed no significant reversal. Hence, we would expect that LAC can count on FDI and Remittances as reliable financing flows during the uncertain times coming ahead.

In addition to these cyclical and stability dynamics, there are other features of FDI and Remittances that should also be considered. FDI is often viewed as a favorable source of financing as it can bring new technology, improve management practices, and even lead to greater market access, thus potentially improving growth and economic development more broadly. For instance, as highlighted by Lipsey (2002), multinational corporations (MNCs) employ a large portion of the labor force, pay higher wages than other firms, and are more productive than other firms. Moreover, the coexistence of MNCs and local firms gives rise to the possibility of knowledge and technological spillovers, which can enhance developing countries’ growth prospects.

In a recent report Lederman et al (2013) find that despite relatively low levels of innovation undertaken by multinational affiliates operating in the LAC region, the entry of foreign MNCs appears to have increased productivity in the region. Moreover, most of these productivity gains are a result of knowledge and technological transfers from multinational affiliates to local firms, especially through local suppliers. Additionally, empirical studies on Mexico (Blomstrom (1983)), Uruguay (Kokko, Zejan, and Tansini (2001)) and Venezuela (Aitken and Harrison 1999) find evidence of higher labor productivity in foreign-owned firms than in local firms. Work by Bloom and others (2012) shows that foreign-owned firms in Argentina, Brazil, Chile and Mexico have better management practices than local firms, giving support to the idea that multinational affiliates “import” knowledge from headquarters. However, these positive spillovers may depend on the characteristics of FDI--investments in extractive industries may have different effects than those in the manufacturing or services sectors. Spillovers would of course also depend on a number of domestic conditions, such as a skilled labor force, quality of institutions and the business environment more generally.

Remittances are also viewed as a valuable source of financing that can enhance and spur growth in developing countries. Remittances have the potential of reducing poverty and inequality in receiving countries as well as increasing aggregate investment and overall growth. On the one hand, they allow poor households to increase their savings, spend more on consumer durables and human capital, as well as improve children’s health and educational outcomes. On the other hand, the departure of migrants, who were active in the domestic labor market, may lead to reductions in other sources of household income. And of particular concern is the phenomenon known as “brain drain”, where migration is most prevalent in the highest educated segment of the population. This could significantly depress the levels of human capital in the source country, thereby reducing its future growth prospects.

In a comprehensive review of these issues, Fajnzylber and López (2008) find that for the case of LAC, Remittances have had a positive impact on the development indicators of the recipient countries, albeit the estimated effects tend to be modest. In fact, migration patterns and remittance recipients are very heterogeneous across LAC countries. For instance, in Mexico, Ecuador, El Salvador, Guatemala, and Paraguay, the recipients of Remittances are predominantly poor, whereas in Peru and Nicaragua, most recipients are in the highest quintile of non-remittance income. Moreover, for Bolivia, Honduras, Dominican Republic, and Haiti, remittance recipients exhibit a U-shaped distribution, where Remittances flow to both the poorest and richest quintiles. Nonetheless, these results suggest that Remittances in LAC tend to reduce poverty and inequality, reduce output volatility and spur growth, as well as increase investment, human capital accumulation and educational outcomes.

The connection between FDI and Remittances

So far we have argued that in the past decades LAC has turned to FDI and Remittances as the main sources of financing for its external balance. A byproduct of this phenomenon is that LAC has transformed its composition of liabilities, becoming a greater debtor in equity and has actually turned the tables on debt, becoming a net creditor vis-à-vis the rest of the world. Moreover, FDI and Remittances appear to be more reliable sources of financing to the extent that they are less volatile and more stable, or less reversible, in times of crisis than non-FDI flows.

We now explore the drivers behind these flows and whether there is a connection between these two flows. Are the factors that bring FDI to a country related to the factors that “push” workers to migrate, or, is FDI mostly directed to healthy economies where workers find it optimal to stay rather than migrate?

To enhance and clarify the discussion of these issues, we start with a brief review of the theoretical arguments on the decision of a firm to locate a production plant in a foreign country and the decision of a worker to migrate.

The theoretical literature describes two important motivations for a firm to engage in FDI. On the one hand, firms can go vertical (vertical FDI), that is, firms would locate their plants in economies where they can exploit differentials in factor costs or natural resource endowments, thereby reducing their production costs. In this case, these firms could later import the finished products back to their home countries. On the other hand, firms could go horizontal (horizontal FDI) and settle in countries to circumvent trade barriers (tariffs or large transportation costs) in serving the local market. In this case, FDI flows and exports would actually be substitutes. The implications for what makes FDI tick are clearly very different in these two cases; for example, vertical FDI may flow towards unskilled labor abundant countries where it can find cheap labor. Conversely, horizontal FDI will be attracted to larger local markets.

Regarding Remittances, the motivation for sending money back home is inextricably linked to the decision of migration in the first place. The literature has identified two main motivations for migration and Remittances. On the one hand, the macro ‘neoclassical’ theory of migration posits that international migration is determined by wage differentials across countries. Potential migrants would estimate the costs and benefits of moving to alternative foreign countries and migrate to where the expected discounted net returns are greatest over some time horizon (Borjas, 1990). In

this case, we would observe that workers from low wage countries tend to move toward higher wage countries. Another theory of migration, known as “the new economics of labor migration” (NELM) proposes that migration decisions are not made by isolated individual actors, but rather by larger units of related people—typically families or households, in which people act collectively not only to maximize expected income, but also to minimize risks. While some family members work in the local economy, others may be sent abroad, where wages and employment conditions are negatively correlated or weakly correlated with those in the local area. In the event that local economic conditions deteriorate, the household can rely on migrant Remittances for support.

The implications of these two theories are rather different. While in the ‘neoclassical’ view workers migrate towards higher wage countries, the NELM theory poses that a wage differential is not a necessary condition for international migration to occur; households may actually have strong incentives to diversify risks through transnational movement even in the absence of significant wage differentials.

Therefore, under the ‘neoclassical’ view, the movement of capital (FDI) and labor (migration and hence Remittances) are intimately linked. Capital rich countries will send capital towards labor abundant economies, where wages are low and the returns to capital are high. The flip side is that workers would migrate towards capital abundant countries, where wages are higher. The implication is that we should observe that FDI and Remittances flow jointly towards labor abundant countries as capital abundant countries send capital and firms to produce in low wage countries, while workers migrate from these countries to capital abundant countries where they remit part of their higher wages.

However, we know that capital doesn’t always flow towards capital-scarce countries. Returns to investments are determined by more than just relative abundance of factors; institutional quality, uncertainty, the regulatory framework or the business environment more generally may affect the decisions of foreign investors. For example, bureaucratic hurdles, red tape, and corruption can add to investment costs and hence reduce expected profits. Additionally, some investments may require minimum levels of human capital to be productive; countries with low educational levels may thus be unattractive to these investors. In sum, returns to capital investments are not solely determined by relative abundance, but by an ‘enabling environment’ which enhances productivity and profits. Under this rationale, we would expect that FDI flows to countries with better institutions and a better business environment. At the same time, this may be an environment where workers would have less incentive to migrate. ‘Enabling environments’ that enhance productivity and growth, may lead to higher wages and increase expected discounted earnings, making it less likely they will migrate.

There may also be a dynamic connection between FDI and Remittances. If FDI has positive effects on productivity and host country growth, then countries that are successful in attracting FDI will not only accumulate more capital and create more jobs today, but they will also grow faster and attract more FDI in the future, thereby creating more jobs and reducing the incentive for workers to migrate. This view implies that FDI and Remittances may be substitutes. That is, countries with significant net inflows of FDI will have less migration and therefore fewer Remittances. On the flip side, countries with low levels of FDI would be those in which migration is more likely, and hence we would observe higher Remittances.

In what follows, we will examine the role of several determinants in explaining both net FDI and Remittance inflows. Although we do take some precautions in avoiding some clear endogeneity issues, we don't attach a strong causality interpretation to the results, but rather we interpret the coefficients as establishing "sophisticated correlations." As a first step, we explore the sign and magnitude of a common set of covariates in a regression framework analysis aimed at explaining the levels of net FDI/GDP and REM/GDP for a subset of LAC countries.⁴⁴ The first set of covariates relates to GDP per capita and GDP growth (lagged) as proxies for market size and growth potential. We also include the 3-year moving average of inflation as a proxy for macroeconomic stability, a measure of the real effective exchange rate (REER) lagged, and the degree of trade openness of the economy (proxied by the ratio of imports and exports to GDP). To proxy for relative wages, we include the ratio of skilled to unskilled workers⁴⁵. To account for the clustering effects found in the empirical literature on FDI, we include a measure of the stock of FDI (lagged).⁴⁶ For the regression on Remittances, we include an estimate of the ratio of migrants to population.⁴⁷ Finally, we also include measures of institutional quality from the ICRG database, namely the investment profile, financial risk, democratic accountability, law and order, and legislative strength. As alternative measures, we also consider the cost of business, time to enforce contracts, and procedure to enforce contracts, all of them developed by the World Bank.

In a second step, we measure directly the correlation between FDI flows and Remittances. To that end, in addition to the determinants listed above, we also include both the stock of migrants and the stock of FDI as determinants for both flows. We also include the flow of Remittances (lagged) as a determinant of FDI flows, and vice-versa.

The results of this exercise suggest that FDI flows towards poorer countries that exhibit higher growth and have better institutions (**Table 2.4**). As in the existing literature, we find that there are significant agglomeration and other self-reinforcing feedback effects, where FDI tends to flow to countries with higher stocks of FDI. This behavior can be interpreted either as a form of signaling, where a higher stock of FDI is a signal of a benign business climate, and thus investors mimic past investment decisions by other investors. Alternatively, foreign firms may gather together due to linkages among projects. Interestingly, the institutional quality (measured by the investment profile or law and order ranking of ICRG) seems to be highly significant, suggesting that better institutions are crucial in attracting foreign investors.

Remittances are negatively and significantly correlated with the level of wealth in the home country. That is, consistent with common wisdom, Remittances tend to flow towards poorer countries in the region. Neither GDP growth nor macroeconomic conditions seem to correlate significantly with the level of Remittances. As in previous studies, we also find that the stock of migrants as a percent of total population is an important determinant of Remittances--a higher stock of migrants is

⁴⁴ Due to lack of data on institutional quality, most Caribbean counties are dropped from the analysis. However, Jamaica and Dominican Republic remain.

⁴⁵ Skilled workers are defined as the proportion of the population 15 years and older who completed secondary education or more. Unskilled are those with educational attainment below completed secondary.

⁴⁶ See Wheeler and Mody (1992) in the case of U.S. firms, Barrell and Pain(1999) in the Western European context, and Campos and Kinoshita (2003) for the case of transition economies.

⁴⁷ The estimate of the stock of migrants comes from DEC Prospects Group database. The stocks are calculated using censuses from different countries, and are thus available every 10 years (1990, 2000, 2010). We create a yearly measure by linearly interpolating between each decade.

associated with higher levels of Remittances. Although the correlation is weak (significant only at the 10 percent level), a higher ratio of skilled to unskilled workers is associated with higher Remittances. But perhaps the most interesting result is that Remittances are negatively correlated with the institutional quality of the home country. This correlation is not only statistically significant, but also of meaningful magnitude. The implication is that while better institutions attract FDI, countries with higher institutional quality are associated with lower levels of Remittances.

In the third and fourth columns of **Table 2.4**, we present results where we add the stock of migrants (FDI) as a determinant of the level of FDI (Remittances). As an alternative, in columns 5 and 6 we add FDI/GDP (REM/GDP), lagged one year, as an explanatory variable of Remittance (FDI) flows. Interestingly, once we control for the stock of migrants or the level of Remittances, FDI does not seem to be correlated with the level of a country's wealth. However, the correlation between FDI and GDP growth remains positive and highly significant across all specifications. Also strong and stable is the correlation between FDI and institutional quality; better institutions are good for FDI. In contrast, Remittances are associated with lower levels of GDP per capita across all specifications. Moreover, they are negatively and significantly correlated with the quality of institutions; in other words, Remittances flow to countries which have lower institutional quality.

If we turn to the direct correlation between Remittances and FDI, it appears that these flows are negatively correlated with one another. On the one hand, the ratio of the stock of migrants to population seems to be negatively and significantly correlated with FDI. The stock of migrants may actually be capturing historical economic conditions and quality of institutions as these stocks may reflect migration that has occurred over long periods of time in the past. On the other hand, the level of Remittances to GDP (in the previous year) also appears to have a negative association with FDI. Although the level of Remittances does not seem to have a significant correlation with the stock of FDI, countries which had higher levels of FDI flows in the past year appear to have lower levels of Remittances.

In sum, we interpret the results of this exercise as indicating that FDI and Remittances seem to behave more as substitutes rather than complements. The results are consistent with the second view of the world described above--FDI flows are directed towards countries with higher growth rates and better institutions. Countries with these attributes exhibit lower levels of Remittances and have smaller stocks of migrants. Conversely, poorer countries with lower institutional quality appear to receive higher levels of Remittances and have larger stocks of migrants as well as lower levels of FDI. Much more research would be needed, however, to better qualify these issues. In particular, it stands to reason that the degree of substitutability between FDI and Remittances depends on the characteristics of FDI flows. For example, FDI directed towards extraction of natural resources, may be less of a substitute for Remittances. By contrast, FDI that is intended to link to global value chains in manufacturing, for example, is more likely to be more of a substitute to Remittances—the better the local institutional environment, the pool of low-cost labor, or the pool of skilled labor, the higher the local attractiveness to FDI and the lower the incentives for local labor to migrate abroad. This report does not delve into these issues, partly due to data and time constraints, but it clearly hints at the importance of this line of research.

Table 2.4: Determinants of FDI and Remittances

VARIABLES	(1) FDI/GDP	(2) REM/GDP	(3) FDI/GDP	(4) REM/GDP	(5) FDI/GDP	(6) REM/GDP
Log of Per Capita GDP	-0.598* (0.313)	-0.598*** (0.192)	-0.325 (0.313)	-0.588*** (0.192)	-0.488 (0.299)	-0.607*** (0.190)
GDP growth (lag)	0.107*** (0.0404)	0.009 (0.0250)	0.095** (0.0394)	0.014 (0.0254)	0.101** (0.0406)	0.008 (0.0248)
Openness	-1.531** (0.661)	0.601 (0.420)	-0.763 (0.676)	0.552 (0.421)	-1.341** (0.660)	0.486 (0.418)
Inflation	-0.001 (0.000832)	0.000 (0.000490)	-0.001* (0.000812)	0.000 (0.000490)	-0.001* (0.000785)	0.000 (0.000487)
Real Effective Exchange Rate (lag)	-0.001 (0.00682)	-0.007* (0.00405)	0.001 (0.00663)	-0.007* (0.00404)	-0.006 (0.00647)	-0.007* (0.00400)
FDI stock/GDP (lag)	4.367*** (1.507)		4.604*** (1.464)	1.057 (0.895)	4.127*** (1.447)	
Skilled/Unskilled	-0.043 (0.708)	0.638* (0.363)	0.113 (0.688)	0.359 (0.433)	0.723 (0.694)	0.850** (0.371)
Market Capitalization/GDP	-0.006 (0.00653)	0.003 (0.00472)	-0.016** (0.00691)	0.003 (0.00472)	-0.021*** (0.00713)	0.000 (0.00484)
Investment Profile	0.307*** (0.0824)	-0.378*** (0.0504)	0.365*** (0.0816)	-0.390*** (0.0515)	0.240*** (0.0863)	-0.321*** (0.0559)
Migrant/Population (lag)		0.327*** (0.0380)	-0.220*** (0.0614)	0.324*** (0.0380)		0.306*** (0.0387)
REM/GDP (lag)					-0.446*** (0.101)	
FDI/GDP (lag)						-0.099** (0.0448)
Constant	5.241** (2.589)	7.672*** (1.598)	3.194 (2.578)	7.668*** (1.596)	5.949** (2.496)	7.685*** (1.580)
Observations	204	187	204	187	187	187
R-squared	0.203	0.536	0.253	0.539	0.307	0.548

Note: In parentheses are the associated *p*-values. *** *p*<0.01, ** *p*<0.05, * *p*<0.1. For each specification, dependent variables are shown in the rows of the table and independent variables are shown in the columns. All regressions are estimated using a OLS approach using LAC countries with available data from 1990 to 2012. Source: Milesi-Ferreti, DEC Prospect Group Migration Database, WDI, ICRG database, IMF-IFS statistics.

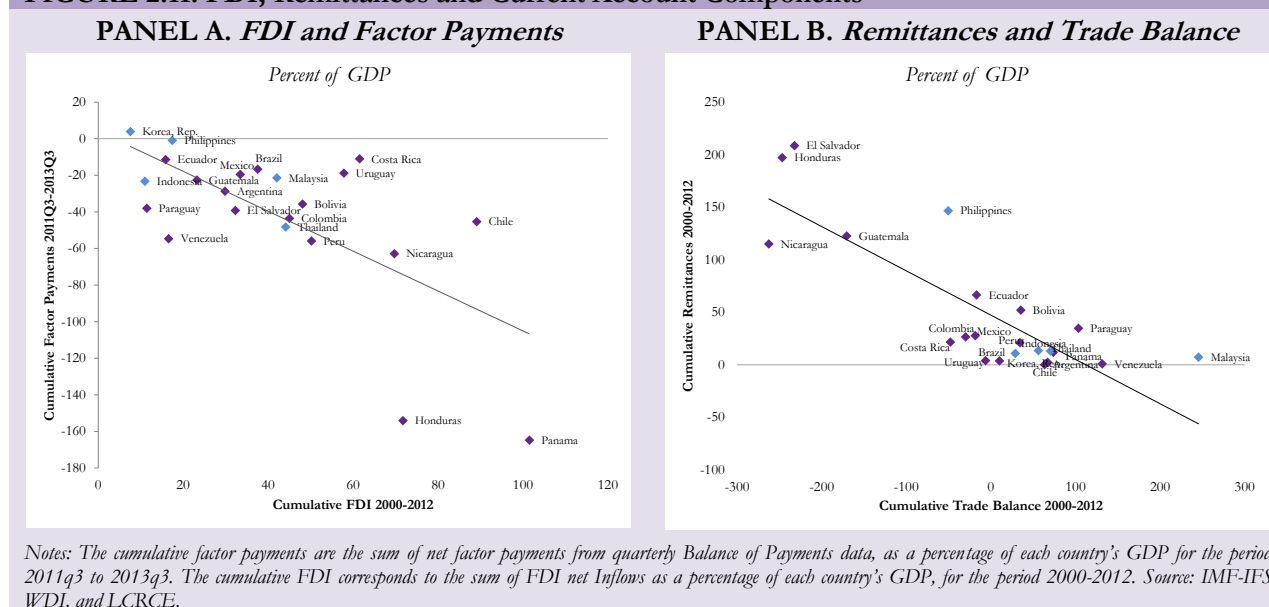
The connection between FDI, Remittances, and External Deficits

As we have highlighted before, both FDI and Remittances help finance the region's external deficits. However, there is also a dynamic connection between these flows and deficits, whereby both flows, coupled with the domestic demand-driven growth model of the region, help further external deficits over time. As we have argued in our 2013 April Semi Annual Report, we observe mostly negative and worsening external balances, whereby imports of capital and intermediate goods are financed by foreign capital (mostly FDI) that eventually gets repaid in the form of large factor payments that subtract from the trade balance, placing the current account in negative territory (**Figure 2.11, Panel A**). In other words, LAC seems to illustrate the reversal of the Gourinchas and Jeanne (2011) paradox-- foreign capital has flown into countries with good growth prospects to fund profitable investments.

Remittances also seem to have a similar effect of worsening external deficits, albeit through a different channel. As documented in the literature, the vast majority of Remittances are used to sustain consumption levels for households. Therefore, Remittances help sustain demand for both locally produced final goods and imported goods, thus, deteriorating the trade balance of the economy (**Figure 2.11, Panel B**). However, this phenomena by itself is not of particular concern to policymakers--essentially, part of what comes in today as Remittances may leave tomorrow as imports of consumer goods.

The underlying policy concern is that a surge in either flow leads to the appreciation of the real exchange rate, a case of “financial” Dutch Disease.⁴⁸ Sustained inflows of capital and Remittances help fuel domestic demand, in both the tradable and non-tradable sectors; however, because most LAC countries are price takers in international markets, growing domestic demand does not raise the prices of tradables. But because the prices of non-tradables are determined in the domestic economy, they increase due to additional demand, the so called spending effect. This effect is coupled with the “resource movement effect”--that is, the relative price change between tradables and non-tradables favors production in the latter sector, pushing up factor demands (especially in the factor intensively used in that sector). In turn, this increased factor demand by the expanding sectors will be accommodated by factors released from other sectors. Ultimately, the price shift and resource allocation in favor of non-tradables appreciates the real exchange rate, eroding the competitiveness of export-oriented sectors and hurting import-competing sectors; the final result of this real exchange rate appreciation is increased import flows and lower export sales.

FIGURE 2.11. FDI, Remittances and Current Account Components



⁴⁸ 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 sectors offsets a growing trade deficit in the manufacturing sector, as the real exchange rate adjusts, from a “financial” Dutch Disease driven by financing inflows such as FDI, portfolio, or Remittances at the expense of a generalized loss of competitiveness and a current account deficit. See Cárdenas and Levy Yeyati (2011).

Nonetheless, there is a fundamental difference between these two flows. FDI has a ‘built-in’ opportunity to offset the loss of external competitiveness through the potential gains in productivity resulting from knowledge and technological transfers from MNCs to local firms. In contrast, Remittances present a major challenge for policymakers in this respect; it has no obvious ‘built-in’ feature for increasing productivity. Notwithstanding the challenge, there is room for creativity and experimentation in the policy arena to incentivize households to direct a higher proportion of Remittances towards savings and investment and away from direct consumption.

An important caveat that should be highlighted is that FDI is no ‘silver-bullet’, and it’s important to distinguish between different types of FDI, which may bring different opportunities for technological or knowledge spillovers. Large inflows of FDI are no guarantee of higher productivity or higher growth. Take the case of many Caribbean islands—they receive large amounts of FDI yet, it has not translated into higher growth rates. The sectoral allocation of FDI flows may also be relevant, as FDI directed towards extractive or primary sectors may be generally viewed as yielding fewer spillovers to the general economy relative to FDI in manufacturing or services. Noting that an acquisition of over 10% of equity in a firm is recorded as FDI in Balance of Payment data, the so-called greenfield FDI versus mergers and acquisitions (M&A) may also have different implications for technological and knowledge transfers.

Although a detailed description of the origin and destination of FDI is beyond the scope of this report, we highlight some interesting patterns that will be further discussed in our upcoming flagship.⁴⁹ The first interesting pattern refers to the share of FDI in the form of M&A, where we observe that this is the prevalent form of FDI for all Caribbean islands in our sample, with the exception of Trinidad and Tobago, Haiti, and the Dominican Republic (**Figure 2.12, Panel A**). On the opposite side, are countries like Guyana, Suriname, Honduras, Haiti, Nicaragua, Bolivia, and Paraguay, where M&A transactions are virtually non-existent. Most countries of LAC (and the top recipients of LAC in absolute levels) present shares of M&A between 20 to 40 percent of total FDI flows.

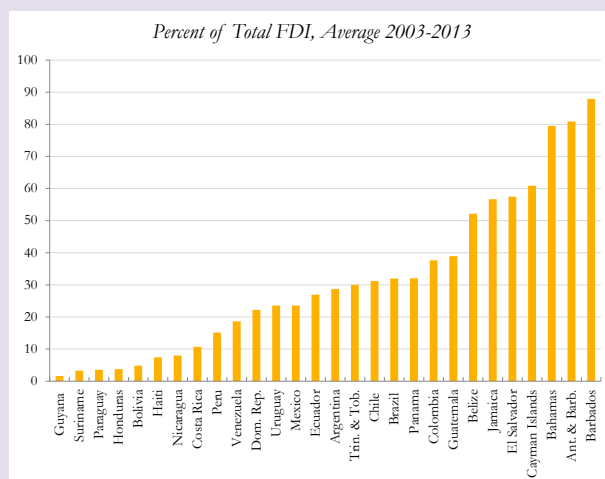
A second interesting pattern is the prevalence of FDI in the services sector in most Caribbean islands. Within services, they are mostly directed towards the financial and tourism services industry; this is true in both M&A and greenfield FDI (**Figure 2.12, Panels B, C, and D**). As expected, energy rich countries, like Venezuela, Bolivia, and Ecuador receive large shares of FDI towards the primary and extractive industries. The four largest economies of the region present a rather balanced mix of FDI to different sectors, with Brazil and Mexico receiving relatively more FDI towards the manufacturing sector. Notably the large proportions of manufacturing FDI observed in Uruguay, Paraguay and Belize are mostly in the form of greenfield investments, perhaps the most productivity-enhancing mix of FDI.⁵⁰

⁴⁹ 2014 Regional Flagship Report, "LAC in a Multipolar World" (forthcoming).

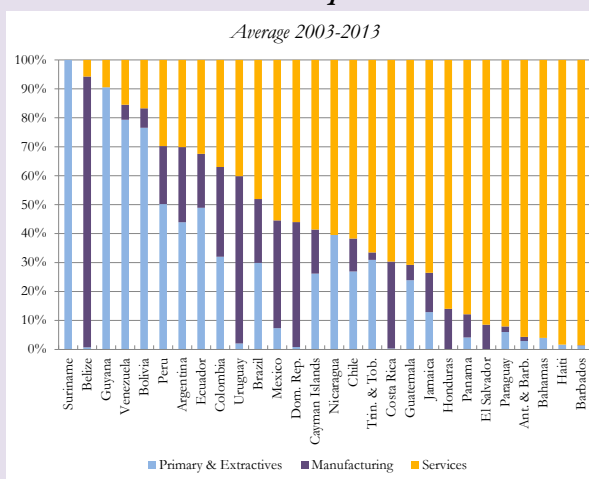
⁵⁰ This statement is speculative as the degree to which greenfield vs. M&A, or manufacturing vs. primary or services are more conducive to productivity gains remains an unanswered question, which merits future research.

FIGURE 2.12. Decomposition of FDI by Type and Sector

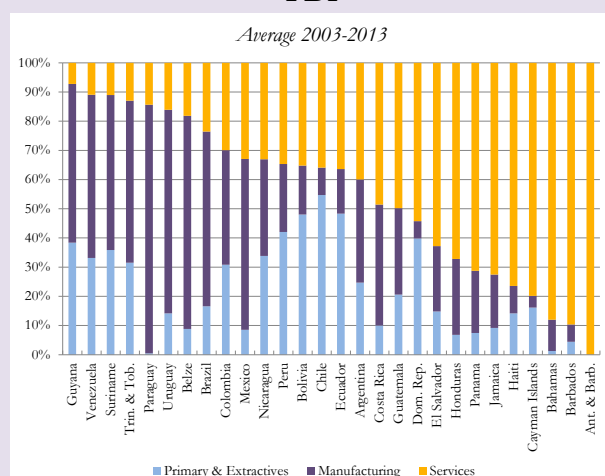
PANEL A. Share of M&A FDI



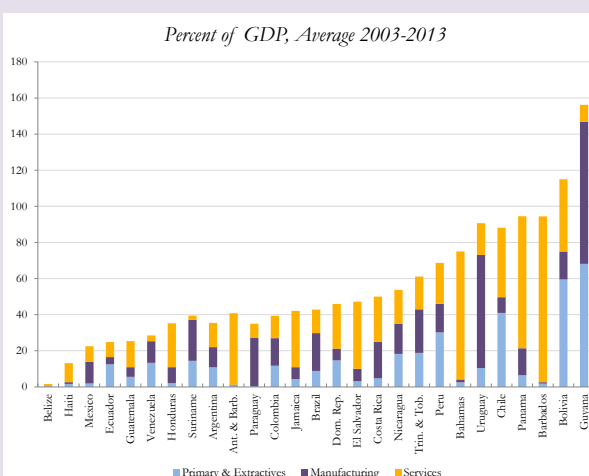
PANEL B. Sectorial Composition of M&A FDI



PANEL C. Sectorial Composition of Greenfield FDI



PANEL D. Sectorial Composition of Total FDI



Note: Primary & Extractives includes sectors 1 to 14; Manufacturing includes sector 20 to 40; Services includes sectors 40 and above according to ISIC 3.1 Sources: for M&A FDI: "Thomson Reuters SDC Platinum," for Greenfield FDI: "Financial Times' FDI Markets."

Conclusions

In chapter one, we have established that the global environment is best described as one of uncertainty and frailty. As the Federal Reserve continues the winding down of its quantitative easing program and interest rate hikes are now in the horizon, financial markets have started to adjust to the 'new reality'. The uncertainty regarding China's slowdown and its impact on commodity prices remains a source of concerns for most LAC countries. It seems that although we are not in the middle of a storm, dark clouds seem to be gathering in the horizon.

In the second chapter we have shown that current account deficits for LAC are back and seem to be here to stay. These deficits are not solely a consequence of lower commodity prices, but are to some extent related to the chronically low savings rate of the region and are an expression of what can be described as a dynamic of growth that is driven by domestic demand rather than external demand.

We also document that the region is now relying heavily on FDI and Remittances as its main sources of finance to its external balances. Non-FDI flows have been relegated to a secondary role, and in principle, this gives the region a leg to stand on during uncertain times, where large swings in

capital flows to emerging markets may take place. Furthermore, the region has used the past decade of growth and large trade balance surpluses to deleverage and de-dollarize their economies, reducing the overall level of debt liabilities, while at the same time increasing its debt in equity contracts (through FDI and portfolio equity). Hence, the region faces this global adjustment period in a very different position than a decade ago. A majority of countries are actually net creditors in debt contracts, mostly because of their large holdings of foreign exchange reserves.

We also present evidence that this increased reliance of the LAC region on FDI and Remittances may actually be a good development. Both net FDI and Remittances have been much less volatile than net non-FDI flows in recent years for LAC countries, and although net FDI flows are somewhat pro-cyclical, they are less so than net non-FDI flows. In contrast, Remittances appear to be counter-cyclical, which underlines its potential role as a macroeconomic stabilizer. Of particular concern for policymakers is the reversal of these flows during economic crises. Here again, FDI and Remittances appear to have more favorable characteristics than non-FDI flows. Using the financial crisis of 2008-2009 as a recent case study, net FDI flows presented reversals that were one third of the magnitude of that of net non-FDI flows and Remittances showed no reversal whatsoever. Thus far, it seems that the region can count on these flows during hard times. However, we should also note that FDI is strongly correlated to GDP growth and hence, if the rain turns into a storm, FDI may soon shy away from the region.

Finally, we explored whether there is a connection between FDI and Remittances. The country by country graphical evidence suggested that countries tend to ‘specialize’ in one of these flows. That is, given a certain need for external financing, as determined by the deficit in the current account subtracting Remittances, some countries tend to receive most of their financing through FDI, while others seem to receive a higher proportion of Remittances.

We examined this connection more formally in the last section of our report. We provide some evidence that countries in the LAC region with high growth rates and better institutions have received higher levels of FDI, whereas poorer countries with lower quality institutions have received higher levels of Remittances. Moreover, FDI flows have been negatively correlated with the stock of migrants and with the level of Remittance receipts. This suggests that those countries that receive higher levels of Remittances are the ones with lower levels of FDI. Conversely, countries receiving higher levels of FDI tend to be associated with lower levels of Remittances.

Although there is some evidence that Remittances may have a positive impact on growth, estimates tend to show only modest impacts. Moreover, our results suggest that Remittances go mainly to countries which are poorer and with lower quality institutions. Thus, it seems that Remittances are best characterized as a lifeboat. When everything goes wrong, you can count on Remittances for a rescue, but they are not the best way forward.

Our results suggest that investments in the betterment of institutions may yield strong dividends. Better institutions can lead to higher levels of FDI, and in turn, higher levels of FDI have the potential for increasing future growth, feeding a virtuous cycle of growth and investment. FDI in LAC has had positive impacts beyond those of factor accumulation, with some evidence of

increased productivity in the region mostly through knowledge and technological transfers from multinational affiliates to local firms. As dark clouds loom in the horizon, improvements in the quality of institutions and the development of a healthier ‘enabling environment’ has become paramount to building a sturdier ship, which in turn may receive a better and more powerful motor in the form of FDI.

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