### Chapter 2

# Latin American macroeconomic outlook

Latin America has moved away from the high rates of economic growth seen during the 2000s and towards more moderate rates of a range of 1.5-3%. Clearly it is good news that the region was able to deal with deteriorating external conditions without experiencing any crises. However, continuous downward revisions to mediumterm growth projections could be a symptom of potential output growth being less robust than expected, which could present a risk to recent social achievements. This chapter assesses Latin America's growth prospects in a more challenging international environment and explores how vulnerable the region is to further blows to the international environment in the short term. It also analyses the historical impact of resource booms (from commodities and capital flows) on the trend and cyclical components of economic performance. The chapter ends with some proposals on economic policy in the short term, and especially in the long term. The region must take ambitious strides to raise productivity and continue to bring down inequality and poverty. To do so, it must improve the skills of current and future workers through traditional education and technical and vocational education and training, a subject that ties in with the rest of this report.

The fall in global demand has hurt Latin America's economic development. The region seems to have left behind the high rates of economic growth seen during the 2000s and moved towards more moderate rates. Clearly it is good news that the region was able to avoid being hit by the deterioration of external conditions. Unlike in the past, there were no dramatic adjustments or crisis episodes in the region. The bad news is that projections are still being revised downwards, and the region could be converging towards a lower potential output than previously forecast.

This scenario is not without risk. First, output could increase as the recovery in the United States grows stronger. This would particularly benefit manufacturing exporters in Mexico and Central America. However, in this case, interest rates would rise sooner and more sharply than expected, which would be a downside risk due to its potential impact on capital flows to the region and on volatility. Another downside risk would be a more pronounced slowdown in Chinese growth than expected, which could have a negative impact on the price and quantity of Latin American commodity exports to the People's Republic of China (hereafter "China").<sup>1</sup>

This chapter therefore not only assesses Latin America's growth prospects, but also explores the region's vulnerability to further blows to the international environment in the short term and discusses policies to counter these challenges. Last year's Latin American Economic Outlook 2014 (OECD/ECLAC/CAF, 2013) focused on how less foreign trade and lower commodity prices might impact the region (see Box 2.1).

### Box 2.1. Macroeconomic outlook and developments in 2013: Forecasts and observed developments

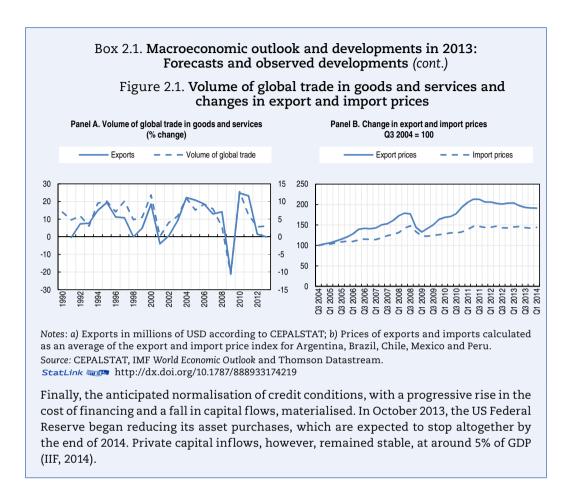
Latin American Economic Outlook 2014 (LEO 2014) forecast a less benign external scenario than that which actually occurred. This box looks back at last year's growth, trade and debt forecasts and compares them with how the economy actually performed in those areas

External growth projections for the OECD region were 1.7% for 2013 and 2.8% for 2014, whereas actual growth was 1.3% in 2013 and is now forecast at 2.2% for 2014 (OECD, 2014a). However, the euro area, with growth of -0.4% in 2013, performed close to projected (-0.6%).

Three main channels should affect Latin American economies under this scenario: a decrease in the volume of foreign trade, a possible fall in commodity prices, and the normalisation of financial conditions for obtaining credit.

The volume of global trade recovered slightly in 2013 from the severe declines in 2010 and 2011 (Figure 2.1, Panel A, left axis). In 2014, exports are expected to grow by just 0.8% from the stable USD 1.3 trillion in 2013 (Figure 2.1, Panel A, right axis), while imports will contract by an estimated 0.6% (ECLAC, 2014a). Although the volume of global trade has improved since then, it is not expected to grow substantially. The strong correlation between GDP growth in the region and world trade led to growth of 2.5% in 2013.

The prices of some commodities fell, as forecast in LEO 2014. Although no major corrections are expected, the equilibrium price is falling below where it stood during the previous decade. Export prices fell slightly in 2013 (Figure 2.1, Panel B), but import prices remained stable for the second consecutive year. As a result, the current account deficit over GDP widened from 1.9% to 2.6%.



The first section of this chapter focuses on the global outlook and its impact on the region. The second section looks at the central scenario for Latin America in the next two years and the impact of external conditions on growth, analysing the historic impact of resource booms on economic performance (trend and cycle) and identifying which countries are most vulnerable and what policy options are available in the current situation, in which output gaps have closed. Finally, the third section reflects upon the challenges that the region faces in the short and long term, and considers what policy options are available in the area of education and skills, which ties this section in with the rest of the report.

### The challenging global environment is having a marked impact on Latin America

The global slowdown continued in 2013, with growth struggling to reach 3%, well below the 5.2% mark recorded when the global recession ended in 2010. According to International Monetary Fund (IMF) estimates published in October, the global economy will grow by 3.3% in 2014 and 3.8% in 2015 (IMF, 2014). However, since then, forecasts have been revised downwards several times, and they now predict that world growth will not exceed 4% in any of the next five years. The global environment is characterised by an economic recovery in most developed economies, a weakening of emerging economies, a gradual fall in the prices of certain commodities and a normalisation of monetary conditions in the United States. The main advanced economies are expected

to record stronger growth over the next two years, especially the United States. Emerging economies look set to continue growing, but at a slower pace. The recovery in advanced economies will probably be accompanied by a normalisation of monetary conditions, starting with the United States. Commodity prices are set to continue falling slightly, but will remain high.

### Growth is slowing in emerging economies, while advanced economies, especially the United States, are experiencing a modest recovery

Although emerging economies will still be the main contributors to world growth, over the next two years some of the momentum will shift towards advanced economies, especially the United States. Forecasts for the OECD economies as a whole predict slower growth (1.8% in 2014 and 2.3% in 2015) than for the world economy (OECD, November).

The United States is showing the clearest signs of a recovery, leading the growth among advanced economies thanks to a gradual boost to domestic demand and exports since mid-2013. Unemployment continues to fall – albeit partly due to a reduction in labour force participation – and has reached the same level as before the financial crisis broke out in 2008. Consumption has been aided by a better labour market, credit growth and the wealth effect resulting from rising stock and house prices. Investment has been underpinned by greater investor optimism and the credit recovery. According to OECD projections, growth is expected to reach 2.1% this year, before rising further to 3.1% in 2015 (OECD, 2014b).

The balance of risks for this global scenario in the short term remains tilted to the downside. The risks include a greater deterioration than expected in external conditions (more sluggish growth in Europe or the main emerging economies) and episodes of financial stress during the normalisation of monetary policy. Nevertheless, certain risks may increase if the US labour market recovers more quickly than expected and there is a greater impetus resulting from new developments in the energy sector. In the medium term, growth is expected to stabilise at around 3%, provided that fiscal consolidation continues in spite of political pressures.

The euro area finally emerged from recession in 2014, thanks to a slight improvement in external demand and a lightening of the fiscal adjustment burden. However, the OECD is projecting that euro countries will record sluggish growth of 0.8% in 2014 and 1.1% in 2015 due to limited credit growth, private-sector deleveraging and weak employment figures. Gaps between countries persist, with the peripheral economies growing at a slower pace, although growth in the central countries has slowed.

The risks of this scenario to the euro area are also tilted to the downside, especially if deflationary expectations affect the price formation process and discourage activity over a sustained period. In June, the European Central Bank (ECB) responded with a series of measures to reduce the risks of deflation, including interest-rate cuts and charges for banks that hold cash (negative interest rates), as well as new liquidity injections through targeted long-term refinancing operations (TLTROs). In October 2014, the ECB also launched a programme to purchase directly asset-backed securities consisting of loans to non-financial companies and mortgages in the euro area. Finally, various geopolitical risks (Middle East, Ukraine) also threaten the region's development because of the possible effects on trade and energy security.

Japanese growth rebounded to 1.6% in 2013, driven by consumption and net exports and fostered by fiscal and monetary stimuli in the Abenomics Plan to exit negative inflation. The plan boosted economic activity and prices began to rise. Inflation for the year was 1.5% and the wage decline halted. In the third quarter, however, the economy

began to contract due to a fall in exports and rising energy imports. Meanwhile, consumption's contribution to growth weakened as consumption taxes were raised in April 2014 as part of the government's fiscal-consolidation measures. This will partly offset the effects of the fiscal and monetary stimuli. Growth is expected to slow to around 0.9% in 2014. The balance of risks for this scenario is also tilted to the downside, especially in the medium term, if structural reforms to ensure debt sustainability and greater labour-market flexibility are not introduced.

Among the emerging economies the so-called BRICS economies (Brazil, Russia, India, China and South Africa) are experiencing the most pronounced slowdown, due to structural factors, so the high growth rates seen in previous years are unlikely to return. The most important of those economies to Latin America is China. The rebalancing of the Asian country's economic model requires a gradual withdrawal of investment in favour of consumption, as well as tighter credit conditions. These measures will serve to contain the expansion of domestic demand. Following GDP growth of 7.7% in 2013, the authorities aim to achieve 7.5% growth in 2014 and 7.3% in 2015.

Data on industrial production and foreign trade in the first quarter of 2014 indicate that the Chinese economy is weakening more than expected, although it did begin to stabilise in the second quarter. From a structural perspective, although the authorities can take steps to shore up economic activity, the stimuli proposed – easing credit conditions and accelerating investment projects – are contrary to the rebalancing towards higher consumption. They would lead to medium-term risks due to the accumulation of excess capacity and housing inventory. In turn, these excesses could affect the solvency of the financial system, since many of the projects are financed by domestic credit to businesses and local government (see Box 2.2). However, most of the banking system is composed of public banks, which have the capacity to assist struggling banks, redirect credit through the more solid banks and prevent credit rationing, albeit at great cost to the public sector.

#### Box 2.2. Chinese banks in Latin America

In the 1990s, the major Chinese state banks, especially the China Development Bank (CDB) and the Export-Import Bank of China (China Exim Bank), began to support the country's macroeconomic development model. These banks have played a central role in China's "zou chuqu" ("going out") strategy to expand abroad. The strategy promotes the international expansion of Chinese companies to ensure access to natural resources and energy, strengthen "national champions" and acquire advanced technologies. To support these activities, Chinese banks have issued hundreds of billions of US dollars of financing for foreign governments, often in the form of commodity-backed loans.

From 2005 until the end of 2013, total financing to Latin America by leading Chinese public banks was USD 102.2 billion according to the China-Latin America Finance Database, a joint initiative between Inter-American Dialogue and Boston University's Global Economic Governance Initiative (GEGI).

Chinese banks finance a very different group of countries than other international financial institutions (IFIs) such as the World Bank and the Inter-American Development Bank (IDB). Since 2005, most Chinese loans to Latin America have been to the Bolivarian Republic of Venezuela (hereafter "Venezuela"), Brazil, Argentina and Ecuador, and have been directed towards infrastructure and heavy industry. Loans from IFIs and "western" development banks to Latin America, however, are mainly for governmental, social and environmental projects. The Chinese loans have similar interest rates to those issued by the IFIs. In fact, the non-concessional rates offered by China Exim Bank, CDB and Bank of China are often higher.

### Box 2.2. Chinese banks in Latin America (cont.)

Chinese financing to Latin America dropped significantly in 2012, with banks issuing only USD 3.5 billion in new loans, the lowest amount since 2006, when China began to step up its activities in the region. In 2013, however, there was a strong recovery, with Chinese loans to Latin American governments and companies totalling USD 20.1 billion. This figure was only surpassed in 2010, when Chinese banks lent USD 37 billion to the region (Figure 2.2). In 2013, CDB provided 79% and China Exim Bank 9% of the total financing.

hillions 

Figure 2.2. Chinese loans to Latin American governments and firms (2005-13)

Source: China and Latin America Finance Database, Inter-American Dialogue, 2014. StatLink Inter-Index. 10.1787/888933174228

Also in 2013, China's central bank (the PBoC) issued its first loan to the region, supporting the creation of a new financial initiative with the IDB. CDB and China Exim Bank continued to focus their financing on higher-risk countries, as measured by international capital markets. The Argentinian and Venezuelan governments were the main recipients of Chinese loans in 2013. The governments of Ecuador and Jamaica also received more than USD 500 million in loans.

In the future, China will remain a major source of financing for Latin America, and their lending in 2014 is expected to be high. A study conducted by CDB in 2013 (<a href="http://finance.eastmoney.com/news/1377,20131022331007572.html">http://finance.eastmoney.com/news/1377,20131022331007572.html</a>) recognises the political and economic risk among China's preferred partners in Latin America, but indicates continued interest in investment and lending to 10 major industries in the region: oil and gas, minerals, agro-processed products, cars, telecommunications and infrastructure. The recently created BRICS Development Bank is another indication of China's commitment to external financing.

### Commodity prices continue to decline, especially minerals and metals

Commodity prices are decreasing, but are not expected to crash. In 2013, weak global demand and supply shocks caused most commodity prices to decline. China's performance has a particularly strong impact on commodity prices (OECD/ECLAC/CAF, 2013). Commodity prices are expected to stabilise somewhat this year, but there may be some small corrections, especially in metal prices, in line with a drop in demand from emerging economies,<sup>2</sup> and in crude oil prices, due to an increase in market supply.

Brent oil prices closed 2013 at USD 111 a barrel, down 1% year on year due to global uncertainty, increased production in Saudi Arabia and a high US crude-oil inventory. In early 2014, the price of Brent oil fell by around 3%, but this trend was reversed and prices rose amid tensions between Russia and Ukraine. However, since August prices have once again been in decline, despite geopolitical risks in the Middle East, as some producers' supply has recovered (e.g. Libya) and US oil shale production has grown, reducing the need to import energy. CAF – Development Bank of Latin America predicted that crude oil prices would continue to slide, but that 2014 Brent prices will average around USD 105 a barrel.

Industrial metal prices fell by 9% on average in 2013. CAF predicts that copper prices will fall by an additional 12% in 2014. The prices of precious metals have also slid, partly due to weak demand from Asian countries, the main importers of these metals. With the Federal Reserve expected to reduce its monetary stimuli, the price of gold fell by around 28% in 2013 and stood at around USD 1 200 an ounce in late December of that year. Gold prices rebounded during the first six months of 2014, averaging USD 1 290 an ounce for the first three months of the year, because the metal is considered a safe haven during times of instability. However, it began to decline again in the second half of the year. For the entire year the price of gold is expected to average USD 1 280 an ounce.

Finally, food prices slipped by 2% in 2013, but remain high. Prices of sugar and cereals (except rice) fell due to bumper crops in Brazil, China, Thailand and other countries, while dairy and meat prices surpassed expectations thanks to a rise in Chinese and Japanese demand. These trends look set to continue, with some agricultural commodities presenting upside price risks associated with El Niño. In short, base metal and fuel prices are expected to decline more sharply than agricultural and fuel prices, which look as though they will remain stable (Figure 2.3).

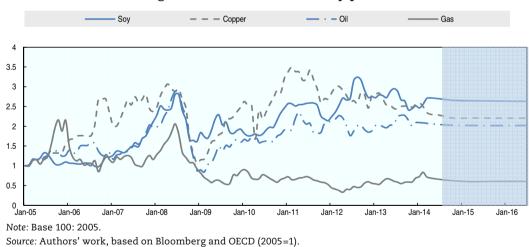


Figure 2.3. Selected commodity prices

The impact of tighter monetary conditions in the United States is one of the major risk factors

The third trend is the tightening of monetary conditions in the United States, which will increase financing costs and make capital flows to emerging economies – especially portfolio investments – less attractive. Since October 2013, the United States Federal Reserve (Fed) has been reducing its asset purchases so that, as the economic recovery

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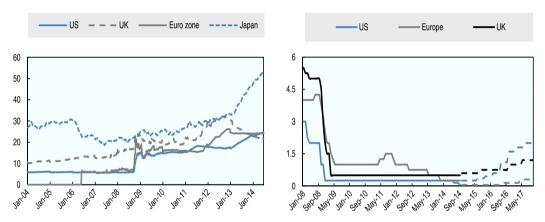
allows, it can inject liquidity into the financial system (Figure 2.4, Panel A). The Fed has reduced the pace at which it is expanding its balance sheet by gradually cutting down its asset purchases until they ceased altogether in October 2014. The mere announcement of this reduction in purchases rocked the markets, and may continue to generate episodes of volatility.

However, global liquidity conditions are expected to remain lax, since US interest rate increases will not be as abrupt as in previous cycles (Figure 2.4, Panel B) and the Bank of Japan still has an expansionary monetary policy. Moreover, as mentioned above, the European Central Bank cut rates to record lows in September 2014 and announced the injection of liquidity into the economy through purchases of asset-backed securities from the private sector. The ECB's cycle of interest rate increases is therefore unlikely to be entirely synchronised with that of the Fed, since the US economy is showing more signs of recovery (Figure 2.4, Panel B).

Figure 2.4. Monetary policy in the industrialised economies

Panel A. Central bank balance sheets (% GDP)

Panel B. Central bank policy rates



Source: Thomsom Reuters Datastream (Panel A). IMF, CAF and Thomsom Reuters Datastream (Panel B)

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Recent evidence suggests that the Fed's quantitative easing programmes have had a big impact both on purchases and on asset prices in emerging markets (Fratzscher et al., 2011). The programmes have also impacted gross capital flows to emerging markets (World Bank, 2014; Olaberria, 2014)<sup>3</sup> and have turned many capital flows into portfolio flows (Ahmed and Zlate, 2013). The scaling back of quantitative easing should therefore slow portfolio flows to emerging countries.

Along with the quantitative adjustment, the change in the expected interest rates influences the performance of long-term bonds in the United States, which affects non-resident capital inflows to emerging markets (Koepke, 2013; IDB, 2014). Changes in long-term US bond yields, especially 10-year bonds, alter the cost of capital financing and the attractiveness of emerging economies' assets, and therefore their prices.

Moreover, the impact appears to be asymmetrical: portfolio flows (especially fixed-income instruments) decline further when market forecasts predict US interest-rate rises than when they predict US interest-rate cuts (Koepke, 2014). There is a correlation between long-term bond yields and the sovereign-debt spreads of emerging economies (Figure 2.5).

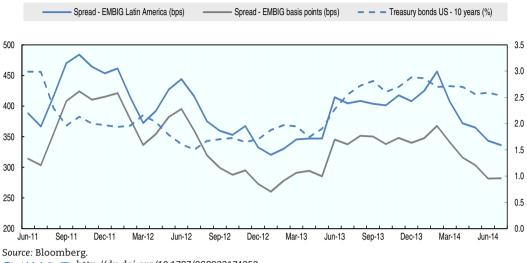


Figure 2.5. Ten-year US treasury bond yields and sovereign spreads of emerging countries and Latin America

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Once again, the impact of monetary normalisation on capital flows varies greatly from one country to another in the region. The mid-2013 episode4 suggests that changes in global financial conditions or "push effects" (borrowing costs in advanced economies and risk appetite) may prevail. But domestic fundamentals, or "pull effects", such as growth expectations and payment capacity, are also relevant (Csonto and Ivaschenko, 2013; IIF, 2014), as was the case during the January 2014 episode. Markets actually seem to be discriminating among countries, depending on their fundamentals.

The emerging economies with stronger fundamentals recorded fewer depreciations and sovereign-spread rises in the financial volatility episodes between January 2013 and January 2014 (Mishra et al., 2014; OECD/ECLAC/CAF, 2013). In particular, the most important specific characteristics for determining market reactions to Fed announcements are the international reserves-to-GDP ratio, the current-account balance, growth prospects, external debt (including corporate debt), inflation rates, stock market capitalisation and macroprudential measures.

Also, growth expectations are positively associated with the value of assets. Stock markets have performed better in economies with good growth prospects for 2014 (including Mexico, the Philippines and Thailand) than in economies like Brazil, where growth prospects have deteriorated (IIF, 2014).

In short, as the normalisation of monetary policy in the US progresses, adjustments to interest rate expectations could generate new episodes of volatility. During those episodes, the markets would probably distinguish between different types of assets and discriminate against emerging economies with weaker fundamentals. For example, as US interest-rate expectations have stabilised since the second quarter of 2014, there has been a resurgence of risk appetite. Consequently, portfolio flows to emerging economies have begun to recover (Figure 2.6). However, those economies' fundamentals have changed very little, and in August portfolio flows began to decline once again and then in October there was another episode of volatility. These events serve as a warning of the impact of periodic changes in attitudes towards risk as the monetary normalisation process moves forward. Economies with greater external financing needs that have witnessed an increase in private-sector leverage in recent years could see their financing disrupted by heavy capital outflows.

■ Debt flows ■ Equity flows 50 40 30 20 10 ٥ -10 -20 -30 -40 887.53 - 153 404/3 00x12 401.15 080,<u>1</u>5 1801/3 4801,3 Mar.13 Maries May's Jun 13 701.13 MIGIS 00,5 080. 12 480'1A Source: IIF, estimates for 30 emerging economies. StatLink http://dx.doi.org/10.1787/888933174265

Figure 2.6. Portfolio flows to emerging economies (billions of USD)

### Situation and outlook in Latin America

### The slowdown is continuing in Latin America, albeit with heterogenity

In 2013, the region grew by 2.5%, down from 2.9% growth in 2012. This slowdown was due to lower export and lower domestic demand growth and some supply bottlenecks. Exports were hit by a downturn in global demand and commodity prices. Meanwhile, the slowdown in domestic demand was caused by the weakening of gross capital formation due to more pessimistic investor expectations and a loss of momentum for domestic credit. Private consumption continued to show solid growth, albeit at a slower pace due to the slight deterioration of labour market conditions and the slowdown in consumer credit.

The region's economy is projected to grow by 1.2% according to CAF<sup>6</sup> and 1.1% according to the Economic Commission for Latin America and the Caribbean (ECLAC) in 2014. Growth in 2014 will be hit by weak investment in most economies, modest US demand and the economic slowdown in China. Although the US recovery is expected to drive growth in exports over the next few quarters, Central America and Mexico could benefit more than South America, which will continue to be weighed down by the slowdown in Chinese demand and the decline of commodity prices.

Nevertheless, the phase of the business cycle and growth prospects vary greatly from one country to another in the region. Peru and Chile, for instance, are experiencing a sharp economic slowdown due to deteriorating terms of trade and weaker investment. Estimates project a slight acceleration in the second half of 2014, but only to around 3% for Peru and 2% for Chile. Economic growth also slowed in Panama, due to weaker external demand, and is expected to reach only around 6% due to a slowdown in investment growth after major infrastructure projects have reached maturity. Growth in the Plurinational State of Bolivia (hereafter "Bolivia") looks set to slip slightly to 5.5% after accelerating rapidly in 2013. It will continue to be underpinned by fuel exports to Brazil and Argentina and public investment.

Brazilian growth has continued to slow and is unlikely to reach 0.5% in 2014 due to infrastructure bottlenecks and delays to pro-competitiveness reforms. According to

projections, Uruguayan growth will slow to 3% in 2014 and, as in Brazil, the economy will be affected by persistent inflationary pressures. Finally, the Argentinian and Venezuelan economies will contract in 2014 due to growing economic imbalances and double-digit inflation.

The Colombian economy is recovering thanks to a monetary and fiscal stimulus and greater consumer optimism, and projections for 2014 predict growth of almost 5%, enabling the output gap to close. In Mexico, fiscal stimuli and the US recovery are expected to lift growth to 2.5% in 2014. Structural reforms recently passed, especially in energy, telecommunications, tax and education, could promote investment and raise growth potential in the coming years. Secondary legislation, which has not yet been drafted, will be vital to drive this process.

Central American countries will also benefit from renewed demand from the US and additional tourism inflows. Costa Rica, Nicaragua and the Dominican Republic will grow by 4% to 4.5%, and Guatemala and Honduras will grow at slightly lower rates of 3% to 3.5%. Finally, growth in the Caribbean economies is expected to accelerate from 1.2% in 2013 to 2% in 2014, bolstered by additional tourism thanks to the economic recovery in the United Kingdom and several countries in the euro area.

In 2015, GDP growth is expected to rebound slightly in nearly all countries in the region, to around 2.5% on average. This growth will be supported by a recovery in global demand, thanks in particular to a shift to a more favourable phase of the business cycle in the United States and expansionary fiscal and monetary policies in countries that have the space to adopt them (Peru and Chile, for instance). The balance of risks for this outlook remains tilted to the downside, mainly by worsening external conditions. There is no perceived risk of adjustments to demand due to internal imbalances, except in a few South American economies. Nevertheless, the need for such adjustments would be precipitated by a further deterioration of external conditions.

### How will the international environment affect Latin America's performance?

### The economic impact of temporary resource booms can be analysed by looking at their history.

When advanced economies are returning to growth, Latin America seems able to cope with gradual interest rate increases and slight declines in commodity prices. Such a scenario is potentially risky, however. Perhaps the most obvious risk is that, if interest rates increase faster than expected, capital markets will become more volatile and capital flows will reverse once again. There is also the risk of a greater fall in commodity prices due to a sharper Chinese slowdown.

In the past, countries in Latin America and the Caribbean have experienced numerous temporary resource booms, which have strongly impacted economic cycles. Resource booms refer to inflows of foreign currency for commodity exports (food, minerals and fuels), remittances, short-term capital flows and foreign direct investment (FDI), the value of which is at least one median deviation above the series median of the GDP trend.<sup>7</sup>

All countries in Latin America have had commodity booms during the last half century. There was an average of 3.3 booms per country in South America and 1.4 per country in Central America and the Caribbean (Table 2.A1.1), compared to only 1.5 per country among high-income economies and 1.6 per country globally (Table 2.A1.1 in Annex 2.A1).

Moreover, 15 of the 16 countries in Central America and the Caribbean included in this analysis recorded short-term and long-term capital-flow booms or remittance booms in the last five decades, with an average of 2.0 episodes per country. In South

America, eleven of the twelve countries experienced booms (all except Suriname) with an average of 1.8 episodes per country. Again, in both cases, this frequency is above the average for high-income countries (1.3 booms) and above the average for any other group of emerging countries.

Table 2.1 shows the nature of the booms in several countries. Chile and Peru experienced mineral booms; Ecuador, Colombia and Venezuela oil booms; Colombia and Costa Rica coffee booms in the 1970s; and Argentina, Uruguay and Paraguay cereal booms. Bolivia and Chile are the countries that experienced most booms in South America. Bolivia is currently experiencing a boom from minerals and gas exports to neighbouring countries. Chile is notable because commodity booms have been bolstered by capital-flow and investment booms.

In Brazil, there have been fewer commodity booms because of a more diversified economy and a low trade openness, with these exports representing only a small portion of GDP. Commodity shocks therefore seem to be less of a blow to Brazil than to the other South American economies, although Brazil has had capital-flow booms.

Table 2.1. Temporary booms in Latin America (selected countries)

|                         | Food  |      | Minerals |      | Fuels |      | Remittances |      | Short-term<br>capital flows |      | Foreign direct investment |      |
|-------------------------|-------|------|----------|------|-------|------|-------------|------|-----------------------------|------|---------------------------|------|
|                         | Start | End  | Start    | End  | Start | End  | Start       | End  | Start                       | End  | Start                     | End  |
| Argentina               | 1977  | 1983 |          |      |       |      |             |      | 1993                        | 1994 | 1999                      | 2000 |
|                         | 2007  | 2012 |          |      |       |      |             |      | 1997                        | 1998 |                           |      |
| Bolivia                 | 1994  | 1998 | 1977     | 1981 | 1981  | 1986 | 2006        | 2010 |                             |      | 1995                      | 2002 |
|                         |       |      | 2008     | 2012 | 2005  | 2008 |             |      |                             |      |                           |      |
|                         |       |      |          |      | 2011  | 2012 |             |      |                             |      |                           |      |
| Brazil                  | 1964  | 1965 |          |      |       |      |             |      | 1994                        | 1996 |                           |      |
| Chile                   | 1994  | 1998 | 1979     | 1981 |       |      |             |      | 1992                        | 1994 | 1996                      | 1999 |
|                         |       |      | 1988     | 1989 |       |      |             |      | 1996                        | 1997 |                           |      |
|                         |       |      | 2006     | 2008 |       |      |             |      |                             |      |                           |      |
| Colombia                | 1964  | 1965 |          |      | 2008  | 2012 |             |      | 1981                        | 1982 |                           |      |
|                         | 1977  | 1980 |          |      |       |      |             |      | 1994                        | 1996 |                           |      |
| Costa Rica              | 1976  | 1981 |          |      |       |      |             |      |                             |      | 2006                      | 2008 |
|                         | 1993  | 1998 |          |      |       |      |             |      |                             |      |                           |      |
| Ecuador                 | 1964  | 1965 |          |      | 1980  | 1985 | 2005        | 2008 | 1990                        | 1992 |                           |      |
|                         | 1994  | 1998 |          |      | 2005  | 2008 |             |      |                             |      |                           |      |
|                         | 2011  | 2012 |          |      | 2011  | 2012 |             |      |                             |      |                           |      |
| Mexico                  |       |      |          |      | 1980  | 1985 |             |      | 1991                        | 1993 |                           |      |
|                         |       |      |          |      | 2006  | 2008 |             |      |                             |      |                           |      |
| Paraguay                | 1989  | 1990 |          |      | 2010  | 2012 | 1995        | 1997 | 1981                        | 1982 |                           |      |
|                         | 2001  | 2003 |          |      |       |      |             |      |                             |      |                           |      |
|                         | 2007  | 2008 |          |      |       |      |             |      |                             |      |                           |      |
| Peru                    | 1964  | 1966 | 1979     | 1983 |       |      |             |      |                             |      | 1994                      | 1997 |
|                         | 1994  | 1997 | 2005     | 2011 |       |      |             |      |                             |      |                           |      |
|                         | 2008  | 2012 |          |      |       |      |             |      |                             |      |                           |      |
| Uruguay                 | 1980  | 1983 |          |      |       |      |             |      |                             |      | 2006                      | 2010 |
|                         | 1996  | 1998 |          |      |       |      |             |      |                             |      |                           |      |
| Venezuela, Bol.<br>Rep. | 2008  | 2012 |          |      |       |      |             |      |                             |      |                           |      |
|                         |       |      |          |      | 1979  | 1984 |             |      |                             |      | 1997                      | 1998 |
|                         |       |      |          |      | 1996  | 1997 |             |      |                             |      |                           |      |
|                         |       |      |          |      | 2005  | 2008 |             |      |                             |      |                           |      |

Note: The fuel boom in Paraguay was driven by oil and gas re-exports from Bolivia.

Source: Authors' work based on World Development Indicators, World Bank and official sources.

About half the food booms have taken place in Central America and half in South America. Fuel and mineral booms, meanwhile, have mainly been in South America and Mexico. Capital-flow booms have been distributed evenly between South and Central America. Finally, two-thirds of direct-investment and remittance booms have been in Central America (see Table 2.2 and Figure 2.7 for a selection of countries).

On average, Latin American booms last 3.7 years and account for 5.6% of GDP (measured as the value of exports as a fraction of long-term GDP in a boom year minus the series median in a 25-year window). The largest booms are in investment flows and short-term capital (7.1% and 6.9% of GDP, respectively), followed by fuel (6.1% of GDP), minerals (5.6% of GDP) and food (4.8% of GDP). The results are similar for South America.<sup>8</sup>

Table 2.2. Temporary booms and output gap in Latin America

|                           |       |                     |                 | Average output gap                          | Average output gap                          | Average<br>output gap                      | Change in output gap                          | Change in output gap                         | Change in output gap before and                            |
|---------------------------|-------|---------------------|-----------------|---------------------------------------------|---------------------------------------------|--------------------------------------------|-----------------------------------------------|----------------------------------------------|------------------------------------------------------------|
| LAC                       | Booms | Duration (in years) | Size<br>(% GDP) | before the<br>boom                          | during the<br>boom                          | after the<br>boom                          | during the<br>boom                            | after the<br>boom                            | after the<br>boom                                          |
| Agricultural products     | 36    | 3.9                 | 4.8             | -0.2                                        | 2.0                                         | -2.1                                       | 2.9***                                        | -4.5***                                      | -2.2                                                       |
| Minerals                  | 9     | 4.2                 | 5.6             | -1.8                                        | 1.1                                         | -3.2                                       | 3.9**                                         | -4.7*                                        | -1.1                                                       |
| Fuels                     | 15    | 4.0                 | 6.1             | 0.0                                         | 0.7                                         | -2.5                                       | 0.7                                           | -4.1***                                      | -3.5                                                       |
| Natural resources         | 60    | 4.0                 | 5.2             | -0.4                                        | 1.5                                         | -2.4                                       | 2.5                                           | -4.4                                         | -2.3                                                       |
| Remittances               | 15    | 4.6                 | 3.2             | -0.4                                        | 0.8                                         | -2.1                                       | 0.9                                           | -2.9***                                      | -2.1                                                       |
| Short-term capital flows  | 17    | 2.4                 | 6.9             | 0.4                                         | 3.5                                         | 0.7                                        | 2.6**                                         | -2.9**                                       | 0.7                                                        |
| Foreign direct investment | 25    | 3.3                 | 7.1             | -0.8                                        | 2.7                                         | 0.1                                        | 3.6***                                        | -3.3***                                      | -0.2                                                       |
| Remittances               | 57    | 3.4                 | 6.0             | -0.3                                        | 2.4                                         | -0.3                                       | 2.6                                           | -3.1                                         | -0.5                                                       |
| Total temporary booms     | 117   | 3.7                 | 5.6             | -0.4                                        | 2.0                                         | -1.4                                       | 2.5                                           | -3.7                                         | -1.4                                                       |
| South America             | Booms | Duration (in years) | Size<br>(% GDP) | Average<br>output gap<br>before the<br>boom | Average<br>output gap<br>during the<br>boom | Average<br>output gap<br>after the<br>boom | Change in<br>output gap<br>during the<br>boom | Change in<br>output gap<br>after the<br>boom | Change in<br>output gap<br>before and<br>after the<br>boom |
| Agricultural products     | 20    | 3.8                 | 3.2             | 3.5                                         | 4.1                                         | 4.0                                        | 3.7                                           | -4.6                                         | -1.0                                                       |
| Minerals                  | 8     | 4.3                 | 6.0             | 3.9                                         | 3.7                                         | 3.6                                        | 3.9                                           | -5.4                                         | -1.1                                                       |
| Fuels                     | 12    | 3.8                 | 6.4             | 3.5                                         | 3.4                                         | 2.8                                        | 0.5                                           | -3.4                                         | -3.1                                                       |
| Natural resources         | 40    | 3.9                 | 4.7             | 3.6                                         | 3.8                                         | 3.6                                        | 2.8                                           | -4.4                                         | -1.7                                                       |
| Remittances               | 4     | 4.3                 | 3.5             | 3.3                                         | 3.4                                         | 3.5                                        | 0.9                                           | -2.9                                         | -2.0                                                       |
| Short-term capital flows  | 9     | 2.4                 | 6.3             | 3.7                                         | 3.9                                         | 3.7                                        | 4.3                                           | -3.0                                         | 2.6                                                        |
| Foreign direct investment | 8     | 3.9                 | 6.4             | 3.0                                         | 3.3                                         | 3.5                                        | 3.0                                           | -4.2                                         | -4.6                                                       |
| Remittances               | 21    | 3.3                 | 5.8             | 3.4                                         | 3.5                                         | 3.6                                        | 3.2                                           | -3.4                                         | -1.0                                                       |
| Total temporary booms     | 61    | 3.7                 | 5.1             | 3.5                                         | 3.7                                         | 3.6                                        | 2.9                                           | -4.0                                         | -1.4                                                       |

Note: \* significant at the 10% significance level. \*\* Significant at the 5% significance level. \*\*\* Significant at the 1% significance level. For South America there are too few data to appropriately infer anything in terms of the significance level. Changes in the average gap are not the same as the differences between gaps because they only take into account observations for which data exist for the minuend and subtrahend.

Source: Authors' work based on World Development Indicators, World Bank and official sources.

Historically, these resource booms have been related to the cyclical dynamics of outputs, thus contributing to accelerated growth during booms and marked slowdowns afterwards. On average, output seems to be close to or below its potential during the two years prior to each boom, then rises above potential output during the boom, before finally falling back below potential two years after the end of the boom. Moreover, the results suggest that the positive output gap during booms tends to be greater during short-term capital-flow booms. The output gap seems to close more quickly after commodity booms, especially mineral booms.

Capital-flow and direct-investment booms cause the output gap to rise furthest above its pre-boom level, followed by food booms. For booms of other commodities and remittances, the difference in the output gap is not significant. In South American countries, the dynamic is fairly similar, but since there are far fewer episodes, it is not possible to establish whether the differences in the output gap are statistically significant. In all cases the average output gap for the two years following the end of the boom is lower than the average gap during the boom. This suggests that growth slips below its potential once a boom has ended. Furthermore, commodity booms tend to have a stronger negative cyclical effect than capital booms (see Figure 2.7, which shows the results for a selected group of Latin American countries).

Irrespective of their nature, these resource booms do not seem to have raised growth potential in Latin America. Empirical analysis suggests that resource booms do not significantly increase the economies' trend growth (Table 2.3). This is true even of direct-investment booms. Nevertheless, this does not disprove that direct investment may help to raise growth potential, but it does show that increases above historical levels are not associated with higher growth potential.

Table 2.3. Resource booms and the trend output growth

| LAC                    | Change in the trend output<br>growth during the boom | Change in the trend output growth after the boom | Change in the trend output<br>growth before and after the boom |
|------------------------|------------------------------------------------------|--------------------------------------------------|----------------------------------------------------------------|
| Agricultural products  | -0.2*                                                | -0.2***                                          | -0.4                                                           |
| Minerals               | 0.0                                                  | 0.2*                                             | -0.1                                                           |
| Fuels                  | -0.2                                                 | -0.1***                                          | -0.4                                                           |
| Remittances            | -0.1                                                 | -0.2**                                           | -0.2                                                           |
| FDKCP                  | -0.1*                                                | -0.2**                                           | -0.3                                                           |
| FDI                    | -0.1**                                               | -0.2*                                            | -0.3                                                           |
| Sum of temporary booms | -0.1**                                               | -0.1                                             | -0.3                                                           |

Note: \* significant at the 10% significance level; \*\* significant at the 5% significance level; \*\*\* significant at the 1% significance level. For South America there are too few data to appropriately infer anything in terms of the significance level.

Source: Authors' work based on World Development Indicators, World Bank and national data.

Commodity booms are often supported by capital booms and FDI booms. As evidenced during the food booms in Chile, Bolivia and Uruguay and the mineral booms in Bolivia and Chile (based on data for 1980-2011, the period for which capital-flow data are available). If direct investment in commodities has only limited spillover effects on other sectors, its capacity to raise the economy's potential output may also be limited, which would be consistent with previous findings.

Different methodologies lead to the same findings concerning the impact of commodity booms on the business cycle in Latin America. The previous analysis is revealing since it presents overall trends and country trends, as well as suggesting correlations. However, it has limitations in establishing the effect of booms on the output gap. For instance, capital flows can be attracted by countries' high growth rates.

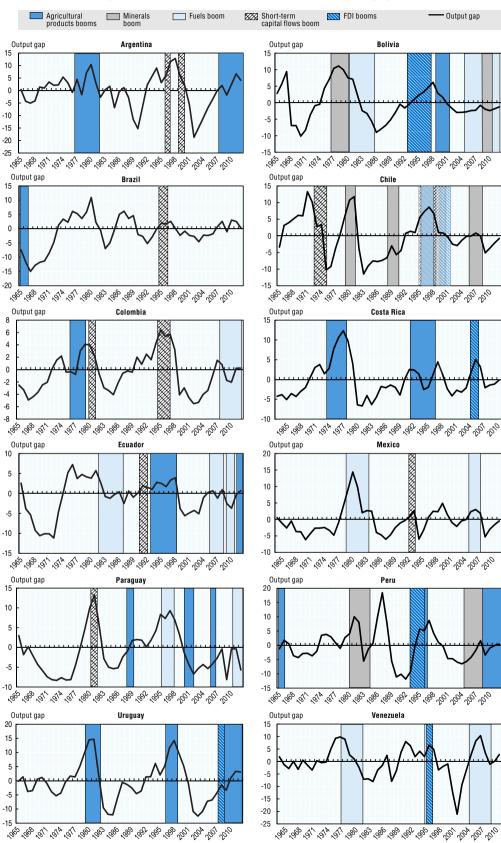


Figure 2.7. Resource booms and the output gap

Source: Authors' work based on World Development Indicators, World Bank and national data. StatLink May http://dx.doi.org/10.1787/888933174275

To solve this difficulty, two panel vector autoregression (VAR) were estimated to evaluate what impact shocks to the interest variables have on the output gap. Although the variables included in the model may be endogenous, exogenous shocks can be isolated by making certain identification assumptions (Box 2.3). The results are consistent with those previously found. Changes in the availability of external resources have significant effects on Latin America's output gap. If we define these effects as a shock of one standard deviation either to commodity exports and capital flows or to the terms of trade and the long-term interest rate in the United States, we find that they last for two years.

### Box 2.3. Estimated impact of resource booms on the output gap using panel VAR

Data were taken from the annual World Development Indicators published by the World Bank for the period 1980-2012 for 12 Latin American countries: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, Mexico, Paraguay, Peru, Uruguay and Venezuela. The output gap is calculated from the GDP series in local currency at constant prices, as in the previous procedures. Income from commodity exports and capital flows is calculated as a proportion of the trend GDP in USD.

The analysis focuses on the impulse responses that measure what effect a single standard deviation shock to one variable has on the other variables. The results show orthogonalised impulse responses using Cholesky decomposition. The level of exogeneity is given by commodities, capital flows and the output gap (YGAP). The commodities series is the most exogenous, as evidenced by the fact that shocks to the other variables have no contemporary impact on commodities. From Graph 2.8 one can deduce that commodity shocks and capital-flow shocks have a positive effect on the output gap.

The model was estimated using two lagged values for each variable, and the first differences were used according to the results of the unit root test designed by Pesaran (2007). The fixed-effect estimators are inconsistent, so, because the lags of the variables are correlated with the error, deviations were taken from the mean value of each variable for each country. The estimate was made using the generalised method of moments (GMM) using lagged values of the variables as tools. These lagged variables thus become workable tools to estimate the model using GMM. Each graph analyses the effect over the other variables over a period of six years.

The effects of shocks on commodity exports and capital flows are positive and have a stable dynamic that converges towards zero (Figure 2.8).

Panel A. Effects of shocks on commodity exports

Outline 
Outline

Figure 2.8. Effects of shocks on commodity exports and on short-term capital flows: Impulse-response functions

Note: YGAP refers to the output gap.

Source: Authors' work based on World Development Indicators, World Bank and national data.

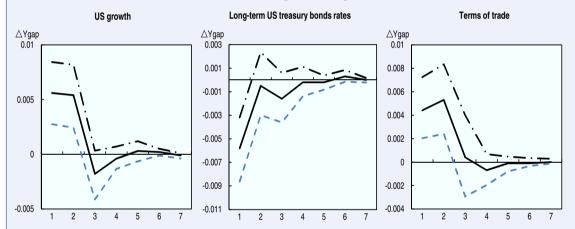
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### Box 2.3. Estimated impact of resource booms on the output gap using panel VAR (cont.)

A similar procedure was used with the output gap, but replacing commodity exports by terms of trade, and capital flows by long-term US treasury bond rates. These new variables are even more exogenous. Furthermore, the procedure controlled for US growth, which is believed to be inversely correlated with US interest rates via countercyclical monetary policy. In this new model, the US growth rate was considered the most exogenous variable, followed by long-term US treasury bond rates, then terms of trade, and finally the output gap.

External shocks also affect cyclical output fluctuations in Latin America (see Figure 2.9). The effects of three external shocks were analysed: US GDP growth, long-term US treasury bond rates and terms of trade. Terms-of-trade shocks were found to have a statistically significant positive effect lasting two years, whereas long-term US treasury bond rates were found to have a negative effect on the gap that lasted a much shorter period of time. On the other hand, a shock to US growth has a positive effect in Latin America. This result is not incompatible with the fact that the effect of a recovery in US growth partly offsets the rise in medium-turn interest rates, as per the findings of the IDB (2014).

Figure 2.9. The effects of shocks to US growth, long-term US interest rates and terms of trade: Impulse-response functions



Note: YGAP refers to the output gap. The terms of trade figures were taken from the World Bank's net barter terms of trade index.

 ${\it Source:} \ Authors' \ work \ based \ on \ World \ Bank \ and \ official \ sources.$ 

StatLink http://dx.doi.org/10.1787/888933174297

In short, business cycles in Latin America – unlike growth potential – are heavily influenced by fluctuations in external resources, whether capital inflows or commodity exports. Food booms are common throughout the region, whereas mineral and fuel booms are more typical of South America. FDI and remittance booms are more influential in Central America and the Caribbean, as are short-term capital flows in South America. Temporary resource booms, especially of minerals, fuels and short-term flows, tend to have a procyclical influence on the GDP gap. When the booms finish, countries seem to return to the pre-boom stage of the business cycle, which means they failed to use the booms to boost the region's long-term growth.

#### The importance of external financing is a reminder that there are various Latin Americas.

Although the region as a whole will see its external conditions deteriorate, neither the impact nor the ability to cushion the impact of that deterioration will be spread evenly across the region. Most at risk will be those countries that have greater external financing needs (a large current-account deficit), those that acquire a larger proportion of their financing from portfolio capital (which is more prone to being reversed if there is a change to the external conditions), and those that have most external liquid liabilities and least external liquid assets. Furthermore, in all countries, the fiscal and monetary space to counteract external shocks has contracted in recent years, though some countries have more leeway than others. Other important factors are the exchange-rate regime and the currency mismatch of economic operators.

Latin America's current account deficit has deteriorated since 2010, making the region more vulnerable to a decline in external financing. Growth in exports has generally slowed owing to weak external demand and less competitive non-primary goods exports (except in Mexico), combined with imports that have continued to grow at the same pace as domestic demand. South America's net commodity exporters have seen their terms of trade deteriorate, especially the two base-metal exporters, Chile and Peru. In Brazil, manufacturing exports have also been affected. In Central America, a moderate decline in energy prices strengthened the countries' external accounts, but was partly offset by the poor performance of worker remittances and US demand in recent years. In Argentina and Venezuela, current flows have plummeted, largely due to the sharp appreciation of their currencies as a result of the exchange rate systems.<sup>11</sup>

The deterioration of external flows needs to be addressed, especially by countries that already had a large current account deficit, which is why several countries have resorted to FDI, multilateral agencies and bank financing. This is the case of some Central American countries, including Nicaragua and Panama (more than 10% of GDP in 2013), the Dominican Republic and Honduras (about 7% of GDP), and Costa Rica and El Salvador (about 5%) (Figure 2.10). South American net commodity exporters have seen their current-account balances deteriorate quickly, including some with surplus balances (Argentina, Bolivia, Paraguay and Venezuela), but the balances seem to be still manageable.

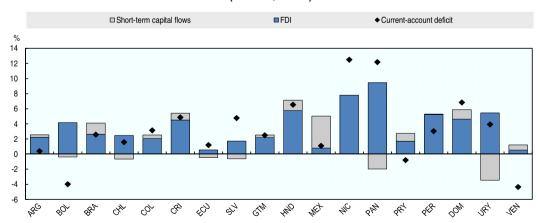


Figure 2.10. Current account deficit and capital flows (% GDP, 2013)

Sources: Authors' work based on central bank, CAF and ECLAC data. StatLink as http://dx.doi.org/10.1787/888933174303

Most countries' current accounts are financed by direct investment, giving them some stability, at least in the short term. Metal producers Chile and Peru could suffer the worst deteriorations to their current accounts, although foreign investment is more than sufficient to finance their deficits. However, the expected decline in commodity prices could increase reliance on short-term flows. This happened in Brazil in 2013, when, for the first time this decade, direct investment did not cover the current-account deficit. Ecuador's current-account deficit remains low, but its sources of external financing are also limited, with low foreign investment and very little access to the financial markets. The country has therefore recently acquired bilateral financing, mainly from China.

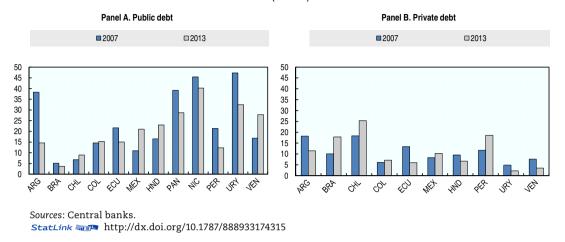
The external positions of some other South American economies are somewhat more vulnerable to a further deterioration in commodity prices. These include Argentina and Venezuela, where the amortisation of external debt commitments and net capital outflows from the private sector have turned the balance of external flows negative as the current-account balance has deteriorated. This has led to a sharp fall in foreign assets in both countries in recent years, especially in Argentina, which does not have access to finance from international markets.<sup>14</sup>

In Central America, some countries are compromised by high external deficits and will struggle to finance them if credit conditions become tighter than expected. Nicaragua boasts the highest current account deficit in the region not covered by foreign investment. El Salvador has a smaller deficit, but less than half of it is financed by foreign investment. Direct investment covers almost 80% of Panama's current-account deficit, but the remaining 20% is dependent on bank financing that is susceptible to changes in direction, as occurred during the 2008 crisis. The Dominican Republic's deficit is not covered by direct investment or portfolio flows either, but the size of the deficit is rather more manageable. Managing external financing also depends on borrowing capacity and access to markets.

Public debt levels improved, albeit asymmetrically across the region. Countries reduced their external sovereign debt from an average of 24% of GDP in 2007 to 20% in 2013, although these figures varied greatly from one country to another (Figure 2.11, Panel A). Uruguay, for instance, reduced its debt from almost 50% of GDP to little over 30% during the same period, while Mexico's increased from 10% of GDP to a still manageable level of 21%. Nicaragua reduced its external debt by around 5 percentage points of GDP. It still remains at a lofty 40%, however, and is even higher as a percentage of tax revenue, which limits the country's scope to obtain additional external financing.

Some economies with low debt levels are also vulnerable to a deterioration of the current account because they do not have access to markets. Argentina and Ecuador are cases in point. Argentina has utilised its stock of reserves to provide for its growing external financing needs, while Ecuador has acquired bilateral financing, mainly from China. Extra borrowing costs would make it difficult for either country to return to the markets and would make bilateral loans more expensive. Another country more exposed in 2013 than in 2007 was Venezuela. Although it has access to markets, its debt increased from 17% to 28% of GDP during the 6-year period and became significantly more expensive, with a spread of more than 1 000 basis points, limiting the country's opportunities to obtain additional financing at a reasonable price.

Figure 2.11. Latin America: External debt (% GDP)



Average private sector debt in the region was relatively stable, but trends vary greatly from one country to another. Economies without access to finance or with access at very high interest rates reduced their external debt. In financially integrated economies, corporate debt surged thanks to the good financing conditions that prevailed over the last three years, especially in Brazil, Chile and Peru, where the ratio of external debt to GDP grew by more than six points between 2007 and 2013. Unlike elsewhere in the region, in these three economies, private debt is more than twice as high as sovereign debt, although government debt is low.

In Chile, for example, private external debt stands at 25% of GDP, but government debt is less than a tenth of GDP (see Figure 2.11, Panel B). So, although improvements to sovereign-debt ratings and spreads fostered cheaper and larger private debt, firms' debt capacity and the market's perceptions of businesses could severely affect borrowing costs, mainly because of the underwriting fee (Avendaño and Nieto Parra, forthcoming). For example, primary corporate bond emissions rose from USD 112 billion in 2012 to USD 130 billion in 2013 in the financially integrated economies.

Although private debt levels remain relatively low, the pace at which they have risen in some economies is a cause for concern, due to the risks that could be accumulating. Some of these companies may, for instance, struggle to access finance if credit conditions tighten, which could generate balance-sheet risks if currency depreciation takes place, especially for companies without currency hedging arrangements. Despite efforts to establish more precisely the level and source of the debt, it is not yet clear whether firms that have increased their debt have the additional coverage they will need, whether explicitly, or naturally because they produce and export tradeable goods (IDB, 2014). This is undoubtedly a source of vulnerability for those economies (Figure 2.12, Panel A).

One factor that could mitigate these risks is the accumulation of foreign assets. In fact, some economies that increased their external liabilities have also increased their external assets, as occurred in Chile, Colombia, Mexico and Peru (Figure 2.12, Panel B). However, it is not clear what proportion of the additional assets is accumulated by firms to hedge for the additional liabilities they have taken on. Brazil has introduced macroprudential measures to reduce private-sector exposure to currency derivatives to mitigate these risks.

Panel B. Private-sector liquid assets (% GDP) Panel A. Non-financial corporate sector securitised debt (2013) (% GDP) □2013 **2007** □ External ■ Internal 50 50 45 45 40 40 35 35 30 30 25 25 20 20 15 15 10 10 5 0 OFF RA ,RY ₩<sub>C</sub> C/A/V φ, tzz. ζς, ·β<sup>2</sup> CAN Source: Authors' work based on central bank figures. StatLink http://dx.doi.org/10.1787/888933174329

Figure 2.12. Private sector accumulation of foreign assets and liabilities (% GDP)

Corporate debt issues in local currency have also been expanded. The presence of domestic capital markets that are more developed in the financially integrated economies served to mitigate the impact of the reversal of capital flows in 2009 (Jara, Moreno and Tovar, 2009). However, although the domestic corporate-debt market includes local investors, there are also non-residents interested in these assets. The market is therefore vulnerable to a change in the sentiment of external markets too, especially carry-trade activity. Companies' access to local bond markets varies greatly across the region (CAF, 2011). Relative to GDP, Chile has the largest bond market (15% of GDP), followed by Brazil and Mexico (both representing 5% of GDP); other countries in the region have much smaller bond markets.

However, initiatives such as the Integrated Latin American Market (MILA) formed by Colombia, Chile and Peru could help to expand the markets by reducing access costs for a wider range of issuers and investors and expanding diversification options. MILA enables stocks and bonds from the three countries' stock markets to be traded through local intermediaries and in local currency, facilitating international transactions. When Mexico joins in late 2014, MILA will overtake the Brazilian stock exchange as the largest stock exchange in the region, with a market capitalisation of more than USD 1 trillion and more than 700 issuers.

In short, although most countries in the region have the scope to obtain external financing, the rapid expansion of corporate leverage in some of the financially integrated economies poses incalculable risks. On the other hand, economies without access – or with limited access – to international capital markets are vulnerable to a further deterioration of their current account and a tightening of financial conditions, which in turn would make it more difficult for them to return to the markets and would increase the cost of other forms of financing.

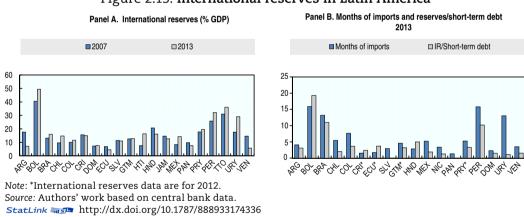
The accumulation of reserves provides a good cushion to meet import requirements and short-term debt commitments. The accumulation of reserve assets between 2007 and 2013 increased from 15% to 17% of GDP in the region. However, once again these

overall figures conceal vast differences from one country to another. For example, Bolivian reserves grew by 10 percentage points of GDP to 50% during the period, giving the economy ample scope, especially considering that it still has a current-account surplus (Figure 2.13, Panel A).

The financially integrated countries are in an intermediate position. Their current-account deficits have widened, but their reserves have increased enough to meet their external liquidity needs. Peru and Uruguay have reserves of more than 30% of GDP, while Chile, Colombia and Mexico have reserves of close to 15%. Chile's external liquidity is also underpinned by its sovereign wealth funds, while Colombia's and Mexico's are covered by special credit facilities with the IMF. Several Central American countries have seen their reserves decline. They remain at around 10%, but given their large current-account deficits this gives them little leeway, and leaves them in a relatively exposed position.

Also vulnerable are Argentina, Ecuador and Venezuela, which have seen their reserves halve to 7%, 6% and 8% of GDP respectively, among the lowest levels in the region. <sup>15</sup> In the absence of more extensive exchange-rate adjustments, <sup>16</sup> there will be no current-account correction, which could cause reserves to fall to critical levels, given the limited access to capital. In Central American countries, the situation is also tight in terms of months of imports covered by reserves. Although all countries have enough reserves to cover short-term debt maturities (with a reserves-to-debt ratio of more than 1), for some countries the ratio is more than 10 (Bolivia and Peru), whereas some countries' ratios (Central American countries', Uruguay's and Venezuela's) are much closer to 1 (Figure 2.13, Panel B). <sup>17</sup>

Figure 2.13. International reserves in Latin America



Exchange-rate flexibility gives economies additional scope to react to external shocks by adjusting prices rather than absorption levels. The currency depreciation that would result from the deterioration of external flows is a matter for concern, since it might drive up inflation. However, except in rare cases where there were already inflationary pressures (either because the economy was very close to full employment and had wage indexation, as in Brazil and Uruguay, or because there were supply bottlenecks and excess liquidity, as in Argentina and Venezuela), exchange-rate movements seem to have contributed little to inflation. This was perhaps because the movements occurred concurrently with a drop in certain commodity prices (food and energy), which offset the effects of weaker exchange rates. Central banks' greater credibility also helped. Indeed, in this region, most countries' inflation expectations remain firmly anchored around the targets set by the central banks, bringing stability to prices.

Core inflation has also been contained. Economies with inflexible systems, such as those that are dollarised (Ecuador, El Salvador and Panama) and those with managed exchange rates (Argentina and Venezuela), do not have this adjustment mechanism at their disposal. These economies will have to respond to the deterioration of their external accounts by using external assets. Moreover, their capacity to absorb exchangerate shocks could be hurt by high balance-sheet risks caused by currency mismatches.

### The role of countercyclical policies: Pursue or rebuild?

In addition to the first lines of defence against external shocks (availability of foreign assets and exchange-rate flexibility), fiscal and monetary policies are also crucial to counteract adverse situations. This was evident during the 2008-09 crisis. However, the region's room for manoeuvre has contracted, especially its scope for fiscal policy.

The fiscal balance remains highly correlated with the external balance. The twin surpluses of the 2000s have been replaced with twin deficits. Fiscal revenue rose on the back of continuous rises in the value of commodity exports in the 2000s, which generated additional income tax, royalties, excise taxes and direct transfers by public enterprises. Since 2011, however, declining commodity prices and the trend of currency appreciation have turned surpluses into deficits as spending has increased. The region's structural balances have also deteriorated as a result (Figure 2.14).

This represents a financial constraint and a macroeconomic risk for the region. Albeit to varying degrees, 15 Latin American countries and 10 Caribbean countries (including Belize, Guyana and Suriname) are faced with the simultaneous deterioration of their fiscal and external balances (ECLAC, 2014b). The Central American countries' current accounts averaged a deficit of nearly 6% of GDP in 2013, while their fiscal deficits averaged 3% of GDP. The Caribbean countries averaged wider deficits: 10% of GDP for current accounts and 5% of GDP for fiscal deficits. These two subregions are therefore the most vulnerable.

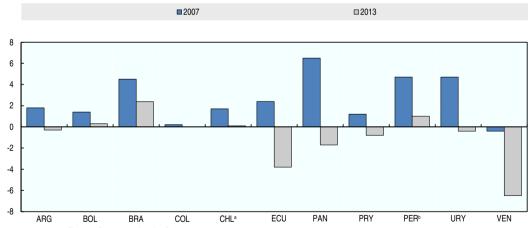


Figure 2.14. Structural primary fiscal balance (% GDP)

Notes: Latest figure for Ecuador is from 2012.

a) Includes public enterprises and social welfare.

b) The Ministry of Economy and Finance, in its latest macroeconomic framework, recorded a structural primary balance of 2.9% of GDP for 2007 and 0.7% of GDP for 2013. These figures are different because of the methodology used.

Source: Authors' work, based on central government data. StatLink Mass http://dx.doi.org/10.1787/888933174341

The average fiscal deficit of Latin American countries looks set to widen by 0.1 points to 2.6% of GDP in 2014 (ECLAC, 2014b). The region's deficit figures suggest a structural deterioration of public finances, which is particularly challenging when there are also long-term fiscal and external imbalances. Public spending is increasing while the tax revenue-to-GDP ratio is flatlining, which does not represent a systemic macroeconomic risk, but does form opposing trends in the medium term. In the Caribbean countries, the fiscal deficit rose to 3.6% in 2013, and is expected to narrow to 3.2% in 2014. Public debt – mainly external debts – remained at around 77% of GDP.

During slowdowns, as during the post-crisis years of strong growth, Latin American governments have generally adopted lax fiscal policies within new or reformed fiscal institutions. Colombia, Mexico and Peru, for instance, have tax rules that align their medium-term goals with business cycles and relevant commodity prices. They apply the structural fiscal balance calculation methodologies that were introduced when Chile adopted a structural balance target in 2001. Brazil, meanwhile, has relaxed its primary surplus targets, allowing more public spending during slowdowns, which has affected the credibility of the policy.

This lax fiscal policy bias was made possible by unusual conditions for accessing finance, especially historically low interest rates. The average public debt per country in Latin America remains stable, although it did rise slightly in 2013, from 31.5% to 32.4% of GDP (ECLAC, 2014b). In terms of its composition, external public debt amounted to only 15% of GDP, compared with 17% for domestic debt.

Bolivia, Chile, Ecuador, Guatemala, Haiti, Paraguay and Peru had below-average debt levels; Colombia, Nicaragua and Venezuela had close to average debt; and Argentina, Brazil, Costa Rica, the Dominican Republic, El Salvador, Honduras, Mexico, Panama and Uruguay had higher debt levels. The differences in debt levels are even greater in the Caribbean, where the national average stood at 76% of GDP in 2012, with Jamaica reaching debt levels above 100% of GDP. Interest repayments have fallen significantly in most countries. This trend is particularly relevant with regard to the outlook for the composition of spending and management of public finances, since it provides space for heavier investment and social spending.

Government budgets for 2014 and recent figures suggest that the upward trend in central government spending in the region in recent years has continued. Data for the first half of the year, even accounting for seasonal variation, warn of a spending surge in some countries, especially in government consumption. The most pronounced surges have been in Argentina, Costa Rica, the Dominican Republic, Ecuador, Guatemala, Nicaragua and Peru (ECLAC, 2014b). According to 2014 budget data, current expenditure by Latin American central governments will rise relative to GDP, at the expense of capital expenditure. Nevertheless, some countries have announced large-scale infrastructure programmes for the coming years, and public-private partnerships are on the rise. In other countries, public investment has focused on public enterprises (which are not usually recorded in central government budgets).

In short, vulnerabilities can thus be observed in the fiscal policies of Latin American and Caribbean governments, limiting their scope for stability efforts. However, on the monetary side, the region's central banks do have some scope to stimulate activity. In recent months, monetary conditions have remained on neutral ground in much of the region (Figure 2.15), albeit with some variation depending on the phase of the business cycle and the presence of inflationary pressures.

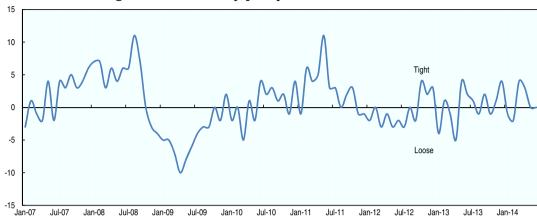


Figure 2.15. Monetary policy indicator in Latin America

Note: The countries included are: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Paraguay, Peru, Uruguay and Venezuela. The indicator is the sum of the number of countries that increased their interest rates in a month minus the number of countries that reduced their rates.

Source: Authors' work based on Capital Economics, ECLAC and central bank data.

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Brazil and Uruguay, for instance, have applied restrictive policies to counter cumulative inflationary pressures. (Brazil raised interest rates, while Uruguay managed its aggregates.) However, credit issued by Brazilian public banks has accelerated, limiting the impact of the government's policies. The central bank actually put the measures on hold midway through the year, reduced reserve requirements and relaxed certain prudential rules to accelerate credit. Colombia started to raise its rates this year to keep inflationary expectations anchored as economic activity improved and the output gap closed. Argentina also allowed rates to rise to prevent a further weakening of its currency, which could have knock-on effects on inflation, since the exchange rate is an important benchmark in forming expectations. Chile and Peru, on the other hand, have cut their interest rates to counter the rapid economic slowdown.

In addition to their response to the domestic business cycle, the region's central banks ought to react to Fed and possibly Bank of England interest-rate rises expected next year. In the financially integrated economies with inflation-targeting systems, central banks should be willing to tolerate a greater currency depreciation, with interventions designed to control volatility. However, to the extent that economies face greater inflationary pressures or are exposed to risks from currency mismatches, central banks may need to raise interest rates to curb the inflationary and financial risks brought by further depreciations. It would also be important to continue strengthening macroprudential regulations and the communication of those regulations in countries where private-sector debt has grown rapidly. This would avoid the accumulation of rate risks and currency mismatches.

Countries with less flexible exchange rates and with capital mobility are likely to be forced to approve increases in domestic rates in response to increases in foreign rates. In countries where inflationary pressures are building, monetary policy needs to be supported by actions to promote the conditions for savings and investments in the economies. Expanding the fiscal space and improving credibility would help to ease any dilemmas that the monetary authority might face and curtail the economy's reliance on external financing to tackle its deteriorating external balances.

Although monetary policy plays a key role in stabilising the output gap, the region's problem reaches far beyond business-cycle management. Gountries seem to be fairly well

prepared for this, but the level of vulnerability and scope for action vary greatly among the region's economies. The region must address the causes of low growth potential. As we will see in the rest of the report, a fundamental component of the problem is education and the development of skills for innovation.

### Conclusions and policy recommendations

In the short term, the region will record more modest rates of growth than in the 2000s, but is unlikely to be plunged into a crisis. Governments must focus on ensuring their economies are able to respond to more adverse conditions. The region needs to rebuild its financial shield by expanding its fiscal space. It must also maintain and increase the credibility of central banks for applying countercyclical management of monetary policy in just as exemplary a fashion as they did before the outbreak of the crisis.

The measures required to expand the fiscal space will depend on each country's initial conditions. In some countries, including some Central American countries, the Andean region and Mexico, the authorities should focus their efforts on strengthening their tax burdens (OECD/ECLAC/CIAT, 2014). Some South American governments with more consolidated income structures should focus on curbing increases in current public spending and developing automatic stabilisers. The Caribbean countries, meanwhile, will need to deal with the recurring problem of public-debt sustainability before they can expand their fiscal space. They also need to better communicate under what conditions they will use their macroprudential frameworks and stabilisers.

The main challenges, however, are in the long term. Is the current economic slowdown temporary, or will growth soon return to the potential rate, traditionally estimated to be in the 3-4% range? If modest growth continues, it will be difficult to close the income gap with the OECD economies or to continue reducing poverty and inequality at the current rate.

Faced with this uncertainty, it is time for the region to embark on a series of ambitious, bold reforms. The diagnosis is the same for all countries in the region – still the most unequal region in the world – and all are aware of it. Institutions are needed with the capacity to implement public policies that create and strengthen social systems built on the principle of equal rights for all. Yet, social policies alone are not sufficient to bring sustained, equitable growth in revenues.

Productivity and innovation improvements, production diversification, policies to reduce infrastructure gaps, investment in human capital, and formal job creation are all vital. Latin America's productivity in recent years has been disappointing compared with that of both OECD countries and emerging economies. Stronger productivity should lead to more inclusive growth and enable inequality and poverty to be reduced further, with 28% of the population (164 million Latin Americans) living below the poverty threshold in 2013 (ECLAC, 2013).

Each government should draw up its own reforms programme, taking into account that it is often difficult to improve productivity and reduce inequalities simultaneously. These reforms must ensure the improvement of workers' skills, For example by improving the connection between education and the labour market, providing better technical training outside universities, and upgrading infrastructure (especially energy and transport) and logistics (OECD/ECLAC/CAF, 2013), as well as by promoting formal employment. With 14 presidential elections having been held between 2012 and 2014, the political context provides an excellent window of opportunity. The region's well-being, especially in the long run, will depend on whether governments make the most of this opportunity. The rest of the report looks at many of these challenges.

### Annex 2.A1. Methodology for identifying temporary resource booms

The World Bank's World Development Indicators (WDI, 1962-2012) for 144 countries were used to identify resource booms. Exports-to-GDP ratio series were used for three commodity groups: agricultural products (food and raw materials), minerals and fuels. The following criteria were applied:

- The value of commodity exports for each group must be more than 4 points higher than the trend GDP (see Sachs and Warner, 1999). This means that only booms that are significant to the country's economy are selected.
- The ratio of exports to trend GDP for a commodity group must be at least one median
  absolute deviation above the median for a 25-year series. This criterion excludes
  observations in countries that are traditional producers of natural resources and
  excludes structural changes to a certain export that do not entail temporary
  changes in the resources they receive for that export.
- Booms must last for at least three consecutive years, or two consecutive years if the boom is larger than the median boom in the sector.

This methodology is a new version of that described by Fernández and Villar (2013), except that a 25-year series is used and the calculation is based on exports as a ratio of trend GDP, thus preventing the inclusion of prolonged output declines as booms. The trend is calculated using an HP filter in which lambda = 400. To prevent distortions at the beginning and end of the series, the series is completed with IMF projections, and the first three observations are removed.

The same calculation was made for remittances, short-term capital flows and investment flows. The databases used were the World Development Indicators for personal remittances and Bluedorn et al. (2013) for short-term capital flows. For most countries, the data only go back as far as 1980.

One advantage of this method over methods used in other recent publications, such as Céspedes and Velasco (2011) and Adler and Magud (2013), is that in addition to identifying booms driven by price rises, it also identifies booms driven by increases in export volumes. This might occur when a new natural resource is discovered or when production expands rapidly thanks to investment in exploration, such as for fuels.

The following tables present the results for booms in commodities, capital flows and remittances (Table 2.A1.1).

Table 2.A1.1. Temporary resource booms

|                                 |                                            | Natural Resources    |                                             | Remittances and capital flows              |                      |                                             |  |
|---------------------------------|--------------------------------------------|----------------------|---------------------------------------------|--------------------------------------------|----------------------|---------------------------------------------|--|
|                                 | Number of countries included in the sample | Countries with booms | Number of booms<br>per country<br>(average) | Number of countries included in the sample | Countries with booms | Number of booms<br>per country<br>(average) |  |
| World                           | 144                                        | 97                   | 1.6                                         | 144                                        | 120                  | 1.6                                         |  |
| LAC                             | 26                                         | 22                   | 2.3                                         | 28                                         | 27                   | 2.0                                         |  |
| South America                   | 12                                         | 11                   | 3.3                                         | 12                                         | 11                   | 1.8                                         |  |
| Central America                 | 14                                         | 11                   | 1.4                                         | 16                                         | 16                   | 2.3                                         |  |
| Sub-Saharan Africa              | 34                                         | 23                   | 1.4                                         | 34                                         | 25                   | 1.3                                         |  |
| South Asia                      | 6                                          | 2                    | 0.7                                         | 6                                          | 5                    | 1.7                                         |  |
| East Asia<br>and the Pacific    | 11                                         | 8                    | 2.0                                         | 15                                         | 11                   | 1.4                                         |  |
| Europe<br>and Central Asia      | 17                                         | 10                   | 1.1                                         | 18                                         | 14                   | 1.7                                         |  |
| Middle East and<br>North Africa | 8                                          | 5                    | 2.0                                         | 10                                         | 7                    | 1.9                                         |  |
| High-income<br>countries        | 42                                         | 27                   | 1.5                                         | 38                                         | 31                   | 1.3                                         |  |

Source: Authors' work based on World Development Indicators, World Bank and official sources.

#### Notes

- 1. Additional risks include the recovery in US shale production, which could reduce the country's reliance on certain fuel imports from Latin America, such as Colombian coal.
- 2. The increase in US interest rates could also help bring down commodity prices by making investments in commodities less attractive, but it is unclear how much influence interest rates would have.
- 3. Based on data from a sample of emerging countries between 1990 and 2012, this study argues that a rise in US interest rates affects gross flows but not net capital inflows. It also argues that a greater perception of global and domestic risk would have a greater impact.
- 4. In mid-2013, when the markets anticipated that US interest rates might start increasing earlier than expected, the rise in the price of 10-year treasury bonds was accompanied by a widening of the sovereign risk premium of emerging economies and of all Latin American sovereign issuers.
- 5. In this episode, the markets reacted adversely to news from emerging economies, such as the downturn in China's economic activity and the crashes in the Argentinian and Turkish currencies.
- 6. ECLAC projections were published in July 2014 and CAF projections in September 2014.
- 7. This analysis is based on Fernández and Villar (2013). See Annex 2.A1 of this chapter for more details on these definitions and the calculation method.
- 8. This chapter will now use the methodology developed by Céspedes and Velasco (2011) to examine how temporary resource booms steer the business cycle, using the full sample of countries. The mean output gap is calculated at two years before each boom, during the boom and two years after the end of the boom. The output gap is calculated as a ratio of the cycle and trend output in constant terms in the local currency of each country. Trend and cycle output were calculated using the Hodrick-Prescott filter, with a smoothing parameter of 400, according to the method described by Correia, Neves and Rebelo (1992) and by Cooley and Ohanian (1991). The initial four and final four observations are removed to prevent distortions at the ends.
- 9. Openness to foreign investment in hydrocarbons usually goes against the price cycle because, when prices rise, many countries tend to raise taxes or modify contracts to acquire a larger fraction of income, which makes investment less attractive. Conversely, when prices fall, countries tend to open up to foreign capital as they have fewer resources to meet the investment needs of the sector (see CAF, 2012). Perhaps one notable exception was the opening of the hydrocarbons sector during the 2000s. More recently, Mexico also opened up its economy, having previously been closed to any kind of foreign investment.
- 10. Vector autoregression (VAR) is an econometric model used to evaluate the relationships among a set of variables over time without assuming any causal relationships among them. Panel VAR is an extension of this methodology that includes cross-sectional data. In this chapter, it is used to analyse the relationships among data for various countries across time.
- 11. Venezuela's current flows have also been hit by the fall in the volume of crude oil and derivatives exports in recent years, since these represent 96% of total exports. Thus, the continued currency appreciation has had an even greater impact by encouraging rapid growth of imports. Argentina's current flows have also been hit by the country's growing energy deficit.
- 12. Bank financing has grown over the last five years, especially in Costa Rica, Guatemala and the Dominican Republic.
- 13. In Peru, declining prices over the next few years could be partly offset by an increase in the volume of metal exports once new mining projects commence operations. These additional exports would also offset any decline in foreign-investment flows, thanks to the maturity reached by several mining projects.
- 14. This is evidenced in Argentina by a rapid fall in reserves and in Venezuela by a decline in reserves and a fall in assets in sovereign wealth funds. However, if Argentina were able to resolve the selective default it fell into after failing to reach an agreement with bondholders on 30 July, the country would regain access to the markets and would be able to contain the decline in reserves while meeting its external commitments.
- 15. Ecuador has imposed some import barriers to mitigate the deterioration of flows and reserves.
- In Argentina and Venezuela, adjustments would also involve reducing foreign-exchange restrictions.

- 17. Venezuela also has external-assets funds other than reserves, but there is little transparency on the size of these funds and on what proportion is freely available to cover liquidity needs.
- 18. The Central Bank of Brazil halved its risk weighting factor for credit operations for vehicles, increased the maximum amount that can be lent to small and medium-sized enterprises, approved the risk weighting factor for all retail lending operations in line with international guidelines, and cut collateral requirements for large companies.

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