2. Outlook and Policy Issues for Latin America and the Caribbean

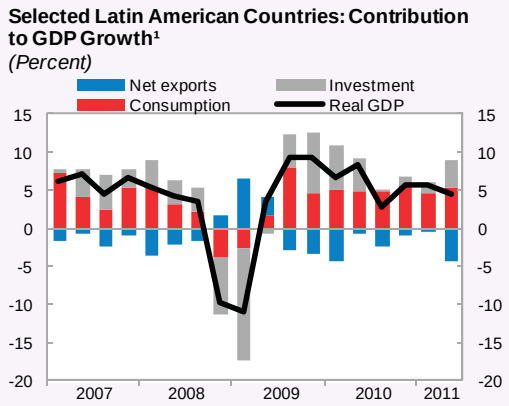
Growth during the first half of 2011 was robust, supported by easy external financing, favorable terms of trade for commodity exporters, and lingering effects of past accommodative policies. However, the shift in the global economic environment and bouts of market volatility pose major challenges for policymakers. Although the slowdown in advanced economies is projected to have a moderate effect on growth in most countries, large downside risks to the outlook loom. In this context, policymakers should remain vigilant to overheating, and rebuild policy buffers used during the global crisis, since a rapid shift in global sentiment may require more supportive policies. In a downside scenario, monetary policy should be the first line of defense for countries with credible frameworks, while fiscal easing should be utilized only if severe downside risks materialize. Prospects are weaker in countries with closer links with advanced economies and limited policy space.

2.1. Overview

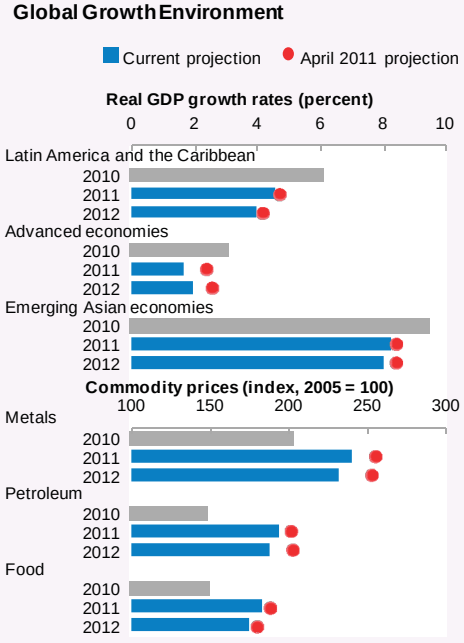
Latin America expanded by about 5 percent during the first half of 2011 (Figure 2.1). Growth continued to be led by the commodity-exporting countries of South America, supported by easy external financing conditions and favorable terms of trade. The growth in activity moderated from the high levels reached in 2010, but remained above potential in much of the region. Domestic demand continued to expand at a fast pace, amply exceeding (actual and potential) real GDP growth, although there are signs that policy tightening helped moderate demand. In Central America, the recovery gathered momentum, fueled by domestic demand and increased agricultural exports, whereas in the highly-indebted and tourism-dependent Caribbean, growth has remained stubbornly low.

Note: This chapter was prepared by Luis Cubeddu and Camilo E. Tovar. Andresa Lagerborg provided excellent research assistance.

Figure 2.1. Real GDP growth has been robust. Under the baseline, the global slowdown is projected to have a moderate effect, although downside risks dominate.



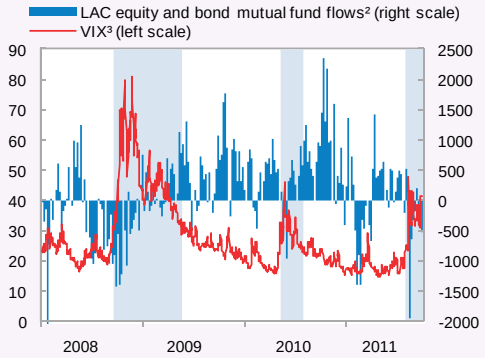
Sources: Haver Analytics; national authorities; and IMF staff calculations.
¹ Seasonally adjusted annual rate. PPP-GDP-weighted averages of Argentina, Brazil, Chile, Colombia, Costa Rica, Mexico, Paraguay, and Peru. Estimates for 2011:Q2 include staff projections for Argentina and Mexico and excludes Costa Rica and Paraguay.



Source: IMF staff calculations.

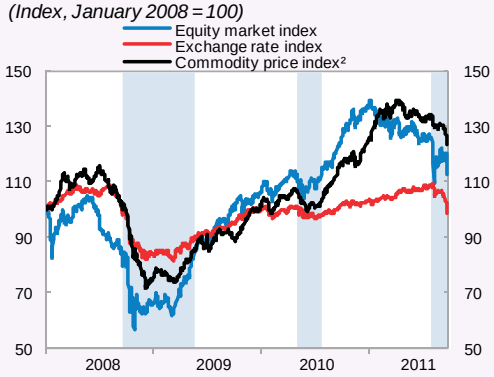
Figure 2.2. In response to recent market tensions, Latin American equities, exchange rates and commodities have all taken a hit. Funding pressures have been more limited so far.

Global Risk Aversion: VIX and Mutual Fund Flows in Latin America[1]



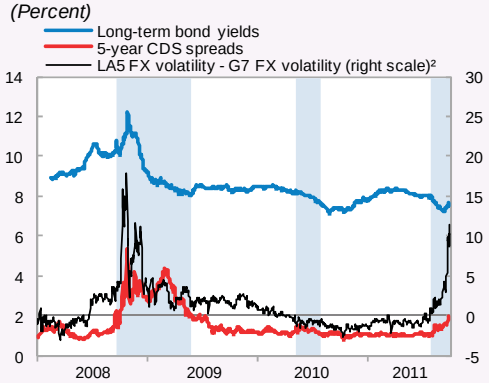
Sources: Bloomberg; and Haver Analytics.
[1] Shaded areas are periods of VIX stress.
[2] Weekly flows in millions of U.S. dollars.
[3] VIX is the Chicago Board Options Exchange Market Volatility Index.

Selected Latin America: Stock Markets, Exchange Rates and Commodity Prices[1]
(Index, January 2008 = 100)



Sources: Haver Analytics.
[1] Equity markets in local currency terms. Exchange rate in local currency per U.S. dollar terms. Shaded areas are periods of VIX stress. Simple average for Brazil, Chile, Colombia, Mexico, and Peru.
[2] Thompson Reuters/Jefferies CRB commodity price index.

Selected Latin America: Bond Yields, Credit Default Swap Spreads, and Foreign Exchange Volatility[1]
(Percent)



Sources: Bloomberg.
[1] CDS spreads and bond yields in local currency terms. Shaded areas are periods of VIX stress. Simple average for Brazil, Chile, Colombia, Mexico, and Peru.
[2] 1-month at-the-money foreign exchange rate volatility.

Although it is somewhat early to make a full assessment, recent financial market volatility and falling commodity prices have started to weigh in on the region's financial markets. Spillovers from troubles in peripheral Europe had been relatively contained through the first half of the year. More recently, however, increased fears of a full-blown crisis in Europe and another recession in the United States have heightened global risk aversion, negatively affecting equities and currencies. That said, balance of payments and funding pressures seem to have been limited, though capital flows remain highly volatile (Figure 2.2). Consensus growth forecasts for 2011 and 2012 were reduced in recent months, and business confidence and other leading indicators suggest that some moderation in activity is in store.

Under our new *baseline scenario*, growth is projected to reach 4½ percent in 2011 and to moderate to about 4 percent in 2012, leaving output slightly above potential next year. Despite downward revisions to growth in the United States and other advanced economies, the outlook is only slightly less favorable than that projected back in April 2011. This reflects in part emerging Asia's relative resilience, which in turn would support commodity prices at fairly high levels. In addition, in some cases the projections assume less policy tightening than originally envisaged in light of weaker external demand conditions.[1]

This baseline scenario assumes that growth in advanced economies will remain sluggish, with a pause in advanced-country monetary tightening—implying a prolonged period of accommodative monetary conditions. It also assumes that European policymakers contain the crisis in the euro area periphery, that U.S. policymakers strike a judicious balance between support for the economy and medium-term fiscal consolidation, and that volatility in global financial markets does not escalate further.

[1] For 2011, large upward revisions in some countries (e.g., Argentina, Ecuador, Venezuela), reflecting stronger-than-anticipated growth during the first half of the year, partially offset downward revisions elsewhere.

Finally, the baseline implies that emerging Asia suffers only a minor loss of dynamism. In such a scenario, *double tailwinds of easy external financing conditions and firm commodity prices* will continue to support growth, albeit with a more moderate push from commodities and more subdued inflows amid continued uncertainties about the resolution of balance sheet problems in advanced economies.

However, *downside risks* from the world economy dominate the outlook, which could turn the tailwinds into headwinds:

- A sustained crisis of sovereign and financial confidence in Europe could disrupt global credit markets and lead to a sudden stop of trade and bank financing, much like that observed following the Lehman Brothers' failure in September 2008 (Box 2.1).
- Another recession in the United States, triggered by woes in Europe or persistent weaknesses in private domestic demand coupled with an overly large up-front fiscal adjustment, could lead to a considerable slowdown in emerging Asia and much lower oil and metal prices.[2] The ensuing contagion could reverse tailwinds and negatively affect the region's commodity exporters. Chapter 3 analyzes the impact of commodity price reversals.

Upside risks remain, particularly if Europe's balance sheet fragilities are contained and financial conditions normalize. Under such a scenario, risk appetite would resume. In the context of a prolonged period of easy monetary conditions in advanced economies, this would stoke larger capital flows to emerging economies (particularly those with stronger policy frameworks) and intensify overheating pressures.

Given the complexity and uncertainties surrounding the global economy, policymakers must stand ready to adjust policies should downside risks materialize.

Countries with policy space and credible frameworks may have room to utilize that space in a downside scenario to mitigate the impact of a global recession and financial market volatility. Accordingly, under our baseline scenario it will be critical to rebuild policy buffers to prepare for an adverse scenario, particularly on the fiscal side, as fiscal positions are weaker than prior to the crisis. Naturally, a country's policy response will also depend on its cyclical position, the strength of its public sector balance sheets, and external (real and financial) linkages:

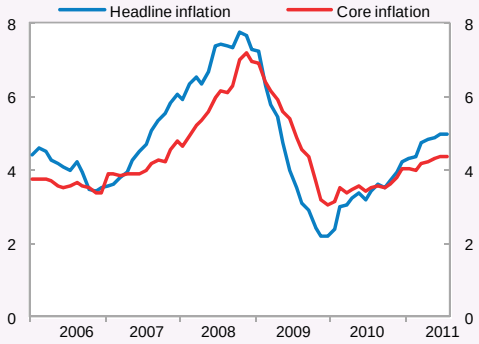
- Commodity exporters in South America with closed output gaps need to remain vigilant to overheating, but also prepare for downside risks. In countries with credible monetary frameworks, where inflation pressures have abated, monetary policy can be more flexible, serving as a first line of defense. Consideration could be given to halting the pace of monetary policy tightening (and in some cases easing), at least until a clearer picture of the global outlook emerges. Meanwhile, fiscal consolidation should proceed as planned to rebuild policy buffers and avoid impairing fiscal credibility. Furthermore, authorities should be vigilant for potential liquidity strains that could impair financial stability.
- Most countries in Central America, where debt remains well above precrisis levels, need to step-up efforts to rebuild fiscal buffers. Meanwhile, the Caribbean must resist fiscal consolidation fatigue, while containing the possible fallout from weak financial institutions.

This chapter is organized as follows: Section 2.2 summarizes the policy challenges of the different subregions in Latin America and the Caribbean. In light of lingering overheating risks, Section 2.3 examines the tightness of labor markets, and Section 2.4 analyzes the effectiveness of macroprudential policies in curbing credit growth. Finally, Section 2.5 reviews recent experiences with fiscal consolidation efforts in the Caribbean, which could shed light on challenges elsewhere.

[2] Roache (forthcoming) finds that a 3 percent decline in Chinese industrial production growth (one standard deviation) causes crude oil and copper prices to fall by 6 percent.

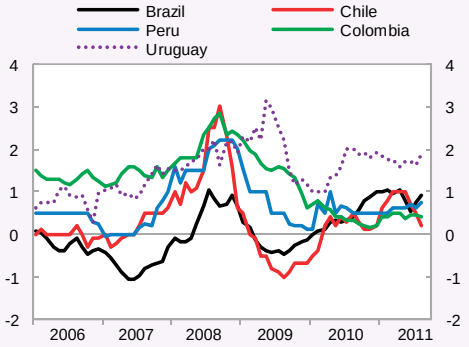
Figure 2.3. Underlying inflation and inflation expectations are moderating, in line with some slowing in domestic demand.

Selected South America: Headline and Core Inflation[1]
(12-month percent change)



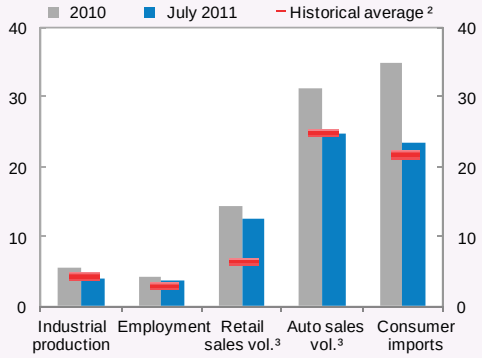
Sources: Haver Analytics; national authorities; and IMF staff calculations.
[1] Simple average of Brazil, Chile, Colombia, Peru, and Uruguay. Data through August 2011.

Selected South America: Inflation Expectations Less Target Inflation[1]
(12-month percent change, 12 months ahead)



Sources: Central banks; Haver Analytics; and IMF staff calculations.
[1] Target inflation is the midpoint of the inflation band. The inflation target range is (± 1), except for Brazil and Uruguay (± 2). Data are through August 2011.

Selected South America: Economic Activity and Demand Indicators [1]
(12-month percent change)



Sources: Haver Analytics; and IMF staff calculations.
[1] Average of Brazil, Chile, Colombia, Peru, and Uruguay. Indices for industrial production, employment, retail sales and auto sales; nominal U.S. dollars for consumer imports. All underlying indicators are seasonally adjusted.
[2] Average over January 2003 — July 2011.
[3] Data through June 2011.

2.2. Policy Challenges

South America: Financially Integrated Commodity Exporters—Guarding against Overheating

With output gaps already closed in most commodity-exporting countries of South America, guarding against overheating remains a key policy priority. In the context of souring global prospects, monetary tightening could pause in countries where policy frameworks are credible and inflation expectations are well anchored, though fiscal consolidation should proceed in line with medium-term plans to rebuild buffers and enhance policy room for maneuver should more extreme downside risks materialize.

Output growth in the more financially integrated commodity exporters (Brazil, Chile, Colombia, Peru, and Uruguay) remained strong during the first half of 2011, averaging close to 5 percent year over year. The expansion was led by strong private domestic demand, supported by favorable commodity prices, easy external financing conditions, and effects of past accommodative macroeconomic policies. Economic activity is now projected to moderate to an average of 4½ percent by the end of the year, reflecting somewhat less stimulative external conditions and some further tightening of macroeconomic policies.

Inflation peaked by midyear, following a period of sustained upward pressures, although it remains above the upper band of the range in Brazil and Uruguay (Figure 2.3). Tighter monetary policy, coupled with declines in world commodity prices and (until recently) further currency appreciation, has helped dissipate some of these pressures. However, inflation expectations remain sticky in some countries, notably Brazil and Uruguay.

The *current account* balance deteriorated slightly during the first half of the year, despite strong commodity prices. Imports increased by more than 35 percent year over year through June, well above the growth in exports.[3] The current account deficit in

[3] In an effort to curb growing imports, in September 2011 Brazil introduced a temporary tax on imported vehicles through end

(continued)

the more financially integrated economies of South America is projected to reach 1¾ percent of GDP by end-2011, ¾ percent higher than in 2010, though further declines in commodity prices (mainly oil and metals) will lead to larger deficits.

Meanwhile, the *capital account* has been buoyant, comfortably financing current account deficits and leading to a further accumulation of international reserves, despite a strengthening of currencies until recently (Figure 2.4). The composition of inflows has tilted in favor of foreign direct investment (FDI), though it remains unclear whether the adoption of capital flow management measures (CFMs) slowed portfolio flows or shifted the composition of flows.

In the context of easy financing conditions, *credit* has continued to expand at a rapid pace and has shown little sign of deceleration:

- Real bank credit to the private sector continues to grow at a brisk pace (an average of about 12 percent year over year through June), though there are indications that lending standards have been tightened for consumption and housing credit, in response to a rise in nonperforming loans in the corresponding sectors and targeted prudential measures. In most countries, banks are increasingly relying on wholesale funding to finance their lending operations, albeit starting from a fairly low base.[4] Although these trends are not an immediate threat to stability, they need to be closely monitored to avoid problems down the road.

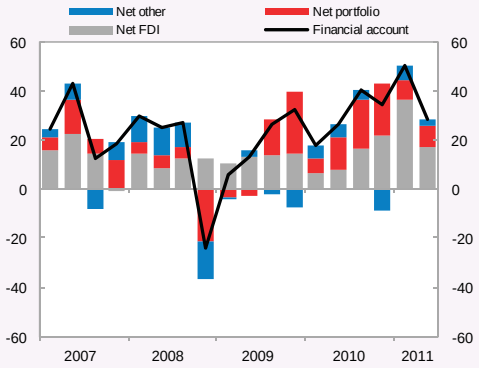
- Similarly, nonbank borrowing by firms is up sharply, although vulnerabilities still remain low. Although an increasing share of borrowing is in foreign currency, maturities have been extended and leverage ratios are low for most countries.

2012. The tax does not apply to vehicles imported from Mercosur or Mexico.

[4] Smaller banks tend to have higher levels of exposure to consumer credit and wholesale funding.

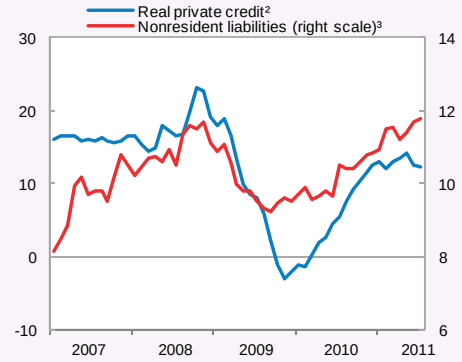
Figure 2.4. Until recently, strong capital flows have fueled credit growth and led a strengthening of currencies in some countries.

Selected South America : Financial Account [1]
($US billions)



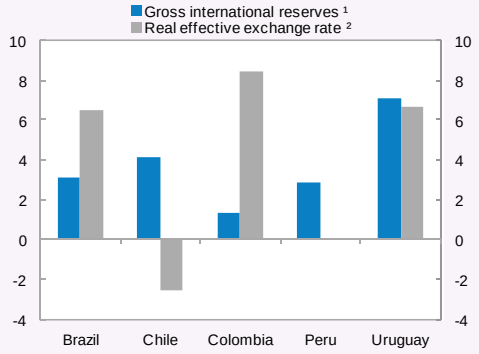
Sources: Haver Analytics; national authorities; and IMF staff calculations.
[1] Includes Brazil,Chile, Colombia, Peru, and Uruguay, except for 2011Q2 where data for Colombia and Uruguay were not available.

Selected South America: Real Bank Credit and Leverage[1]
(Percent)



Sources: EMED; Haver Analytics; and IMF staff calculations.
[1] Average of Brazil, Chile, Colombia, Peru, and Uruguay.
[2] Real bank credit to private sector; 12-month percentage change.
[3] Defined as liabilities to nonresidents as a percentage of total liabilities. Excludes Chile.

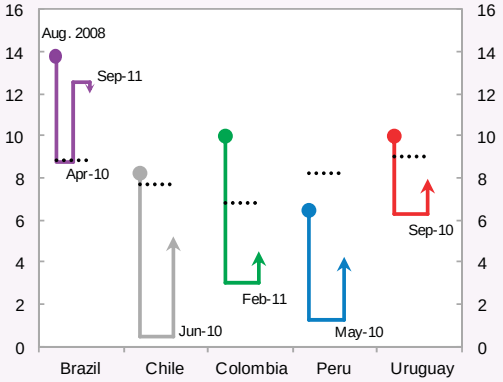
Selected South America: Change in International Reserves and Real Effective Exchange Rates, January/August 2011



Sources: Haver Analytics; IMF, Information Notice System; and IMF staff calculations.
[1] Change in gross international reserves in percent of 2010 GDP. Includes data up to August 2011.
[2] Real effective exchange rate change between December 2010 and July 2011, in percent. Positive values indicate an appreciation.

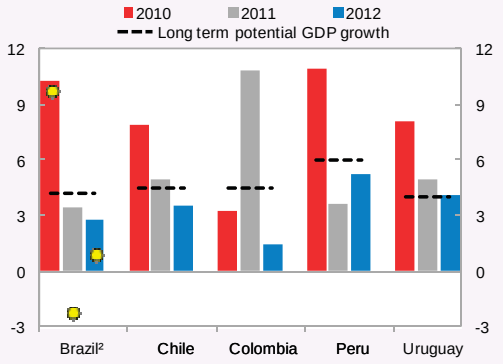
Figure 2.5. Policies have been tightened. However, fiscal positions remain somewhat weaker than pre-crisis levels.

Selected South America: Monetary Policy Rate[1]
(Percent)



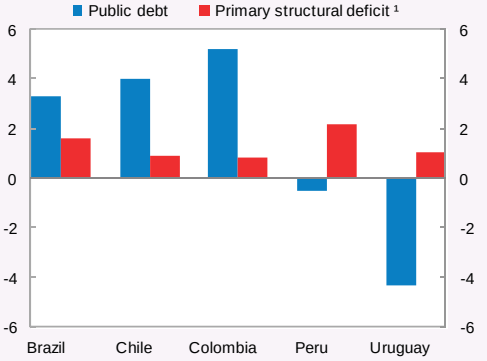
Sources: Haver Analytics; and IMF staff calculations.
[1] Dot at the beginning of the graphs for each country represent the peak policy rate prior to the beginning of the easing cycle in the second half of 2008. The dotted line presents potential growth plus inflation target. Last data available is August 2011, except for Brazil (September 2011).

Selected South America: Real Primary Expenditure Growth[1]
(Percent)



Source: IMF staff calculations.
[1] Percent change in primary expenditures deflated by consumer prices.
[2] Bars exclude policy lending in all years and Petrobras' capitalization in 2010; dots include policy lending.

Selected South America: Change in Public Debt and Structural Primary Balance, 2008/10
(Percent of GDP)



Sources: IMF, *World Economic Outlook*; and IMF staff calculations.
[1] For Uruguay, measures the change in the cyclically-adjusted primary fiscal deficit.

- In contrast, equity prices have been on a downward trend since early this year in most countries, likely reflecting concerns regarding valuations (price-earnings ratios have returned to historical averages), and more recently, increased global risk aversion and capital outflows in this segment.

In the context of strong domestic demand and tight labor markets, *monetary policy* was tightened (Figure 2.5 and Section 2.3). The average monetary policy rate has been raised by 280 basis points since the beginning of the tightening cycle in 2010, with Brazil and Chile posting the strongest swings. For most inflation-targeting countries, policy rates are now near neutral levels. More recently, and in response to the global slowdown and related uncertainties, central banks have started to put rate hikes on hold, with Brazil reducing rates (by 50 basis points). The decision to pause policy tightening in some countries is appropriate, particularly where inflation expectations remain well anchored. Further rate hikes may be warranted once uncertainties settle and downside tail risks dissipate; in a downside scenario, countries with policy credibility may have room to ease if inflation expectations remain well anchored.

Fiscal policy should continue to focus on gradually reducing public debt and on returning structural balances to precrisis levels.[5] This strategy would support policy credibility, while rebuilding fiscal buffers that could be deployed in a downside scenario; given high levels of uncertainty, fiscal easing now would be premature. Fiscal consolidation efforts should avoid placing an undue burden on infrastructure spending (needed to support medium-term growth), and pressures to increase recurrent spending (particularly wages)

[5] Brazil's recent decision to increase the government primary surplus by ¼ percent of GDP in 2011 by saving the bulk of the revenue windfall is a step in the right direction, though greater action on the fiscal front may be required to strengthen the policy mix.

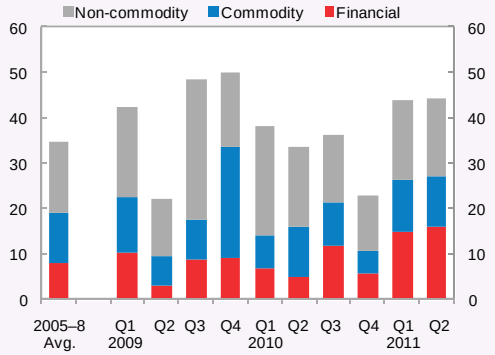
should be resisted (Box 2.2).[6] To meet growing social and infrastructure needs in a manner consistent with fiscal consolidation, revenue mobilization should be considered, particularly in countries where tax burdens are still relatively low (Chile, Colombia, and Peru).

Meanwhile, fiscal frameworks should be strengthened—countries should consider establishing structural fiscal targets (that control for the cycle) and binding medium-term plans (Box 2.3)—and efforts towards improving the structure of public debt should continue. In that regard, it is worth noting that the average maturity on outstanding sovereign domestic debt has more than doubled from about 4 years in 2003 to over 8 years in 2010, with maturities on new issuance averaging near 14 years.

Macroprudential policies should remain part of the toolkit to protect the stability of the banking system (see also Section 2.4). In light of heightened downside risks to a sudden stop in financing, it remains imperative to ensure that the financial and corporate sectors do not continue to build vulnerabilities. The increase in wholesale funding by banks and firms is a worrying trend, and prudential measures should actively be deployed to discourage foreign-financed credit expansions and risk taking (Figure 2.6).[7] Moreover, authorities should remain vigilant about liquidity pressures, which (if they arose) could be countered partly via macroprudential means (easing of reserve requirements), as well as via direct intervention in foreign exchange and domestic liquidity markets if needed to ward off instability. Finally, further efforts are required to address regulatory blind spots and bring financial oversight in line with best practices (Box 2.4).

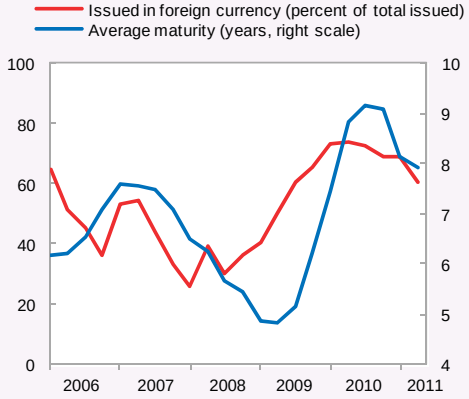
Figure 2.6. Corporate indebtedness is on the rise, though leverage indicators remain low.

Latin America: Corporate Bonds and Loans Issuance by Borrower Type [1]
($US billions)



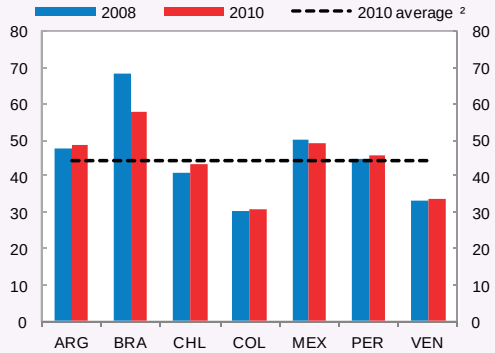
Sources: Dealogic; and IMF staff calculations.
[1] Includes Argentina, Brazil, Chile, Colombia, Mexico, Peru, and Venezuela.

Latin America: Bond Issuance by Currency and Maturity[1]
(Three-quarter moving average)



Sources: Dealogic; and IMF staff calculations.
[1] Includes Argentina, Brazil, Chile, Colombia, Mexico, Peru, and Venezuela.

Latin America: Nonfinancial Corporate Sector Leverage [1]
(Percent of total assets)



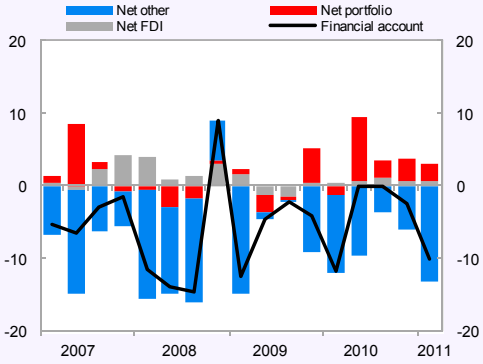
Sources: Dealogic; Worldscope; and IMF staff calculations.
[1] Leverage is defined as the simple average over all nonfinancial firms' total liabilities-to-total assets ratios, where liabilities include current liabilities, long-term debt, pension benefits, and unrealized losses on marketable securities.
[2] Simple average for Argentina, Brazil, Chile, Colombia, Mexico, Peru, and Venezuela in 2010.

[6] In Brazil, the legally mandated 13.6 percent minimum wage increase during 2012 will increase public sector wages and pensions by 0.5 percent of GDP in 2012.

[7] In January 2011, the Brazilian central bank required banks to deposit 60 percent of their short spot dollar positions in cash at the central bank. This requirement applied to positions in excess of US$3 billion or Tier 1 capital. In July, the central bank lowered this threshold to US$1 billion.

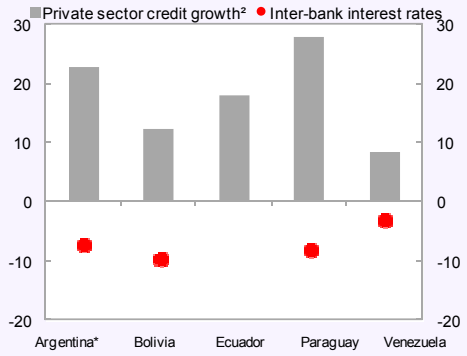
Figure 2.7. Policies remain highly procyclical in the less integrated commodity exporters, while capital outflows continue.

Other South America: Financial Account[1]
($US billions)



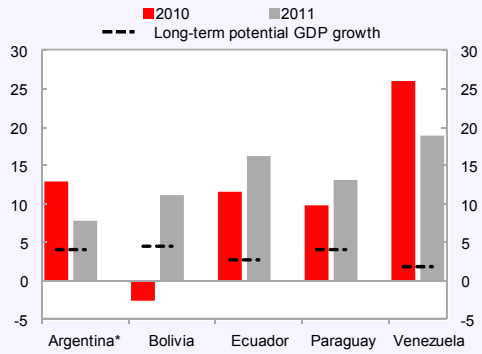
Sources: Haver Analytics; national authorities; and IMF staff calculations.
[1] Average of Argentina, Bolivia, Ecuador, Paraguay, and Venezuela. Excludes Bolivia and Paraguay in 2011:Q1.

Other South America: Real Interest Rates and Real Bank Credit Growth, 2011 [1]
(Percent)



Sources: Haver Analytics; national authorities; and IMF staff calculations.
[1] Data through August 2011. Deflated by consumer prices.
[2] Data through July for Ecuador and Venezuela, and through June for Argentina and Paraguay.

Other South America: Real Primary Expenditure[1]
(Percent)



Source: IMF staff calculations.
[1] Percent change in primary expenditures deflated by consumer prices.
* Nominal variables are deflated using the IMF staff's estimate of the average provincial inflation rate (excluding Buenos Aires). A Laspeyres index is employed to aggregate price changes across provinces, using weights derived from the 2004/05 National Household Expenditure Survey (ENGH). Based on data for 11 provinces for which provincial CPI data are available through 2011.

Exchange rate flexibility should be maintained. Not only do flexible exchange rates help cushion against downside tail risks, but they also reduce vulnerabilities by limiting foreign exchange exposure and the adverse impact of sudden stops. During September, some countries (Brazil, Peru) intervened to counter volatility in currency markets resulting from the recent spike in risk aversion and falling commodity prices. Going forward, there are both upside and downside risks to inflows; although sterilized interventions and CFMs can be useful tools to manage volatile inflows, these should not substitute for traditional macroeconomic policies (see Adler and Tovar, 2011; Eyzaguirre and others, 2011; and Ostry and others, 2011).[8]

South America: Less Financially Integrated Commodity Exporters—Avoiding Procyclicality

With output above potential and inflation in double digits in most countries, macroeconomic policies need to shift quickly to a countercyclical stance. Further declines in commodity prices pose serious downside risks where policy buffers have not been built during the boom years, given limited access to market financing.

In most of the less financially integrated commodity-exporting economies (Argentina, Bolivia, Ecuador, Paraguay, Venezuela), growth was very strong during the first half of 2011, supported by high commodity prices and expansionary policies. In some cases (Argentina, Bolivia, Paraguay) vibrant demand from Brazil also played a key role. High world food prices, strong domestic demand, and supply constraints contributed to a rise in inflation (which reached double digits in most countries, except Ecuador), although inflation has peaked in a few cases (Bolivia, Paraguay).

Macroeconomic policies are mostly procyclical. Monetary aggregates and private credit are expanding at nearly 20 percent year over year in real terms (Figure 2.7). Although interest rates have been raised (particularly in Paraguay) in some countries,

[8] In general, trade protection measures should be avoided.

they still remain quite negative in real terms. Fiscal policy is also adding to demand pressures, with real government primary expenditures growing well ahead of potential growth in most countries.[9] Moreover, much of the increase in primary spending is recurrent in nature, adding to budget rigidities and concerns regarding the composition of public expenditures (Box 2.2).

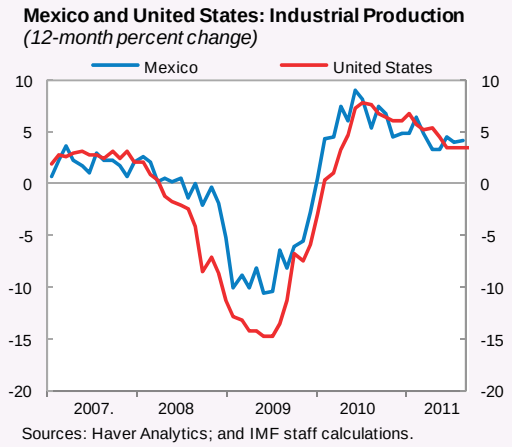
Downside risks dominate the outlook, particularly in a scenario in which commodity prices drop significantly. Procyclical policies during the boom years and limited access to financing would leave these economies with little ammunition to avoid a sharp contraction during a commodity downturn. Looking forward, priority should be given to strengthening fiscal frameworks, with the aim of reducing the procyclicality and improving the transparency and predictability of public sector operations. Monetary policies need to be tighter, significantly in some cases.

Mexico and Central America: More Headwinds to Growth

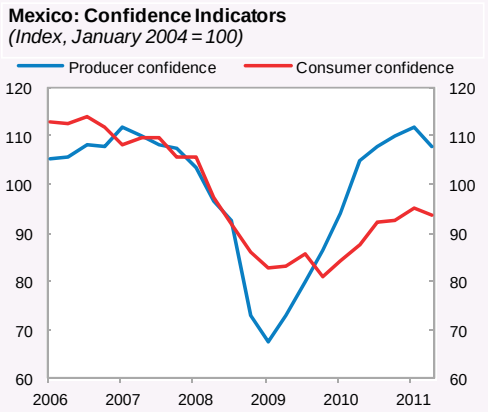
Growth in Mexico and Central America was fairly robust during the first half of the year, despite the lackluster performance in the United States. However, there are increasing signs of some moderation with externally driven downside risks dominating. In this context, fiscal policy buffers need to be rebuilt to bring public debt down gradually to precrisis levels, and monetary policy (particularly in Mexico) can be put on hold to assess the evolution of economic conditions and adjust accordingly.

Mexico expanded at a pace of about 3½ percent during the first half of 2011, supported by strong manufacturing exports and domestic demand. This relative resilience reflects in part strong linkages to U.S. manufacturing, which has performed better than the overall U.S. economy. Weaker-than-envisaged U.S. growth and an increase in global uncertainties would hinder Mexico's performance, with confidence indicators already on a downward

Figure 2.8. In Mexico, industrial production has held up, though headwinds from weak U.S. growth and global uncertainties will persist.



Sources: Haver Analytics; and IMF staff calculations.



Sources: Haver Analytics; and IMF staff calculations.

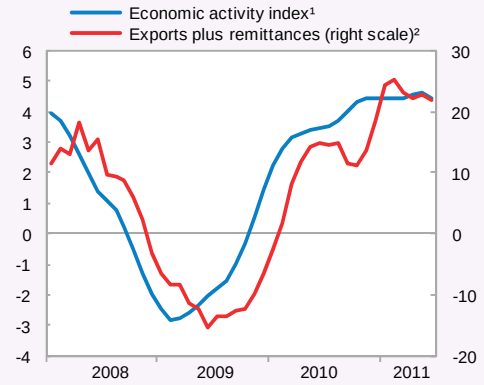
trend. Growth is now estimated to reach about 3¾ percent in 2011–12, roughly ½ percent lower than projected in the April 2011 *Regional Economic Outlook*, largely reflecting the revised U.S. outlook. Risks are clearly tilted to the downside, linked to risks in the United States (Figure 2.8).

Mexico's policy stance has been appropriately balanced, with monetary policy supporting the recovery, while fiscal consolidation (which started in 2010) proceeds. In light of the U.S. slowdown and increased uncertainties, and in the context of firmly anchored inflation expectations, monetary policy can be put on hold to assess the evolution of economic conditions, with remaining scope for further accommodation in case downside risks to the global

[9] In Bolivia, the planned fiscal expansion in 2011 follows a period of sustained fiscal surpluses and accumulation of international reserves (which now exceed 40 percent of GDP).

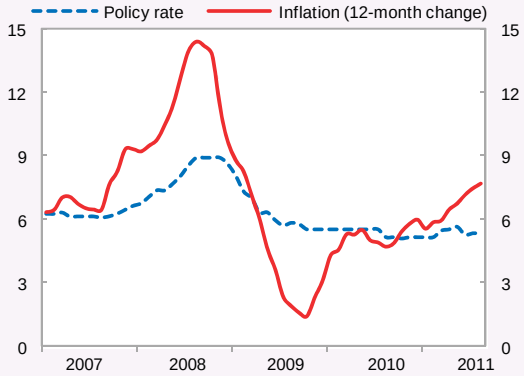
Figure 2.9. In Central America the recovery has gained some strength. Policies need to shift toward building buffers, in the context of growing global downside risks.

Central America: Economic Activity
(Annual percent change)



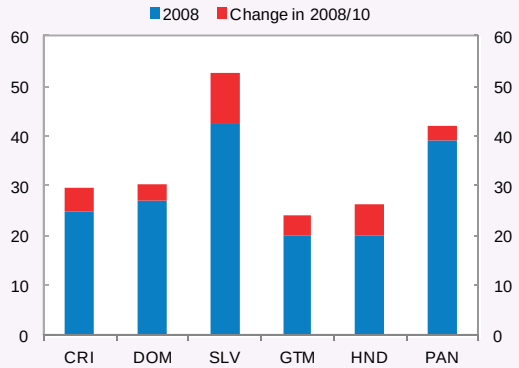
Sources: National authorities; and IMF staff calculations.
[1] Includes Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua.
[2] Three-month moving average. Includes El Salvador, Guatemala, Honduras, and Nicaragua.

Central America: Inflation and Policy Rates[1]
(Percent)



Sources: National authorities; and IMF staff calculations.
[1] Simple average for Costa Rica, Dominican Republic, Guatemala, and Honduras. Data through August 2011.

Central America: Public Debt in 2010 versus 2008[1]
(Percent of GDP)



Sources: National authorities; and IMF staff calculations.
[1] Countries consist of Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, and Panama.

outlook materialize. Meanwhile, gradual fiscal consolidation should continue to regain policy buffers. Reforms should also aim to address longer-term fiscal pressures, stemming from lower oil receipts (as a percentage of GDP) and higher age-related spending.

In the Central America, Panama, and the Dominican Republic (CAPDR) region, the recovery gained strength during the first half of the year. Output expanded by about 4½ percent, led by domestic demand. Growth was also supported by strong agricultural exports and some bounce-back in remittances, though these still remain well below precrisis levels (Figure 2.9). Growth has been particularly strong in Panama, fed by construction related to canal expansion, whereas in the Dominican Republic growth has declined, dissipating previous overheating concerns. Meanwhile, inflation in most countries continues to rise (reaching an average of 7¼ percent in July), despite some moderation in energy and food prices.

Growth in the CAPDR region is projected to remain near 4 percent during 2011–12, roughly ¼ percent lower than projected back in April 2011. However, downside risks dominate. Another U.S. recession would sharply reduce exports and remittances, setting back the recovery particularly in economies that have exhausted space to implement countercyclical policies.

Given small or closed output gaps in most countries and large downside risks, policies must quickly shift toward rebuilding policy buffers. On the fiscal side, efforts should center on reducing public debt, which is up by an average of more than 5 percent of GDP since the 2008 global crisis. Given the region's relatively low tax burden, revenue mobilization will be required to address fiscal consolidation needs as well as large social and infrastructure gaps (see also Box 2.2). Similarly, efforts are also needed to contain the public wage bill, which is already large relative to that of other regions with similar income per capita levels.

In countries with independent monetary policy (Costa Rica, the Dominican Republic, Guatemala),

further hikes in policy rates may be warranted, as these rates remain well below neutral levels and inflation has been trending above or near the upper bound of the target range. Increased exchange rate flexibility should be considered as part of the strategy to bring down inflation, as well as to buffer the impact of a more-pronounced slowdown in global demand.[10] In dollarized or peg regimes, wage pressures should continue to be resisted, and in some instances (e.g., Panama) a stronger tightening of fiscal policies may be required to address overheating risks.

The Caribbean: Repairing Sovereign and Financial Balance Sheets

The recovery in much of the Caribbean remains weak, with downside risks to growth. Greater resolve is required in bringing down high public debt levels and decisively addressing persistent weaknesses in the financial sector.

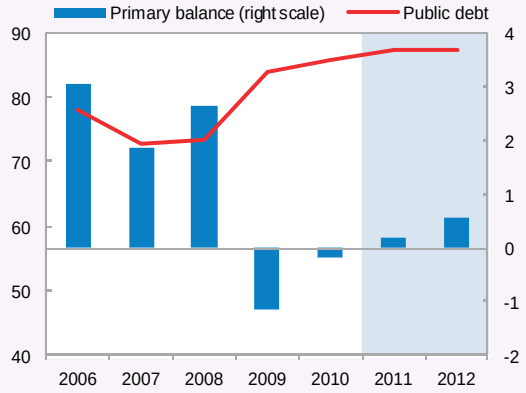
The Caribbean region continues to struggle to recover from a long and protracted recession. Drags from fiscal consolidation and higher energy prices continue to constrain private demand, while the recovery in tourism flows remains tepid amid high unemployment in advanced economies (Figure 2.10). Tourism-intensive economies are projected to expand by an average of 1¼ percent during 2011–12, almost 1 percent lower than anticipated six months ago. Prospects are better in the mineral-rich countries, with Guyana and Suriname benefiting from record gold prices. In Haiti, growth is estimated to reach about 6 percent this year, well below the 8½ percent projected back in April, as earthquake reconstruction efforts have been lagging.

Risks to the outlook are tilted to the downside. A further slowdown in advanced economies would dampen the recovery and add pressures to an already heavy public debt burden. Meanwhile, further delays in resolving sovereign and financial sector balance sheets could lead to a generalized

[10]The high degree of liability dollarization in some countries could pose some restrictions for exchange rate flexibility.

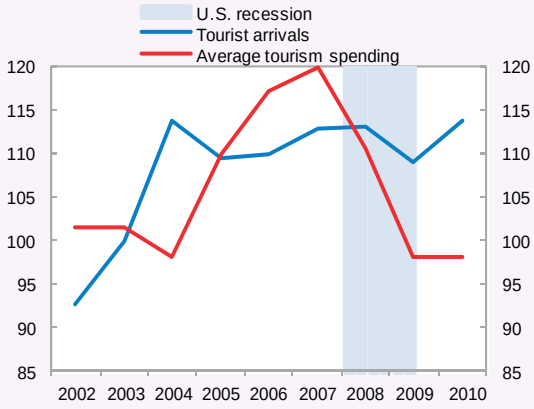
Figure 2.10. Fiscal consolidation needs to proceed in the Caribbean in the context of a weak recovery of tourism and growing financial sector strains.

Caribbean: Primary Balance and Public Debt[1]
(Percent of GDP)



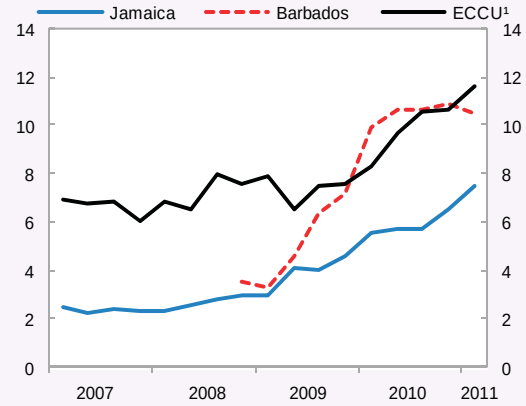
Sources: National authorities; and IMF staff calculations.
[1] Simple average of Antigua and Barbuda, Dominica, Grenada, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, and Trinidad and Tobago.

Caribbean: Tourism Arrivals and Spending, 2002–10
(Index, 2000 = 100)



Source: Caribbean Tourism Organization.

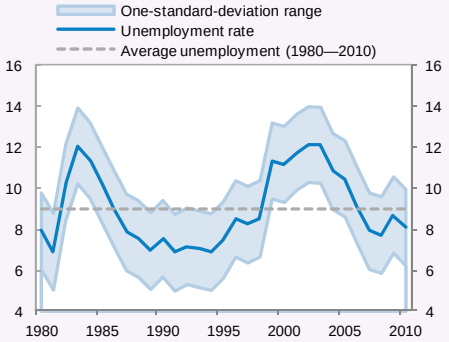
Caribbean: Nonperforming Loans
(Percent of total loans)



Sources: National authorities; and IMF staff calculations.
[1] ECCU stands for the Eastern Caribbean Currency Union.

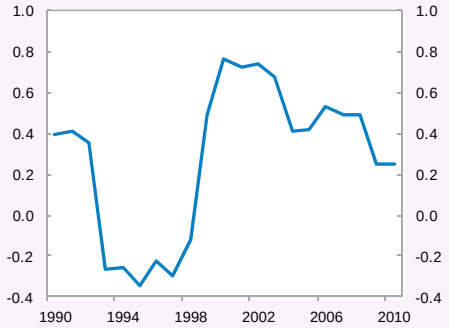
Figure 2.11. Unemployment rates in key Latin American countries are below their historic levels and approaching their natural rates, signaling overheated labor markets.

Selected Latin America: Unemployment Rates, 1980/2010[1]
(Percent)



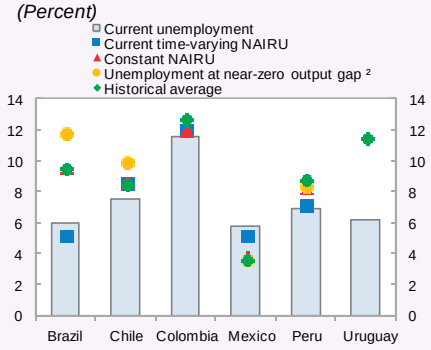
Sources: Ball, De Roux, and Hofstetter (2011); and IMF staff calculations.
[1] Simple average of Brazil, Chile, Colombia, Mexico, Peru, and Uruguay.

Selected Latin America: Correlation of Unemployment and Output [1]
(Percent)



Sources: Ball, De Roux, and Hofstetter (2011); and IMF staff calculations.
[1] Ten-year rolling correlation of the unemployment gap and output gap, measured as the series over its Hodrick-Prescott-filtered trend. Simple average of Brazil, Chile, Colombia, Mexico, Peru, and Uruguay.

Selected Latin America: Current Unemployment Rate versus NAIRU[1]
(Percent)



Sources: Haver Analytics; national authorities; and IMF staff calculations.
[1]Seasonally adjusted quarterly data; historical average for entire available series. Constant and time-varying NAIRU estimated from the Phillips curve. In the case of Chile, estimates may be affected by methodological changes to the measurement of unemployment that were introduced in 2010. Structural changes and supply shocks tend to distort NAIRU estimates for Uruguay, which are therefore not reported.
[2] Unemployment at near-zero output gap represents the observed unemployment rate in Q4 of the year in which the output gap was closest to zero in the series. Data unavailable for Colombia and Uruguay.

loss of confidence. The recent moderation in world commodity prices provides some relief to an otherwise difficult global and domestic environment.

In this context, greater resolve is required in reducing public debt (which is up over 9 percent of GDP since the crisis) and resisting fatigue in some countries, where pressures to increase wages and subsidies have intensified. Fiscal consolidation efforts should, to the extent possible, preserve growth and competitiveness by avoiding steep cuts in infrastructure spending. Section 2.5 discusses in detail the challenges for fiscal consolidation in high-debt tourism-intensive Caribbean economies.

Financial sector fragilities in the region have become more troubling. In the Eastern Caribbean Currency Union (ECCU), financial sector health indicators have continued to deteriorate, highlighting the importance of steps to further strengthen the sector.[11] In this context, the authorities need to diagnose the health of the financial system quickly and develop options for strengthening balance sheets, and avoid further compromising public finances. Moreover, financial regulation and supervision frameworks require significant strengthening, including ensuring that the resolution of failed institutions is carried out transparently.

2.3. How Tight Are Labor Markets in Inflation-Targeting Countries?

As one gauge of the extent of overheating, we examine estimates of the nonaccelerating inflation rate of unemployment (NAIRU) for selected countries. Our findings suggest that labor markets have been showing signs of overheating in several economies.

Unemployment rates in the faster-growing Latin American commodity exporters are currently near or

[11]In July 2011, the largest indigenous bank in Antigua and Barbuda was intervened. Meanwhile, the resolution of the failed insurance companies, British American Insurance Company (BAICO) and Colonial Life Insurance Company (CLICO), of the Trinidad and Tobago-based CL Financial Group, remains pending.

at historic lows. In contrast with past crises, the 2008–09 crisis had a relatively small and short-lived adverse impact on unemployment in the region (Figure 2.11). In fact, the strong economic expansion that Latin America experienced over the past decade has been more labor inclusive than that during the 1990s. However, questions have emerged about the sustainability and nature of recent unemployment trends. On the one hand, employment gains have taken place in sectors (construction and services) traditionally thought to be more vulnerable to a reversal in the economic cycle. On the other hand, it is unclear whether further declines in unemployment will add to wage pressures and stoke inflation.

Estimating the Nonaccelerating Inflation Rate of Unemployment

How tight are labor markets? Monetary policy is often guided by some metric of economic slack—for example, output versus its potential level, or unemployment versus its natural rate or the rate at which inflation is "nonaccelerating."[12] Despite its importance, only a few studies have examined the relationship between inflation and unemployment in the region (Texeira da Silva Filho, 2010; Restrepo, 2008). This is not surprising given data constraints, as well as deep structural changes in recent years (Ball, De Roux, and Hoffstetter, 2011). Furthermore, particular labor market features in the region (e.g., informality and underemployment) can affect the inflation-unemployment relationship.[13]

To analyze this relationship we estimate a Phillips curve equation, with the goal of finding a time-varying unemployment rate consistent with stable inflation.[14] The estimated NAIRUs are also compared with other rule-of-thumb proxies such as (1) the average historical rate of unemployment, (2) the Hodrick-Prescott-filtered unemployment rate, and (3) the unemployment rate consistent with past episodes when our estimated output gaps were near zero.

Our results suggest that unemployment is currently below trend or near NAIRU levels for most inflation-targeting countries in the region (Figures 2.11 and 2.12).[15] The evidence is fairly robust for Chile, Colombia, and Peru, yet mixed in the case of Mexico. For Brazil and Uruguay we encountered more difficulties in identifying the NAIRU given the prominence of supply and structural factors (the sharp reductions in inflation during the early 2000s in both countries took place in tandem with important declines in unemployment).

Policy Implications

From a policy perspective, our NAIRU estimates suggest that labor markets have been fairly tight and that further tightening of monetary policy in some countries could be warranted. Nonetheless, this has

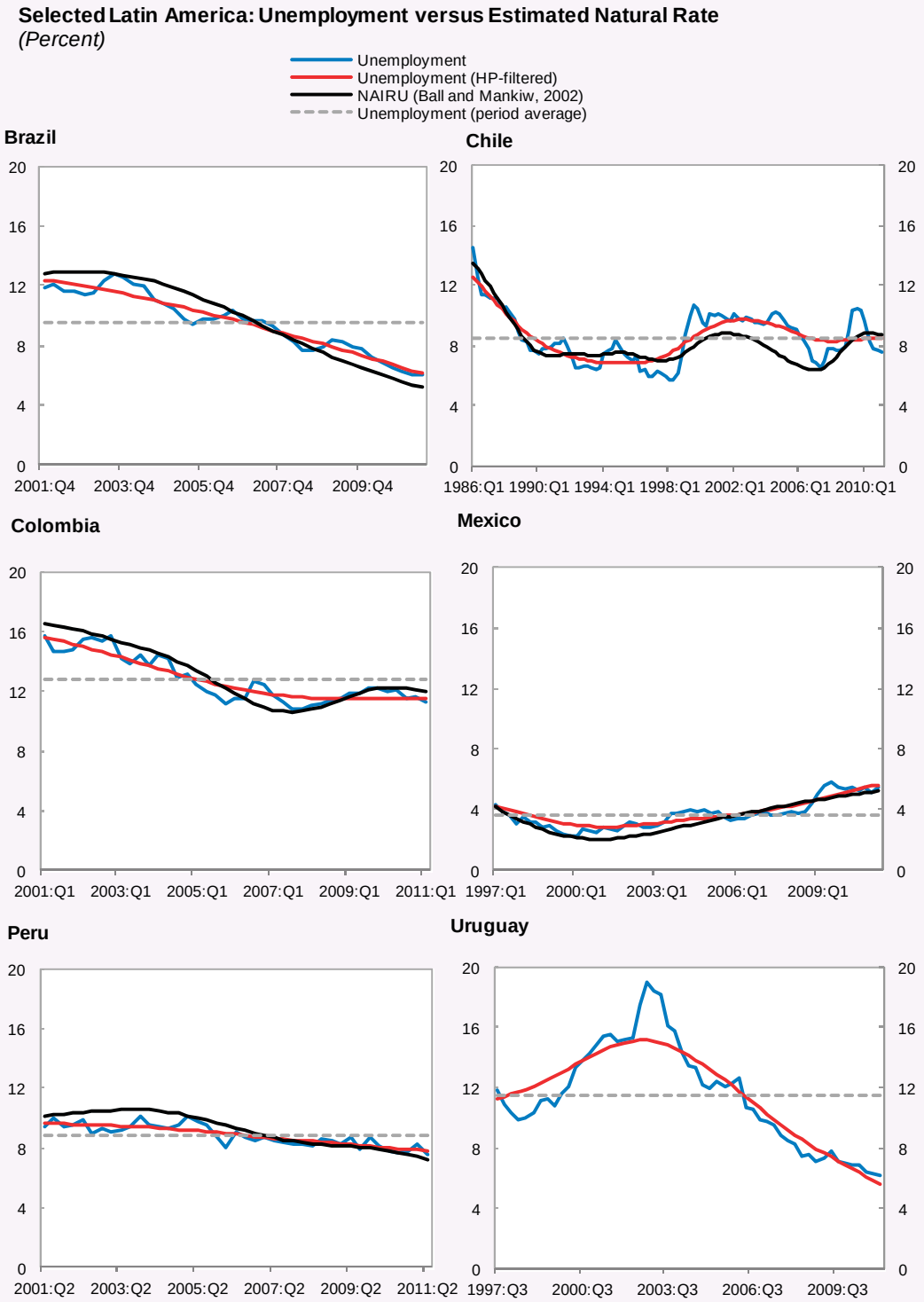
[12] Implicit in this concept is the idea that shifts in aggregate demand coming from either monetary policy or other sources have short-run impacts on unemployment. However, in the long-run, unemployment tends to return to the NAIRU. Although it is tempting to conclude that the NAIRU is determined by supply-side factors, such as labor market frictions, this is not necessarily the case, in particular if demand shocks have hysteresis effects (see Ball and Mankiw, 2002; Ball, 2009).

[13] In some instances, long time series cannot be used because episodes of hyperinflation break down the relationship between inflation and unemployment.

[14] To this end, we use quarterly data for six inflation-targeting countries in the region (dating back to at least 2001) and follow the methodology developed by Ball and Mankiw (2002). Formally, $\Delta\pi_t = \beta(U_t - U_t^*) + X_t + \varepsilon_t$, where changes in inflation ($\Delta\pi_t = \pi_t - \pi_t^e$) are regressed against the unemployment gap (i.e. how far is unemployment, U_t, from the nonaccelerating inflation rate of unemployment, U_t^*), and supply shocks (X_t). To identify the time varying NAIRU a Hodrick-Prescott filter is applied to $U_t + \frac{\pi_t - \pi_t^e}{\beta}$, based on the assumption that U_t^* is a slow-moving process and $\frac{\varepsilon_t}{\beta}$ corresponds to high-frequency fluctuations associated with different shocks. A constant NAIRU is also estimated by regressing inflation against a constant, lagged inflation, and unemployment, where the NAIRU is equivalent to the ratio of the estimated constant term to the sum of the lagged unemployment coefficients (see Staiger, Stock, and Watson, 1997).

[15] A challenge in examining unemployment dynamics relates to the varying definitions used by statistical agencies across the region (see Ball, De Roux, and Hoffstetter, 2011). This can be a caveat for cross-country analyses, but it does not affect the estimates reported in this section as they do not use the cross-sectional dimension.

Figure 2.12. Unemployment in Latin America is close to proxies for its natural rate, such as the Hodrick-Prescott-filtered unemployment series, the historic average unemployment rate for the period, and the estimated time-varying NAIRU.



Sources: Haver Analytics; and IMF staff calculations.
[1] The NAIRU is estimated based on a regression of the Philips curve that includes core inflation, unemployment, and supply shocks (See Ball and Mankiw, 2002). For the cases of Peru and Mexico, core consumer price index (CPI) inflation is in levels, not detrended. Exchange rate supply shocks are defined in terms of annual percentage changes: the de-meaned real effective exchange rate is used for Brazil, Colombia, Chile, and Mexico; the nominal exchange rate is used for Peru. Estimates for Chile and Peru also include an inflation supply shock defined as the de-meaned difference between headline and core annual CPI inflation rates. Estimate for Brazil includes one lag of detrended inflation. In the case of Chile, estimates may be affected by methodological changes to the measurement of unemployment that were introduced in 2010. Structural changes and supply shocks tend to distort NAIRU estimates for Uruguay, which are therefore not reported.

to be complemented with further forward-looking analysis of inflation indicators, while taking into account the impact of the recent global slowdown and related uncertainties.

Although there exists a negative and statistically significant relationship between inflation and cyclical unemployment (and a role for unemployment to be a reliable predictor of inflation), structural features of labor markets suggest that further analysis is warranted. For example, informality, underemployment, or wage indexation may mask the extent to which unemployment dynamics are related to inflation. In Mexico recessions are characterized by declines in formal sector hiring, with increased informality or underemployment playing a buffering role (Lederman, Maloney, and Messina, 2011). In these situations, unemployment may need to be adjusted to include informality to obtain a more accurate measure of spare capacity.

2.4. Effectiveness of Macroprudential Policies

Credit continues to expand rapidly across the region, raising concerns about the accumulation of risks and vulnerabilities. An increasing number of countries in the region have addressed these concerns by adopting macroprudential policies; however, little is known about these policies' effectiveness and how they interact with monetary policy. We report new cross-country evidence for the region suggesting that macroprudential policies have a moderate and transitory impact in slowing the pace of credit growth, possibly because narrowly based measures may be circumvented. We also find that monetary and macroprudential policies tend to complement each other.

In the face of easy external financing conditions, many countries in the region have actively been adopting prudential measures to curb credit growth and anchor the stability of their financial systems (see Section 2.2). These policies, now commonly referred to as "macroprudential," include market-wide measures such as loan-loss dynamic provisioning (e.g., Bolivia, Colombia, Chile, Peru, Uruguay) and tightening of reserve requirements on bank deposits or other liabilities (Brazil, Peru, and Uruguay).[16] In some instances, targeted sectoral measures have been used, including a tightening of capital requirements to address specific market segments (e.g., the long-term consumer loan market in Brazil) and, more recently, reserve requirements on short spot dollar positions (Brazil).[17] These measures are summarized in Table 2.1.

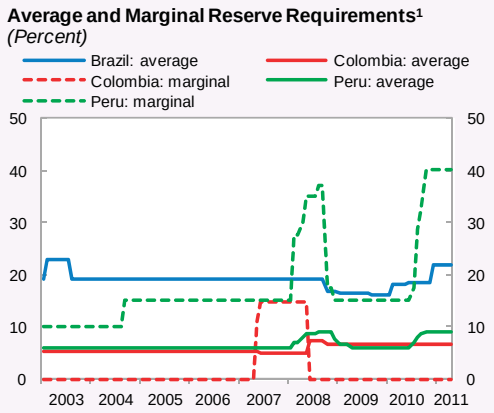
Table 2.1 Summary of Recent Macroprudential Measures

Policy tool	Country and measure	Motivation—objective
Capital requirements and loan-to-value ratios	Brazil (long-term consumer loan market-2010)	Slow down consumer credit growth and shrink the duration of credit.
Dynamic provisioning	Bolivia (2008), Colombia (2007), Chile (2011), Peru (2008), Uruguay (2001)	Countercyclical tool that builds up a cushion against expected losses in good times so that they can be released in bad times.
Liquidity requirements	Colombia (2008)	Tools to identify, measure, monitor, and/or control liquidity risk under conditions of stress.
Reserve requirements on bank deposits	Peru (2011), Brazil (2010), Uruguay (2009, 2010, 2011)	Limit credit growth, manage liquidity, and complement monetary policy to achieve macroprudential goals.
Reserve requirements on short term external credit lines of banking instutions	Peru (2011)	Nonquantitative prudential tool to increase the cost of financing for banks and make domestic investment opportunities less attractive.
Tools to manage foreign exchange credit risk	Peru (2010), Uruguay (2010)	Internalize foreign exchange credit risks associated with lending to unhedged borrowers.
Limits on foreign exchange positions	Brazil (reserve requirement on short spot dollar positions, 2011), Peru (2010)	Quantitative measures to manage foreign exchange risk in on- and off-balance sheet foreign-exchange-denominated assets and liabilities.
Other	Peru (limits to foreign investment by domestic pension funds, 2010)	Measure to facilitate capital outflows and ease pressure on the currency, domestic demand, and consumer prices.

Source: IMF Staff based on national sources.

[16] For a detailed overview of recent experiences with prudential policies see September 2011 *Global Financial Stability Report* (2011b), IMF (2011c, 2011d), and Terrier and others, (2011).
[17] Compared with Asia, measures aimed at real-estate related lending have been less common in Latin America (see IMF and Bank of Korea, 2011).

Figure 2.13. Brazil, Colombia, and Peru have stepped up the use of macroprudential measures to protect the resilience of the financial sector.



Sources: Central bank data; and IMF staff calculations.
[1] Simple average. Brazil: reserve requirements on sight deposits and term deposits; Colombia: checking, savings, term deposits, and certificates of deposit; Peru: domestic and foreign currency deposits for residents.

Despite their increasing use, the effectiveness of macroprudential policies in leaning against credit growth and protecting financial stability remains an open question, as empirical analysis has been limited thus far.[18] This is not surprising given the complexity of the question at hand, including the many dimensions over which these policies operate and their sectoral and market-specific targeted nature, as well as their relatively short history. Moreover, given that systemic risk is not directly observable, assessing effectiveness of these measures against credit growth may only provide us with a partial answer. For example, even if macroprudential measures were to have a muted effect on credit growth, systemic risks could be reduced, including through changes in the composition of credit and/or improvements in the quality of bank funding. These secondary effects are not examined in this section (Figure 2.13).

Cross-Country Analysis

To assess the impact of macroprudential policies on bank credit to the private sector, we use two complementary methodologies: *event analysis, whereby we track the effect of measures through time,* and *dynamic panel autoregressions, whereby we consider feedback effects between credit and policies.*[19] The analysis captures the effects of macroprudential measures using a cumulative dummy variable.[20] We also pay special attention to the impact of *average* and *marginal* reserve requirements on bank deposits, reflecting both the widespread use of these requirements in the region and the growing interest regarding their effectiveness.

Event analysis. Macroprudential policy shocks lead to a *moderate* and *transitory* slowdown in the growth of bank credit to the private sector (Figure 2.12). In particular, we find that those countries that introduce macroprudential policies experience on average an immediate decline in bank credit growth of about one percentage point in the month following the shock. However, this effect is *moderate* given the high rates of credit growth observed prior to the policy measure and the fact that credit growth resumes its pre-event level after four months.

In addition, we find evidence that (1) macroprudential policies have nonnegligible weakening effects on the nominal exchange rate, suggesting that these policies form part of a broader strategy to manage exchange rate pressures, and (2) the effects of marginal reserve requirements cannot be decoupled from monetary policy shocks, suggesting that these policies are often complementary to one another, an issue that we explore further later in this section.

Dynamic panel vector autoregression. This methodology helps us isolate the effects of macroprudential policies from other shocks and take

[18] See IMF (2011c) for a comprehensive cross-country analysis on the effectiveness of macroprudential policies.

[19] The sample covers the period January 2003 to April 2011 and includes economies where macroprudential measures have been actively employed (Brazil, Colombia, and Peru), as well as others that have been less active with their use (Chile and Mexico).

[20] In some countries regulations already in place may be tight enough that they do not demand adjustment over the cycle. In these cases, it would be desirable to have a measure that controls for the level of regulations and not just its changes as is done in this section.

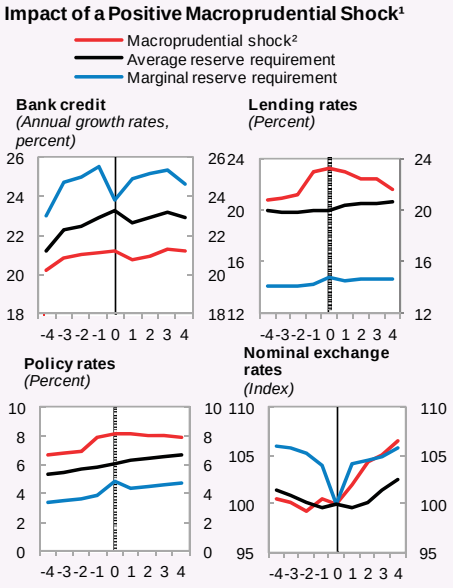
advantage of cross-country variation.[21] Consistent with the event analysis, our findings confirm that macroprudential measures lead to a *modest* and *temporary* reduction in private bank credit growth (Figure 2.14). Results are strongest in the case of average reserve requirements and *other* macroprudential policies (e.g., dynamic provisioning, countercyclical capital requirements). By contrast, we find that marginal reserve requirements have negligible short-run effects, confirming that findings in the event case analysis for marginal reserve requirements are due to hikes in policy rates.[22]

Finally, our results suggest that there is a reinforcing role between policy rate hikes and macroprudential policy shocks and vice versa. That is, policy rates tend to increase following a tightening in macroprudential policies, and vice versa (Figure 2.15).

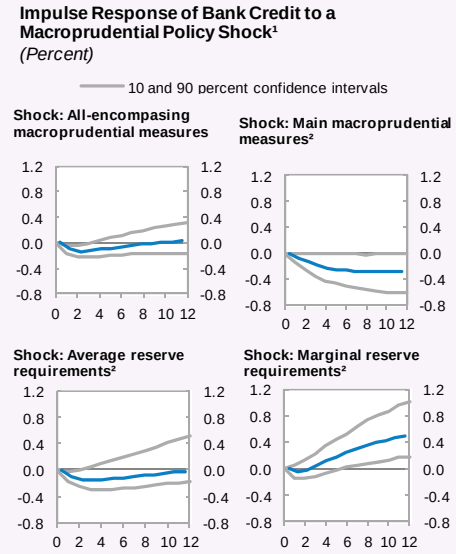
Sectoral Evidence

Macroprudential policies are often targeted at specific markets or sectors of the economy, so their effectiveness need not have marked effects on aggregate credit measures, as those used so far. This could help explain why these policies are found to have only moderate and transitory effects. We illustrate this point by examining the impact of a

Figure 2.14. Evidence suggests macroprudential shocks can affect bank credit and nominal exchange rates in the short-run.



Sources: Central bank data; and IMF staff calculations.
[1] Periods in the horizontal axis denote months. Time equal to *zero* denotes the time of the shock. Sample consists of Brazil, Colombia, and Peru, over the period 2003:M1—2011:M4.
[2] Includes reserve requirements.



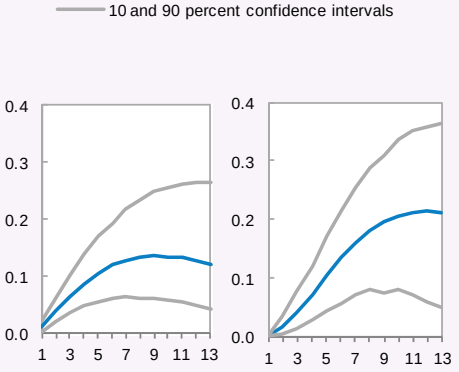
Sources: Central bank data; and IMF staff calculations.
[1] Macroprudential shock includes an all-encompassing measure that includes reserve requirements and other macroprudential measures (e.g. dynamic provisioning, countercyclical capital requirements). Estimates based on system generalized method of moments panel vector autoregression with two lags using monthly data for the period 2004:M6—2011:M4. The system includes macroprudential measures, the policy interest rate, the level of economic activity, and bank credit to the private sector. Identification is achieved using Choleski decomposition with the ordering mentioned above. Impulse responses have been normalized to one. Sample includes Brazil, Chile, Colombia, Mexico and Peru.
[2] The all-encompasing macroprudential variable has been split into average and marginal reserve requirements and main macroprudential measures.

[21] The panel vector autoregression is estimated using system Generalized Method of Moments estimations (see Holtz-Eakin, Newey, and Rosen, 1988; Love, 2003). Identification of shocks is achieved through a Choleski decomposition in which macroprudential policy shocks are assumed to be the most exogenous variables, followed by the level of economic activity and, finally, bank credit to the private sector. When macroprudential measures are split, we order other macroprudential measures first (most exogenous) followed by average and marginal reserve requirements. Results robust to alternative orderings.

[22] Further analysis on the impact of marginal reserve requirements is left for future research, in particular, the need to control for the tightness of the policy through a tax-equivalent measure.

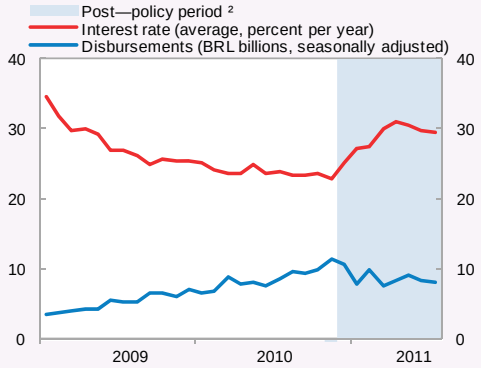
Figure 2.15. Macroprudential and interest rate policies have played a complementary role. In Brazil, targeted measures on long term consumer loans helped to dent credit growth in that sector.

Complementary Role of Macroprudential and Interest Rate Policies [1]
(Percent)



Sources: Central bank data; and IMF staff calculations.
[1] Estimates based on system generalized method of moments panel vector autoregression with two lags. The system includes macroprudential measures, policy interest rate, level of economic activity, and bank credit to the private sector. Identification is achieved using Choleski decomposition with the ordering mentioned above. Estimates are based on monthly data over the period 2004:M6—2011:M4 and include Brazil, Chile, Colombia, Mexico, and Peru. Macroprudential measure includes reserve requirements and other macroprudential measures (e.g., dynamic provisioning, countercyclical capital requirements) and is captured by a cumulative dummy. Simulation performed assuming 25-basis-point shock on policy interest rates. The impulse response has been normalized so that the corresponding macroprudential shock equals one.

Brazil: Impact of Macroprudential Measures on New Car Loans [1]



Source: Central Bank of Brazil.
[1] Data through July 2011.
[2] Shaded area starts in December 2010, when new macroprudential measures were put in place.

tightening of capital requirements adopted in regard to long-term consumer loans in Brazil.[23] After the introduction of these requirements in December 2010, the cost of auto loans rose sharply (close to 4½ percentage points between November 2010 and January 2011) and credit contracted immediately (Figure 2.14). This suggests that in using targeted measures authorities need to take into account the difficulties of calibrating the policies associated with such measures as well as the possibility that agents may circumvent the regulation (e.g., because of the existence of substitute markets).

Policy Implications

Traditional macroeconomic policies often face limitations in containing the buildup of financial sector vulnerabilities. The findings presented in this section show that macroprudential policies can play a role in containing credit growth. Although the direct impact on credit appears modest and temporary, the secondary effects of these measures on systemic risk (for example as reflected on credit and funding quality) should not be underestimated and represent an area of future research.

Finally, although macroprudential measures tend to work best when complemented with traditional macroeconomic policies, they need not always be aligned. For example, it is possible to envision circumstances that call for tighter macroprudential policies (e.g., to address concerns arising from systemic risk) while monetary policy may need to be eased or put on hold (e.g., due to a global slowdown).

2.5. Fiscal Consolidation Challenges in Tourism-Intensive Economies

Public debt dynamics in tourism-intensive economies of the Caribbean have deteriorated since the crisis, reflecting mainly a collapse in revenues. This section discusses recent fiscal trends,

[23] Specifically, for any given maturity, the new rule under these requirements stipulates a greater risk weight for loans that carry high loan-to-value ratios (LTVs). For instance, a risk weight of 150 percent (vs. 100 percent before the change) is now imposed on auto loans with LTVs higher than 80 percent for the two- to three-year tenor, or loans with LTVs higher than 70 percent for the three- to four-year tenor, or loans with LTVs higher than 60 percent for the four- to five-year tenor (see Terrier and others, 2011).

(continued)

including debt-restructuring agreements.[24] *Despite the progress made, greater savings are required to stabilize and reduce debt over the medium term. This requires addressing budgetary rigidities, restraining public wage and pension spending, closing loopholes, and reducing tax incentives.*

Public debt in most Caribbean countries has increased sharply since the crisis.[25] The increase largely reflects a deep and prolonged economic recession, which has affected debt dynamics (Figure 2.16). In fact, despite reductions in real government expenditures in most countries, primary balances deteriorated almost across the board as revenue losses more than offset efforts to curb spending. In most cases, declines in real growth added to the debt burden.[26]

Fiscal consolidation efforts in the area have thus far been mixed. Countries have adopted various strategies to reduce fiscal imbalances (Table 2.2), with a combination of revenue-enhancing measures (e.g., a VAT was introduced in a few countries and VAT rates were hiked in others) and efforts to contain spending growth, including limiting losses in public enterprises (Jamaica). However, primary spending was down by only an average of 0.3 percent of GDP between 2008 and 2010, with the bulk of the adjustment falling on capital spending, as governments sought to protect public employment and wages as well as social programs.

Some countries have combined fiscal adjustment with debt restructuring to ease their debt service burdens. Recognizing that the up-front fiscal adjustment required would be too large to meet debt service obligations and preserve debt sustainability, Antigua and Barbuda and Jamaica sought to reduce their debt service burdens (Box 2.5). Antigua and Barbuda

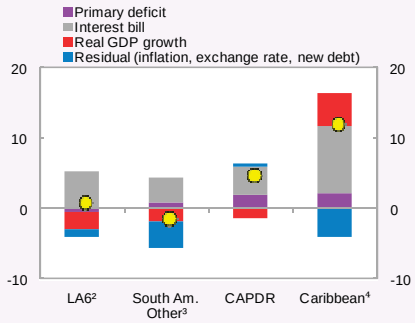
[24] This section was prepared by Charles Amo-Yartey and Therese Turner-Jones.

[25] This section focuses on fiscal consolidation efforts in tourism-intensive economies, including The Bahamas, Barbados, ECCU economies, and Jamaica. Belize, the Dominican Republic, Guyana, Haiti, Suriname, and Trinidad and Tobago are excluded.

[26] St. Vincent and the Grenadines and St. Lucia, with somewhat lower debt ratios, adopted a large fiscal stimulus during the crisis. (3) reprioritized

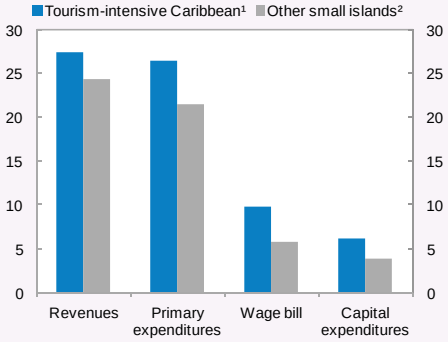
Figure 2.16. A comprehensive approach will be required to tackle large and increasing public sector debt in the Caribbean.

Latin America and the Caribbean: Decomposing Increase in Public Debt, 2008–10[1]
(Percent of GDP)



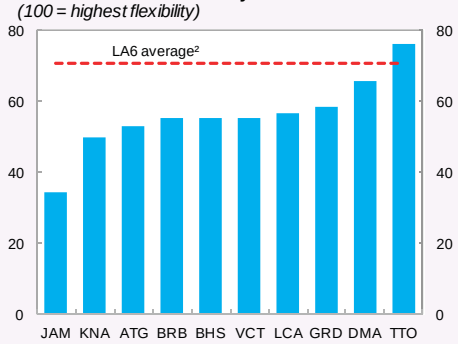
Sources: IMF, September 2011 *World Economic Outlook*; and IMF staff calculations.
[1] Dots display change in public debt as a percentage of GDP.
[2] Includes Brazil, Chile, Colombia, Mexico, Peru, and Uruguay.
[3] Includes Argentina, Bolivia, Ecuador, Paraguay, and Venezuela.
[4] Caribbean includes only Bahamas, Barbados, ECCU, and Jamaica.

Caribbean: Fiscal Indicators
(Percent of GDP, average 2007—10)



Sources: IMF, *World Economic Outlook*; and IMF staff calculations.
[1] Includes Bahamas, Barbados, ECCU, and Jamaica.
[2] Includes Dominican Republic, Mauritius, and Seychelles.

Caribbean: Fiscal Flexibility Index[1]
(100 = highest flexibility)



Sources: IMF, September 2011 *World Economic Outlook*; and IMF staff calculations.
[1] Defined as one minus the share of nondiscretionary spending, which in turn is equal to wages plus interest bill over total expenditures. Countries consist of Jamaica, St. Kitts and Nevis, Antigua and Barbuda, Barbados, the Bahamas, St. Vincent and the Grenadines, St. Lucia, Grenada, Dominica, and Trinidad and Tobago.
[2] Simple average for Brazil, Chile, Colombia, Mexico, Peru, and Uruguay.

Table 2.2. Selected Caribbean Countries: Summary of Tax and Expenditure Measures, 2009–11

Country	Revenue policies	Expenditure policies
Antigua and Barbuda	(1) Rolled back all VAT exemptions granted since 2007 and increased VAT rate for tourism sector from 10.5% to 12.5%; (2) increased stamp duties from 5% to 10%; (3) increased import duties; (4) increased Airport Embarkation Tax from US$25 to US$50; (5) increased fuel taxes.	(1) Strict control over wages and salaries; (2) reduced capital spending by 35% (2010); (3) debt restructuring reduced interest payments from 2010 by 3 percent of GDP.
Bahamas, The	(1) Raised tax rates on vehicles, departure taxes, and taxes on hotel rooms; (2) revamped business license tax; (3) strengthened customs, by consolidating collections in one institution, and introduced new procedures to reduce tobacco smuggling.	(1) Strict expenditure control on wages and transfers to public corporations; (2) initiated reform of fiscal incentives. However, wage freeze was suspended.
Barbados	(1) Increased VAT from 15% to 17.5%; (2) eliminated tax-free allowances for travel and entertainment; (3) increased excise tax on gasoline by 50%; (4) increased immigration fees; (5) increased bus fares by 50%.	(1) Adopted reforms to reduce cost of tertiary education; (2) reduced capital spending by one percentage point of GDP in 2011/12.
Dominica	(1) Reduced personal income tax rates to levels comparable to regional peers; (2) introduced revenue administration reforms to improve efficiency and lower compliance burden; (3) adopted new Customs Act and upgraded customs information technology infrastructure.	(1) Maintained capital spending in 2009 at high posthurricane level of 2008; (2) scaled up social spending in response to the crisis; (3) adopted a medium-term expenditure framework to improve predictability of capital expenditure and its consistency with medium-term fiscal objectives.
Grenada	(1) Introduced VAT of 15% in February 2010. In October 2010, eliminated VAT on textbooks, bread, and medicine for chronic diseases, and hotel service charges and temporary VAT exemptions granted on selected construction materials; (2) reduced excises on manufacturing items and eliminated excises on new motor vehicles.	(1) Adopted a medium-term budget planning framework; (2) introduced temporary subsidy on cooking gas and gasoline (April 2011).
Jamaica	(1) Established cap on the concession of discretionary waivers (November 2010); (2) modified alcohol tax; (3) reduced ad valorem tax on gasoline from 15% to 10%; (4) introduced strategy to improve compliance of largest taxpayers and strengthened auditing of tax arrears.	(1) Reduced nonwage current spending; (2) paid in full wage arrears to public sector workers (2% of GDP), yet did not link to future wage negotiations; (3) reprioritized capital spending of central government and public enterprises.
St. Kitts and Nevis	(1) Introduced VAT and excise tax reform; (2) adopted an unincorporated business tax; (3) streamlined import duty exemptions; (4) strengthened auditing and monitoring of duty-free shops; (5) introduced environmental levy on new vehicles; (6) increased electricity tariffs by about 80%; (7) changed structure of housing and social development levy.	(1) Froze wage bill and (2) prioritized capital expenditure in 2011 budget.
St. Lucia	(1) Adopted new vehicle license fees and property taxes; (2) will introduce VAT in April 2012.	Increased capital expenditure (4 percent of GDP in 2011) for reconstruction purposes.
St. Vincent and the Grenadines	(1) Established a Large Taxpayer Unit to improve tax collections; (2) broadened the base for property taxation and plans to implement market-based property valuation; (3) increased stamp duties and license fees.	Froze public service wages.

Source: National authorities; and IMF staff.

reached an agreement with the Paris Club in September 2010 to reschedule the country's official private debt, which lowered the annual interest bill from roughly 7 percent of GDP to about 4½ percent from 2010 onward. Jamaica reached agreement with domestic private creditors to reduce its debt service burden (interest and amortization) by about 14 percent of GDP one year after the debt exchange. St. Kitts and Nevis is in the process of preparing a comprehensive debt-restructuring deal involving all creditors.

However, greater efforts are necessary to generate fiscal savings to stabilize and reduce public debt over the medium term. The IMF staff's debt sustainability analysis suggests that the average Caribbean country will need to increase its primary balance by at least 4 percentage points of GDP through a combination of revenue-raising and expenditure-cutting measures. This is somewhat smaller than that required for advanced economies, where an 8 percent of GDP adjustment in the cyclically-adjusted primary balance of over the next decade is required to stabilize and reduce debt levels (see the September 2011 *Fiscal Monitor* [IMF, 2011a]).

Achieving meaningful fiscal savings will require tackling long-standing budget rigidities. In many countries, fiscal expenditures are mostly committed to wages, interest payments, and pensions, limiting the flexibility of fiscal adjustment. In fact, the share of nondiscretionary spending (defined as the share of expenditure on wages and salaries and interest payments) is among the highest in the Latin America and the Caribbean. A strategy to gradually reduce public wage and pension spending—not only in central government but also in autonomous agencies—will be necessary to guarantee public debt sustainability, with the added benefit of improving the region's competitiveness.[27]

Closing loopholes and reducing tax incentives should also form part of the consolidation strategy. With weak growth in advanced economies, revenues are unlikely to return to precrisis levels without fundamental change in the tax system. Efforts should be made to review generous tax incentive schemes, the impact of which on investment and growth remains elusive. Instead, emphasis should be on growth-enhancing structural reforms that enable private sector development.

Caribbean countries can draw lessons from successful fiscal consolidation strategies in other regions. In particular, fiscal consolidations based on expenditure reductions have tended to be more effective than tax-based consolidations, and cuts in current spending are more effective than capital expenditure cuts (Alesina and Perotti, 1997). Moreover, these efforts work best when framed as part of a medium-term fiscal framework that extends beyond the current administration (Kumar, Baldacci, and Schaechter, 2009).

[27] The public sector wage bill in the Caribbean exceeds 9½ percent of GDP. Although small economies of scale are in part responsible for the public sector's relatively large size, wage bills are higher than in other small island economies (around 5¼ percent of GDP).

Box 2.1. Latin America: Banking Sector Spillovers from the European Crisis

Using *consolidated* Bank for International Settlements banking statistics through March 2011 and the IMF Research Department's Bank Contagion module,[1] two potential scenarios are constructed to attempt to assess the spillovers on the Latin American banking system of a crisis in Europe and its impact on the deleveraging of foreign banks:[2]

Scenario A. If average market-expected losses on Greek, Irish, Italian, Portuguese and Spanish (GIIPS) exposures were to materialize, international banks' associated losses would trigger a mild deleveraging process mostly affecting European countries. In the region, only Panama and Belize are estimated to experience a significant foreign bank credit reduction.

Scenario B. More adverse market-expected losses on GIIPS exposures would cause large losses in international banks, which, under the no-recapitalization assumption, would force a few European banks to deleverage to restore their capital asset ratios. In this context, Latin America would be among the regions most affected, with significant foreign bank credit reductions in Chile (2½ percent of GDP), Brazil (1½ percent), and Mexico (1¼ percent). It is worth noting that the deleveraging impact depends not only on the presence of European banks in the country, but also on the foreign affiliates' funding structure, the size of international banks' direct cross-border lending, and the size of the financial system. Brazil, despite having a slightly smaller foreign bank presence than some of its peers, has a higher share of direct cross-border lending from European banks, and a few of its European affiliates banks rely less on local deposits.

This analysis has certain data limitations and is based on some simplifying assumptions. Bank losses and deleveraging needs are calculated at the national banking system level of BIS reporting countries, since bank-level data on exposures to GIIPS are not available. In addition, losses in off-balance-sheet exposures are assumed to be an average across sectors, bank recapitalizations as well as other remedial policy actions are not assumed, and the deleveraging process is assumed to be uniformly distributed across all international bank assets (domestic and external) to exclude additional subjective judgments from the analysis.

Figure 1. Estimated Deleveraging by International Banks (percent of GDP)

Note: This box was prepared by Eugenio Cerutti.

[1] The scenario analysis includes several rounds of asset and funding shocks. The first round considers bank losses on assets that deplete banks' capital partially or fully. In the second round, if losses are large enough, an 8 percent Tier 1 capital ratio is assumed to be restored through deleveraging (loans not being rolled over and selling of assets, assuming no recapitalization). In the third round, banks are assumed to reduce their lending to other banks (funding shocks), causing fire sales and further deleveraging. Potential bank failures cause additional losses to other banks on the asset and liability sides. Final convergence is achieved when no further deleveraging needs to occur. For more details on the methodology and an analysis of the data limitations on measuring systemic banking in global banking see Cerutti, Claessens, and McGuire (2011).

[2] Assuming standard loss given default ratios of 75 and 60 percent for the sovereign and private sector, respectively, Scenario A's market-expected losses are built by taking each country's Moody's KMV mean credit default swap (CDS)-implied expected default frequency (EDF) for the private sector (as of mid-June 2011) and the CDS-implied sovereign five-year sector default probabilities (assuming risk neutrality, and as of mid-July 2001). Scenario B's tail market-expected losses are built using the 75th percentile Moody's KMV CDS-implied EDFs and two times the sovereign CDS-implied default probabilities.

Box 2.2. Latin America: Fiscal Adjustment with Social Cohesion

Improved sovereign balance sheets in years leading up to the 2008–09 global crisis allowed most Latin American economies to implement a countercyclical fiscal response. Primary balances deteriorated by an average of 2 percent of GDP between 2008 and 2010, and public debt ratios increased by an average of 4½ percent of GDP during the same period. However, the size of the countercyclical response and quality of the expansion differed significantly across countries. In most financially integrated commodity-exporting economies, the fiscal stimulus tended to be larger (reflecting stronger balance sheets) and favored capital over current expenditures, which are also known to have larger multipliers and tend to be easier to unwind. In the rest of Latin America, the fiscal stimulus was somewhat smaller and concentrated in increases in current spending, adding to already large budget rigidities. The Caribbean had to react procyclically, though its efforts were focused on cutting capital expenditures.

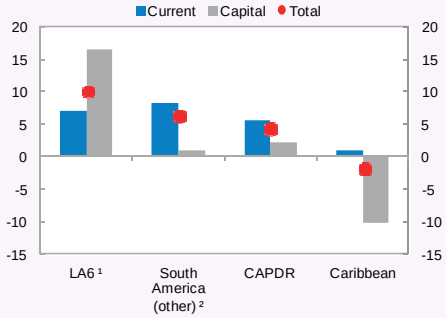
Rebuilding fiscal buffers used during the crisis is particularly critical given the increasingly uncertain global environment. However, consideration needs to be given to the speed and quality of the fiscal adjustment (see IMF, 2011a).

The **speed of fiscal adjustment** in a given country should depend on a combination of factors, including (1) its cyclical position; (2) its level of public debt; (3) the credibility of its fiscal framework and access to market financing; and (4) vulnerability to shocks (commodities, global interest rates, exchange rates). As such, the pace of consolidation may need to be faster in countries with high public debt levels and less credible and more vulnerable fiscal frameworks.

The **composition of fiscal adjustment** needs to be carefully crafted in a manner that does not cripple potential growth, protects the poor, and is consistent with social cohesion.

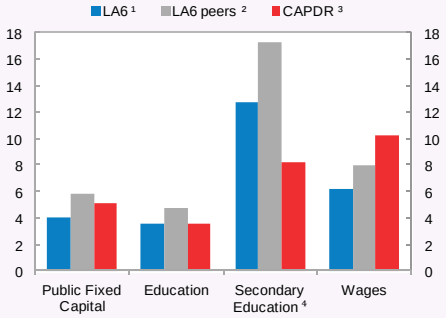
- Fiscal adjustment should avoid sharp cuts in expenditures for public infrastructure and education, which by and large are low relative to those of other countries and regions with similar income per capita. It is worth clarifying that although public investment could add to growth over the medium term, it fuels demand over the near term much like current spending. Therefore, increases in public infrastructure spending need to be offset by higher taxes and/or cuts in current spending to avoid adding to overheating risks in some countries. In Central America, Panama and the Dominican Republic (CAPDR), efforts must continue in limiting the growth in the public sector wage bill.

Latin America and the Caribbean: Primary Expenditure Growth Composition, 2008/10
(Real annual percent change)



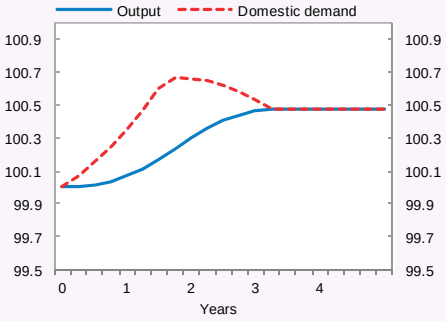
Sources: National authorities; and IMF staff calculations.
[1] Brazil, Chile, Colombia, Mexioo, Peru, and Uruguay.
[2] Argentina, Bolivia, Ecuador, Paraguay, and Venezuela.

Government Expenditures, 2005-10
(Percent of GDP)



Sources: World Bank; IMF, *World Economic Outlook*; and IMF staff calculations.
[1] Includes Brazil, Chile, Colombia, Mexico, Peru, and Uruguay.
[2] Includes Bulgaria, Malaysia, Poland, Romania, South Africa, Thailand, and Turkey.
[3] Includes Costa Rica, El Salvador, Guatemala, Panama, and Dominican Republic.
[4] Expenditures per pupil in percent of GDP per capita.

Simulation: Impact on Output and Domestic Demand of a 1 Percent of GDP Investment Shock



[1] Assumes a Cobb-Douglas production function with labor share = 0.5; initial capital-to-output ratio = 3.1; stock of extra investment = 1 percent of GDP for 3 years; after shock, investment is enough to keep new capital-to-output ratio unchanged.

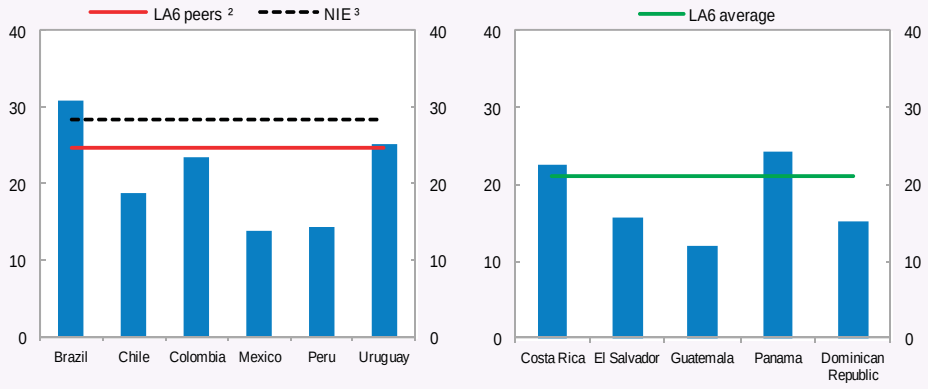
———

Note: This box was prepared by Luis Cubeddu.

Box 2.2. Latin America: Fiscal Adjustment with Social Cohesion (continued)

- In countries with relatively low tax burdens (Chile, Mexico, Peru, much of Central America), efforts are also required in mobilizing revenues to attend to the region's large infrastructure and social needs, including still high levels of income inequality and unmet needs of a rapidly growing middle class. To reduce the social burden of fiscal consolidation, particular consideration should be given to raising direct taxes by bringing corporate tax rates to international standards and reducing generous tax concessions and incentives. In the case of the CAPDR region, staff estimates suggest that tax revenues could be raised by an average of over 4 percentage points of GDP by simply increasing tax rates to international standards, improving tax administration and halving tax incentives. Given the cost of tax incentives, attracting investment could be best achieved through improvements in the business and investment climate (e.g., reducing red tape, strengthening property rights, and lowering barriers to entry).

Non-Commodity Revenues, Average 2005-10 [1]
(Percent of GDP)



Sources: IMF, *World Economic Outlook*; and IMF staff calculations.
[1] Excludes direct contributions from commodities, as well as social contributions and grants.
[2] Includes Bulgaria, Malaysia, Poland, Romania, South Africa, Thailand, and Turkey.
[3] Includes Australia, Czech Republic, Israel, Korea, and New Zealand.

Box 2.3. Rule-Based Fiscal Frameworks for Latin America

Latin American countries adopted rule-based fiscal frameworks over the course of the past decade to put an end to a long history of fiscal profligacy. Aimed at addressing debt sustainability concerns and managing commodity price cycles, they paid little attention to the business cycle. They primarily targeted balanced budgets or deficit ceilings, and were reinforced at times with caps on subnational borrowing and current expenditure growth. Only Chile adopted a structural balance rule which, aside from addressing copper price volatility, included an adjustment for the business cycle (see table).

Though these rules helped to strengthen fiscal sustainability, they benefitted from cyclical and commodity revenue windfalls. However, improvements in public finances hid the fact that fiscal policy was broadly procyclical as real expenditures expanded well above the rate of potential economic growth. The procyclicality derived from the rules' emphasis on balanced budgets or deficit ceilings, but also from extensive revenue earmarking and frequent revisions to the numerical targets. Even in Chile, fiscal policy was slightly procyclical, mainly as a result of revisions to long-term copper prices and the numerical targets.

The "first generation" of rules was generally ill equipped to respond to the challenges posed either by the global crisis or by the current recovery phase. The rules did not provide any guidance on:

- *How to implement a discretionary response to the global crisis*, and in the absence of escape clauses, most rules were modified or suspended, on some occasions following ad hoc and improvised procedures.
- *How to develop a medium-term exit strategy to unwind the stimuli implemented during the crisis*, which, together with the lack of specific mechanisms to set aside current cyclical and commodity-related revenues gains, is making fiscal withdrawal very difficult to implement in the present context of closing output gaps.

To strike the right balance between fiscal sustainability and cyclical management, a "second generation" of fiscal rules may be necessary:

- To ensure sustainability, the rules should be embedded into a medium-term fiscal framework, which, depending on countries' data availability, could include (1) expenditure and revenue envelopes (e.g., floors on social spending and tax collections), (2) long-term projections for commodity revenues and the government's net financial assets, and (3) routine stress tests, sensitivity analysis, and assessments of debt sustainability and contingent liabilities.
- To reduce procyclicality, the rules should target the *structural primary balance*, adjusted for the business cycle and commodity prices (Peru recently committed to this). Given the difficulties in obtaining robust estimates of the output gap and long-term commodity prices, the rules could be complemented with ceilings on the noncommodity primary balance and the rate of growth of real expenditure.
- To discourage circumventions, the rules should envisage an institutional coverage as comprehensive as possible and include stringent transparency and accountability mechanisms. A nonpartisan fiscal watchdog could be established in charge of providing key parameters and assessing compliance with the rules.
- To provide flexibility, the rules should include transparent escape clauses and a strategy for returning to the medium-term objective.

Success will depend greatly on solid institutional arrangements. In some countries that currently have such rules, these institutional arrangements are even more important than the stand-alone numerical rules, with a few countries (e.g., New Zealand, Australia) not even specifying the numerical targets of their rules. The institutional arrangements should seek to (1) foster a strong consensus and political commitment regarding the rule's objectives, (2) maximize the reputational costs of breaching commitments without overrestricting discretion, and (3) guide the public debate on fiscal policy, rather than put fiscal policy on automatic pilot.

_____

Note: This box was prepared by Teresa Daban-Sanchez.

Fiscal Rules in Selected Latin American Countries

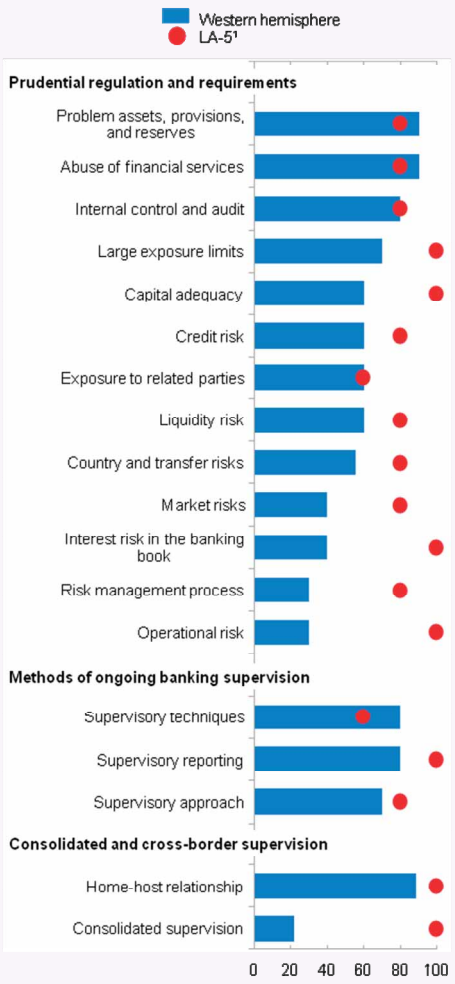
Country	Type of rules	Numerical targets (current)	Statutory base	Time horizon and coverage	Escape clauses	Implementation issues
Argentina	Rules on current expenditure growth (constant or in line with nominal GDP), balanced budget, and debt.	Current expenditure growth in line with GDP.	Fiscal Responsibility Law (1999, revised in 2001 and 2004).	Annual; applicable to each individual entity of the general and central governments.	No.	Congress has on several occasions granted "emergency superpowers" to the President, leading to suspension of the fiscal rules.
Brazil	Rules on expenditures, (government payroll in relation to revenues), primary balance, and debt.	Primary surplus of 3 percent of GDP. Wage bill is limited to 50 percent of net current revenue for the federal government, and 60 percent for states and municipalities. There exist specific wage bill limits for the executive, legislative, judiciary and other offices.	Fiscal Responsibility Law (2000).	Fixed annual ceilings for debt and spending, and three-year rolling targets for the primary balance; general government.	Yes, escape clauses exist for real GDP growth below 1 percent over four quarters or natural disasters, but can only be invoked with congressional approval.	Ample room for Congress to change targets proposed by the government. Implementation is hampered by extensive revenue earmarking. In case of noncompliance, corrective measures need to be taken and can result in sanctions.
Chile	Rule on structural balance, which results from adjusting according to the economic cycle and copper prices. Two funds (stabilization and saving).	Commitment to achieve a structural deficit of 1 percent of GDP in 2014 (down from current 2 percent of GDP).	Political commitment (2000) and Fiscal Responsibility Law (2006).	Annual; work in progress for the adoption of a medium-term fiscal framework; central government.	No; implementation of the rule aims at achieving a specific target for the structural balance. The current administration has pledged to reduce the structural deficit from 3 percent of GDP in 2009 (reflecting the shocks and fiscal stimulus derived from the crisis) to 1 percent of GDP by 2014.	External bodies provide independent estimates of output gap and long-term copper price. Upward revisions of the long-term copper price have imparted an unintended procyclicality to government expenditures. The Commission for the Reform of the Fiscal Rule has proposed strengthening the rule's flexibility and transparency.
Colombia	Rules on subnational borrowing, current expenditure growth and structural balance for the central government.	Newly approved rule sets path for fiscal consolidation which lowers the central government structural deficit to 2.3 percent of GDP by 2014, and sets a deficit ceiling of 1 percent of GDP effective in 2022.	Laws enacted in 1997, 2000, and 2011.	Annual targets framed by a medium-term fiscal framework; structural balance rule covers only the central government.	Yes, an increase in the structural balance to accommodate 25 percent of the output gap, to be reversed in two years.	The new law on the structural balance has not been implemented; it leaves significant detail to future regulations (e.g. adjustment for commodity cycle); creates a saving and stabilization fund; and requires that an independent expert panel be set up to provide key inputs.
Costa Rica	Expenditure rule.	Golden rule.	Law.	Annual, although recent efforts to move toward multiannual budgeting; central government.	Annual.	The government has requested that Congress suspend the fiscal rule on several occasions.
ECCU countries	Rule on debt-to-GDP ratio.	Debt ratio at 60 percent of GDP by 2020.	International treaty.	Annual; general government.	No.	All ECCU countries rank within the 15 most indebted emerging markets and developing countries. Three have a public debt-to-GDP ratio above 100 percent. All countries currently exceed the 60-percent-of-GDP target.
Mexico	Rules on balanced budget and debt.	Commitment to achieve a balanced budget by 2012, down from the current deficit of 0.5 percent of GDP.	Fiscal Responsibility Law (2006).	Central government, but excludes important off-budget operations.	Yes, deviations from the rule are allowed under exceptional circumstances, but they are not defined.	The oil price rule place a large weight on short-term oil futures, which results in procyclicality. Capital expenditures for the public oil company (Pemex) were taken out of the rule, and since 2009 deficits have been allowed under the premise of exceptional circumstances. In 2010–11, the cap on accumulated revenues at the oil fund was removed on a temporary basis.
Panama	Rules on debt and deficit ceiling.	Deficit ceiling of 1 percent of GDP; debt-to-GDP ratio below 40 percent must be maintained once achieved.	Fiscal Responsibility Law (2008).	Annual; general government.	Yes; in the case of recession or slowdown of the global and Panama's economies and natural disasters; provides for a gradual adjustment path over four years.	Frequent use of escape clauses, which has happened every year since the inception of the rule, may reflect negatively on the credibility of the rule and the government's commitment to fiscal consolidation.
Peru	Rules based on deficit and expenditures growth ceilings.	Deficit ceiling of 1 percent of GDP (increased temporarily to 2 percent of GDP during 2009-10).	Fiscal Responsibility Law (2000).	Annual, although framed by a medium-term fiscal framework; nonfinancial public sector.	Yes; temporal relaxation of the rules' targets with congressional approval.	The deficit ceiling becomes nonbinding when the fiscal accounts reach a surplus; and the rule does not ensure full savings of revenue windfalls. The expenditure growth ceilings have been relaxed in certain years, and some expenditures are excluded.
Venezuela	Rules on the current balance, expenditure growth, and debt.	Implementation of the associated law has been postponed.	Organic Law on Public Finances (1999).	Annual targets, but framed in the medium-term fiscal framework; nonfinancial public sector.	No.	Expenditures have continued to be highly correlated with oil prices. Budgetary institutions have deteriorated, in part as a result of proliferation of extrabudgetary operations.

Sources: IMF database on fiscal rules; IMF staff reports; and authorities' reports.

Box 2.4. Challenges for Financial Regulation and Supervision in Latin America

Although Latin America's banking system weathered the global financial crisis relatively well, there is ample room for improving its financial and regulatory frameworks. Authorities need to comply effectively with international best practices and adopt the new Basel III regulatory and oversight reforms such as (1) improving the capitalization and funding structures of banks; (2) reducing procyclicality of the financial system; (3) widening the perimeter of regulation; (4) strengthening the assessments of exposure and interconnectedness among financial institutions; and (5) strengthening the effectiveness of consolidated supervision. However, priorities vary across the region (see figure and FSB, IMF, and WB, 2011).

Western Hemisphere: Compliance with Selected Basel Core Principles for Effective Banking Supervision
(Percentage, 100 indicates full compliance)



Source: IMF staff calculations based on IMF Financial Sector Standards and Codes database.
¹ LA-5 Includes Brazil, Chile, Colombia, Mexico, and Peru. For a detailed explanation of Basel Core Principles see BCBS (2006) . Does not include Financial Sector Assessment Program information for 2011:Q2 or 2011:Q3.

In *the financially integrated economies of Latin America* (Brazil, Chile, Colombia, Mexico, Peru, Uruguay) regulation is close to international best practices, yet qualitative aspects of supervision need strengthening. Banking systems display relatively good capital and funding structures—large banks exceed the new capital standards (Basel III), the new minimum leverage ratios are nonbinding (Terrier and others, 2011), and failure to comply with the new liquidity requirements is limited to some small banks. In this context, priority should be given to (1) assessing and improving the quality of capital; (2) enhancing the supervisors' capacity to perform a more thorough assessment of banks' risk management practices (in some cases this will require strengthening the legal protection of supervisors); (3) tackling information gaps, especially in areas such as property price indexes, which are fundamental for assessing misalignments (see the April 2011*Regional Economic Outlook* and Cubeddu and Tovar, 2011); and (4) establishing consolidated credit registries for information sharing across credit providers (e.g., banks and department stores) and a proper assessment of credit risk. In addition, a regulatory architecture for the monitoring and management of systemic risk needs to be put in place. In this respect, progress is underway: Brazil, Chile, Colombia, Mexico, Peru, and Uruguay have either established or are working towards establishing a financial stability committee and defining its governance structure. Of course, it remains to be seen how these new institutions will operate.

The *Central America, Panama, and the Dominican Republic* region lags relative to the financially integrated Latin American economies (Delgado and Meza, forthcoming). Despite recent progress, supervisory weaknesses make the quality of financial soundness indicators and compliance ratios questionable. The priority here is to strengthen legal and regulatory frameworks and bring supervisory standards closer to international best practices. Particular efforts are needed to widen the perimeter of regulation, fully enable cross-border consolidated supervision, and effectively implement risk-based supervision. These should be complemented with more proactive and intrusive supervision and a strengthening of the legal protection of supervisory authorities. Finally, efforts will be required in calibrating and expanding the prudential toolbox to manage procyclicality (Terrier and others, 2011).

Note: This box was prepared by Camilo E. Tovar.
[1]Compliance is rated for the Core Principles for Effective Banking Supervision, the International Organization of Securities Commissions Objectives and Principles of Securities Regulation, and the International Association of Insurance Supervisors Core Principles.

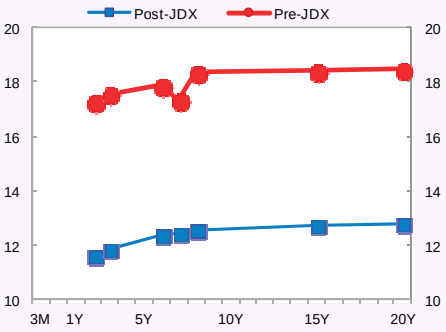
Box 2.5. Recent Sovereign Debt Restructurings in Latin America and the Caribbean

Since 2000, nine Latin American and Caribbean economies have resorted to sovereign debt restructurings to deal with either an unsustainable fiscal position or acute liquidity pressures endangering solvency. Three recent cases (the Dominican Republic, Jamaica, and Uruguay) are analyzed in this box, differing in scope and approach. In the case of Uruguay, the debt exchange involved foreign-currency-denominated bonds held by both nonresidents and domestic financial institutions, with the latter supported by a government-financed fund (the Fund for the Stability of the Banking Sector). In the Dominican Republic, the debt restructuring was targeted at private and official external creditors and involved agreements with the Paris and London Clubs. The Jamaican debt exchange (JDX) targeted only domestic securities and given the high exposure of the financial sector to sovereign debt, it required (like that in Uruguay) the establishment of a Financial Sector Support Fund (FSSF) to assist banks with liquidity or capital needs potentially arising from the debt exchange. Despite differences, in all three cases the restructurings were preemptive in nature and did not entail a principal haircut.

		Type		Debt involved (US$ billions)	As percent of GDP	Collective action clauses / exit consents	Net present value reduction	Actual participation
Uruguay	2003	Preemptive and maturity extension	External	5.5	46% (50% of total debt)	Both used	13%	93%
Dominican Republic	2005	Preemptive and maturity extension	External	1.1	3.3% (14% of total debt)	Yes	1.4%	97%
Jamaica	2010	Preemptive and maturity extension	Domestic	7.8	65% (47% of total debt)	No	15-20%	99.2%

Impact. All three restructurings involved significant short-term debt service reductions, which helped the countries to rebuild international reserves in the context of a strong fiscal adjustment program, with an average committed increase in the primary balance of more than 3 percent of GDP. Moreover, the countries' sovereign ratings were upgraded immediately after the exchange, and all three regained market access less than a year later. In the case of Jamaica, interest payments were reduced by 3½ percent of GDP, and the average maturity was extended by close to four years. Moreover, debt service relief was accompanied by reductions in the share of variable rate and U.S.-dollar-denominated securities, resulting in reduced interest and exchange rate risks. Financial institutions did not request access to the FSSF given that key sources of risk to their capital positions did not materialize.

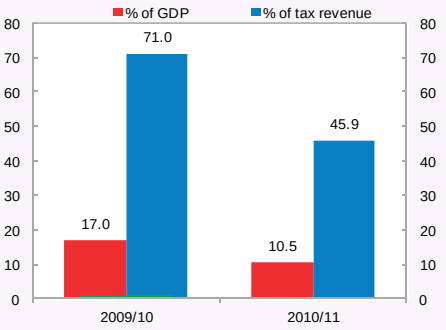
Jamaica: Government Yield Curve [1]
(Local currency)



[1] JDX stands for Jamaican Debt Exchange. Horizontal axis displays maturity in months and years.

Lessons. A transparent, preemptive and market-friendly approach with extensive coordination with stakeholders emerges as the key element in the aforementioned cases. The restructurings were complemented by a credible fiscal consolidation plan and growth-enhancing structural reforms. In the cases of Uruguay and Jamaica, the restructurings were also designed to protect the stability of financial systems heavily exposed to sovereign debt, with significant resources committed to the government-supported stability fund to boost confidence.[1]

Jamaica: Interest Payments



Note: This box was prepared by Mariusz Jarmuzek and Cesar Serra.

[1] The combination of fiscal resources to the stability funds plus financing under IMF-supported programs averaged more than 13 percent of GDP in both Jamaica and Uruguay.