



# BRAZIL

## STAFF REPORT FOR THE 2013 ARTICLE IV CONSULTATION

October 2013

Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. In the context of the 2013 Article IV Consultation with Brazil, the following documents have been released and are included in this package:

- The **Staff Report** for the 2013 Article IV Consultation, prepared by a staff team of the IMF for the Executive Board's consideration on July 26, 2013, following discussions that ended on May 24, 2013, with the officials of Brazil on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on July 2, 2013.
- An **Informational Annex** prepared by the IMF.
- A **Staff Statement** of July 26, 2013 updating information on recent developments.
- A **Press Release** summarizing the views of the Executive Board as expressed during its July 26, 2013 consideration of the staff report that concluded the Article IV Consultation with Brazil.
- A **Statement by the Executive Director** for Brazil.

The document(s) listed below have been or will be separately released.

Selected Issues Paper

The publication policy for staff reports and other documents allows for the deletion of market-sensitive information.

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**International Monetary Fund**  
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July 2, 2013

### KEY ISSUES

**Context.** Brazil is recovering gradually from the growth slowdown that started in mid-2011, but the recovery remains uneven and inflation elevated. Output is estimated at potential with supply-side constraints, linked to tight labor market conditions and protracted weak investment since 2011, limiting near term growth. A monetary tightening cycle has started, following a period of easing. In staff's view, excessive fine tuning of fiscal policy (including through public banks) has weakened the credibility of Brazil's long-standing fiscal framework, while broader policy uncertainty has weighed on investment. Staff's estimates of potential growth have been revised down and the challenges posed by eroding competitiveness and economic imbalances remain—notably low saving and investment. The Article IV consultation mission took place during May 13–24.

**Outlook and Risks.** The recovery is expected to continue during 2013–14, supported by a pick-up in investment and resilient consumption. The near-term outlook envisages continued monetary tightening, broadly unchanged fiscal policy, and sustained implementation of infrastructure investment. Domestic risks are to the downside, linked to more sluggish investment and intensified inflationary pressures, worsening the growth-inflation tradeoff. Lack of timely policy tightening would exacerbate existing imbalances and weaken confidence in the fiscal framework. External risks are associated with global financial conditions and commodity prices. Over the medium term, a substantial scaling up of investment will be necessary to boost potential growth.

**Policies.** With supply-side constraints restraining short-term growth, a tightening policy stance is needed to rebalance demand, including a steady fiscal consolidation, winding down policy lending, and continued monetary tightening. Strengthening Brazil's long-standing fiscal framework to rebuild fiscal buffers and bolster confidence would entail adherence to a primary balance that puts gross debt firmly on a downward path; maintaining sub-national fiscal discipline; easing rigidities to increase public saving; and more fully recognizing contingent fiscal risks. The flexible exchange rate remains the main shock absorber for global turbulence, while intervention should aim to limit disorderly market conditions. The renewed focus on supply-side policies is welcome but in order to increase potential growth, decisive and comprehensive efforts are needed to enhance productivity and competitiveness, increase investment, and mobilize domestic saving.

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## RECENT DEVELOPMENTS

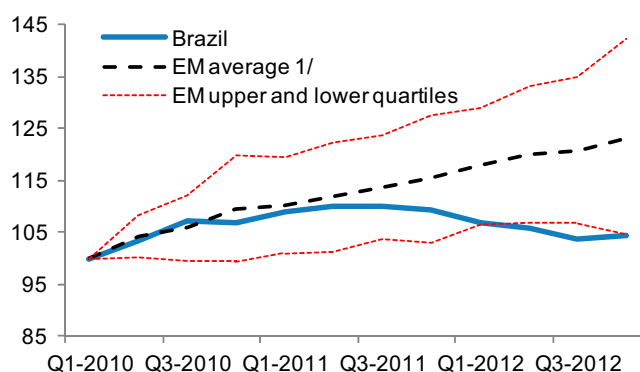
- 1. Brazil's economy is recovering gradually from the slowdown that began in mid-2011.** Despite a substantial easing in monetary and fiscal policies since 2011, growth has been weaker and more uneven than was envisaged after bottoming in the third quarter of 2011. The early stages of the recovery were marked by resilient consumption and weak investment amid global uncertainty and diminished business confidence, and real GDP growth stayed below 1 percent in 2012 (Box 1). Notwithstanding a recent pick-up in investment, the economy is estimated to be operating close to potential and remains subject to supply-side constraints that hold back the near-term pace of recovery below its medium-term potential growth rate and exacerbate inflationary pressures.
- 2. Growth has been supported mainly by consumption, with some rebalancing towards investment more recently.** Since 2011, Brazil's dependence on consumption-based growth has intensified as investment and net exports fell. The initial decline in investment in 2011 was associated with a deteriorating external backdrop and a steady loss of competitiveness, but since early 2012 other domestic factors, notably increased uncertainty about policies, seem to have become more important. More recently, investment has begun to recover as business confidence has stabilized and capacity utilization has reached cyclical highs. Private consumption growth slowed in the first quarter of 2013, but fundamental support for household spending remains in place. These include very low unemployment (notwithstanding a moderation in net job creation more recently) and broad real wage gains (owing in part to a large rise in the minimum wage during 2012).
- 3. Supply-side constraints have restrained near-term growth and exacerbated inflationary pressures.** Inflation has remained above the 4½ percent target mid-point for almost three years, notwithstanding recent large reductions in household energy tariffs and tax cuts for food staples, which together are estimated to have helped shave off about ¾ percentage point in the headline index. Core inflation has also picked up and is near the ceiling of the tolerance band, while non-tradables inflation—reflecting robust consumption demand—has accelerated to almost 10 percent. Staff estimates that the unemployment rate is below the NAIRU and this has contributed to demand-pull and cost-push inflationary pressures (See Annex II). Medium-term inflation expectations have deteriorated in tandem, with surveys now anticipating inflation above the target mid-point over a 3-year horizon.
- 4. The external current account deficit has widened.** The deficit rose to 2.4 percent of GDP, up from 2 percent the previous year and compared to a current account norm estimated at about -1 to -2 percent of GDP. Worsening terms of trade accounted for 0.1 percent of GDP of the increase in the deficit, mainly due to lower prices of commodity exports. Trade flows with Argentina have stabilized and begun to pick up following a large contraction during the first half of 2012. Import growth was close to zero in 2012 but has begun to pick up more recently as capital goods imports rise in tandem with domestic investment. Export volumes declined across the board, including for

### Box 1. What Explains Weak Investment in Brazil?

**Investment in Brazil has been remarkably weak since mid-2011.** Gross fixed capital formation stood about 5 percent lower than its peak 2011 level at the end of 2012 and, although it has since picked up, the recovery remains uncertain. Investment growth slowed across emerging market economies following the post-crisis recovery, but on average has continued to expand. In contrast, starting in 2011 Brazil's investment stalled then began to contract. Manufacturing capacity utilization near cyclical highs despite weak output (Figure 1, middle right chart), suggests that industry has been a major contributor to this investment decline. What explains this poor investment performance?

#### Investment in Emerging Markets, Q1-2010 to Q4-2012

(Rebased index of gross fixed investment in constant prices)



Sources: Haver Analytics; and Fund staff calculations.

1/ EM sample includes Chile, Colombia, Mexico, Peru, Indonesia, India, Malaysia, Philippines, Thailand, Hungary, Poland, Russia, Turkey, and South Africa.

**Commodity prices, growth expectations, and measures of uncertainty, both domestic and global, have been the most important drivers of quarterly variation in overall investment growth in recent years.** Variance decompositions of investment growth identify implied U.S. equity volatility (VIX) and commodity prices as the two key spillover channels to Brazil. Domestically, expectations for output growth and investor uncertainty appear to play a key role. In particular, regressions indicate that the dispersion of market forecasts for output growth over the next 12 months was highly significant but other domestic variables including the real interest rate, the real exchange rate, and business confidence were not significant in this model (Text Table).

#### Coefficients from Investment Regressions, Q4-2002 to Q4-2012<sup>1,2</sup>

Dependent variable	Log change in commodity prices	Change in VIX	Change in level of GDP forecasts 3/	Change in dispersion in GDP forecasts 3/
GFCF	0.15 (0.05)	-0.11 (0.11)	2.71 (1.11)	-13.06 (7.65)
R-squared	0.672			
Out-of-sample RMSE	3.00			

Source: Fund staff calculations.

1/ Estimated using two-stage least squares with lags of domestic variables and real interest rates as instruments. Standard errors in parentheses.

2/ A comparison of out-of-sample root mean square errors and, as a robustness check, in-sample Wald tests were used to decide on the final specification.

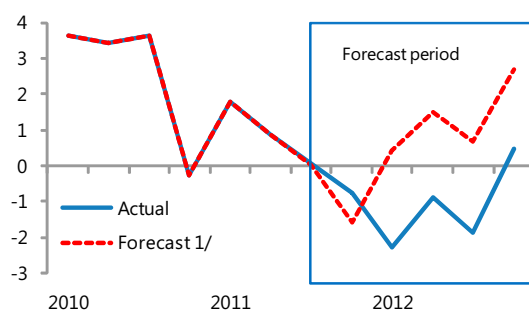
3/ The change in forecasts calculated from the 12-month ahead median GDP forecast from the weekly BCB Focus survey. The change in dispersion is calculated as the change in the standard deviation of the 12-month ahead forecast.

### Box 1. What Explains Weak Investment in Brazil? (concluded)

**While global factors explained some part of the initial period of weak investment, domestic factors have been more important since the start of 2012.** A simple model does a good job of explaining investment during the initial weakness between mid-2011 and the first quarter of 2012. Falling commodity prices and tighter global financial conditions mainly contributed to the sharper-than-expected decline in investment in 2011. However, since the start of 2012, the improving global environment has failed to ignite an investment pick-up, as was predicted by the model and observed in other emerging markets. Instead, deteriorating domestic factors, notably persistent downgrades to growth and greater uncertainty about the outlook, appear to have weighed on investment.

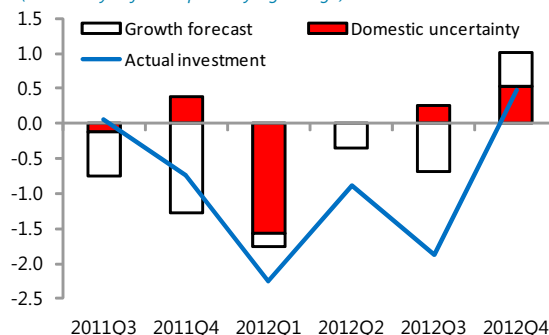
#### Investment: Actual and Model Forecasts, 2011-12

(Seasonally adjusted quarterly log change)



#### Investment: Contribution of Domestic Factors 2/

(Seasonally adjusted quarterly log change)



Source: Fund staff calculations.

1/ Out-of-sample forecast from the model estimated from Q1-2002 through Q2-2011 and using actual values of explanatory variables.

2/ Contribution based on the coefficients from the model estimated over the full Q1-2002 to Q4-2012 sample period and actual explanatory variable values.

**The puzzle of weak investment has not been fully solved, however.** While the preceding analysis suggests that domestic factors have become more important it does not provide a structural explanation and does not provide much guidance on whether the decline is permanent or transitory. Some potential underlying factors may be unwound quickly, including the impact of domestic policy uncertainty on the investment climate. Other factors may take more time, notably the steady erosion of competitiveness (only partially reversed in 2012) and the apparent decline in productivity.

primary and manufactured products. In the first quarter of 2013, the 12-month current account deficit has widened further reflecting weaker external demand, temporary disruptions in oil production, and larger income payment outflows.

**5. The real exchange rate depreciated in the last 12 months, most recently as part of a broad realignment across emerging markets, but rising unit labor costs have limited the gains in competitiveness.** Brazil's real effective exchange rate has depreciated by 9 percent during the 12 months through April 2013. At the same time, unit labor costs in U.S. dollars have remained broadly unchanged at almost 45 percent above pre-Lehman levels, as the effects of the weaker currency have been offset by rapid real wage growth and stagnant labor productivity. A range of metrics and methodologies suggests that the real exchange rate, at end-April, was overvalued by about 10–15 percent based on current policies (See Annex I). Since early May, the nominal effective exchange has depreciated by about 8–10 percent, somewhat higher than other major emerging markets with flexible exchange rates but consistent with previous episodes of sudden increase in global risk aversion.

**6. Net capital inflows, particularly portfolio flows, subsided through 2012, a tendency that has been exacerbated by the recent volatility in global financial markets.** Net portfolio inflows have averaged about US\$1 billion per month since the first quarter of 2012, about US\$3 billion less per month than monthly flows recorded during 2010–11. The weaker growth outlook for Brazil, lower interest rates, and the series of capital flow measures (CFMs) have all contributed to lower net inflows. More recently, global financial turbulence and higher global risk aversion have further dampened net portfolio inflows to Brazil, notwithstanding the increase in interest rates and the easing of CFMs. Foreign purchases of Brazilian equities have also been subdued, probably reflecting the deterioration in growth prospects and profitability. Direct investment inflows, however, have remained strong (almost 3 percent of GDP in 2012), with FDI increasingly directed to the domestic services sector (Box 2). International reserves have remained broadly stable following a halt in reserves accumulation since mid-2012; as of end-May 2013, international reserves stood at US\$375 billion, compared to US\$352 billion at end-2011.

**7. Financial conditions have tightened but credit growth remains relatively strong, driven by public bank lending.** Notwithstanding the recent increase in domestic interest rates across the yield curve, rates remain low compared to historical levels and market conditions have remained orderly. Equity prices have declined and corporate debt and equity issuance has slowed in line with other major emerging markets. Credit growth has slowed from its peak in 2010 but has remained relatively strong, with lending by public banks outpacing that of private banks (growth rates of 25 and 10 percent respectively, over the past 12 months). Private banks' NPLs have declined since mid-2012, when they reached 5.4 percent, while public banks' NPL have remained stable at about 2 percent. Mortgage lending has grown strongly, at annual rates close to 40 percent, but remains a relatively small share of total credit. Prices of premium property in some large cities, though moderating, have continued to increase. In turn, the authorities have made progress in implementing key recommendations of the 2012 FSAP Update, including issuance of regulations on positive-credit bureau and change in board composition of the deposit insurance fund (Box 3).



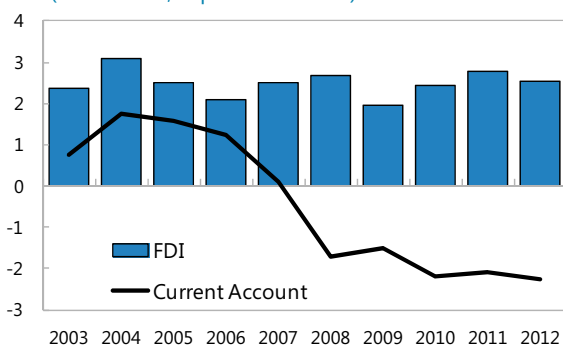
### Box 2. FDI in Brazil

**Brazil has received significant foreign direct investment inflows over the last decade. Annual FDI flows averaged 2½ percent of GDP between 2003 and 2012, helping to finance the current account deficit.** The sectoral composition of FDI has remained relatively broad, with shares of investment in mining and agriculture increasing in the mid-2000s, amid the commodity price boom, and inflows into services rising later on. Investment in the manufacturing sector has been broadly stable at about 1 percent of GDP, primarily into metallurgy, machinery, pharmaceuticals, and chemical products.

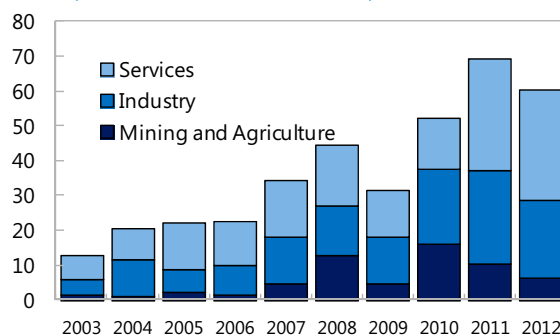
**The stock of foreign direct investment liabilities account for about one half of Brazil’s gross foreign liabilities.** FDI gross liabilities have increased to 25 percent of GDP in 2012, comprising primarily of equities, while intercompany loans account for about 1/5. Based on ultimate country of origin, the U.S. and European economies account for ¾ of the stock of total FDI liabilities.

**FDI is expected to play an important role in financing Brazil’s infrastructure and energy over the medium term.** Foreign investment is expected to contribute to development of infrastructure concessions (with estimated investment needs up to \$150 billion over the next 5 years). In addition, there will be an increase in inflows into the oil sector related to recent and forthcoming auctions of oil fields.<sup>1</sup>

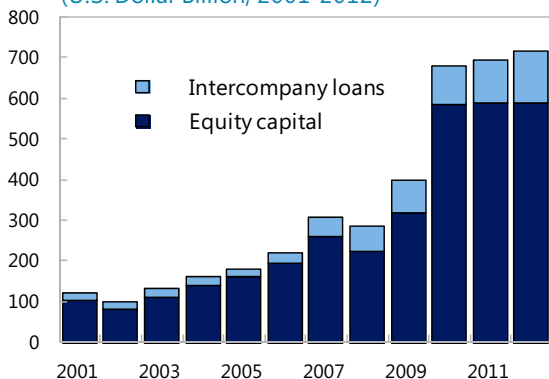
**FDI Inflows and Current Account Balance**  
(2003-2012, in percent of GDP)



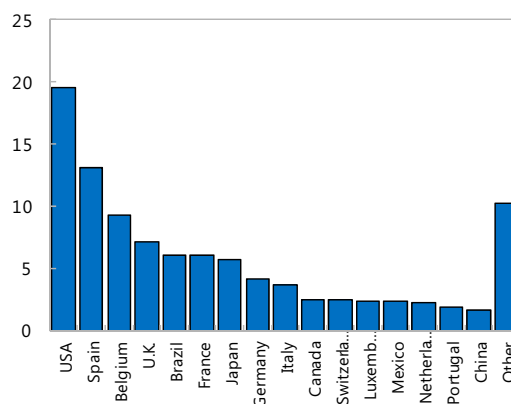
**Composition of Inward FDI Flows**  
(U.S. Dollar Billion, 2003-2012) 2/



**Gross FDI Liabilities**  
(U.S. Dollar Billion, 2001-2012)



**Share of FDI Liabilities by Investor**  
(In percent of Total, 2011) 2/



<sup>1</sup> A new round of oil concessions was carried out in May 2013, generating \$1.4 billion in revenues. New investment in development of the auctioned oil fields over the next 5 years is expected to reach \$4 billion.

<sup>2</sup> Excluding intercompany loans.

### Box 3. Brazil: Status of Implementation of 2012 FSAP Key Recommendations<sup>1</sup>

The latest FSAP, undertaken in March 2012 and discussed by the Board in July 2012, found that Brazilian financial system was stable, with low levels of systemic risk and sizable buffers. Flexible exchange rate, strong microprudential policy frameworks, high capital adequacy ratio, and ample liquidity asset, provided significant risk mitigants. However, the FSAP stressed that some key challenges remain:

- **Enhance macroprudential policy framework to effectively monitor and manage systemic risks**, by issuing regulation on positive credit bureaus, publishing a better house price index, and creating a multi-partite, high level committee with an explicit macroprudential mandate.
- **Improve financial safety nets and crisis management**, by strengthening the procedures for use of the deposit insurance fund, enhancing the central bank's emergency liquidity assistance, removing impediments to bank resolution tools, and extending legal protection for microprudential agencies and employees.
- **Undertake financial sector reforms to move the system away from the low duration and high interest rate environment**, by providing incentives for longer duration and infrastructure investments, and re-focusing *Banco Nacional de Desenvolvimento Econômico e Social* (BNDES, Brazilian Development Bank) to support private long-term finance.
- **Strengthen insurance and pension oversight**, in particular, by ensuring adequate operational autonomy and legal protection for supervisors.
- **Establish a dedicated consumer financial protection unit.**

The authorities have made significant progress in implementing the recommendations, including: issuing regulation on positive credit bureau, publishing a house price index, improving financial safety nets, strengthening the resolution framework, extending tax incentives to infrastructure *Fundos de Investimentos em Direitos Creditórios* (FIDCs, Receivable Investment Funds), facilitating long-term financing by BNDES, and appointing a deputy governor and establishing a dedicated consumer financial protection department in the *Banco Central do Brasil* (BCB, Central Bank of Brazil). Regarding a recommendation to create a multi-partite, high-level financial stability committee, the authorities mention that there is no one-size-fits-all model and the current system with the *Conselho Monetário Nacional* (CMN, National Monetary Council) and the *Comitê de Regulação e Fiscalização dos Mercados Financeiros, de Capitais, de Seguros, de Previdência e Capitalização* (COREMEC, Committee for the Regulation and Supervision of the Financial, Securities, Insurance, and Complementary Pension) has been fully functional to deal with systemic risk monitoring and crisis management. Staff noted that considering the recommendations of the FSAP Update can further benefit the effectiveness of the macroprudential policy frameworks.

#### Brazil: Status of Implementation of 2012 FSAP Key Recommendations

Key recommendations	Status of Implementation
1. Issue regulation on credit bureau to ensure broad availability of reliable positive information on borrowers.	Implemented.
2. Ensure compilation and publishing of a housing price index that is based on purchases, with broad geographic coverage.	Implemented.
3. Create a multi-partite, high-level committee, comprising all financial safety net providers, with an explicit mandate for systemic risk monitoring and crisis coordination.	Not implemented.
4. Strengthen the procedures and systems of the BCB to deliver Emergency Liquidity Assistance (ELA).	In process. There is an ongoing project in the BCB to submit a proposal to improve ELA.

<sup>1</sup> Prepared by Heedon Kang (MCM).

**Box 3. Brazil: Status of Implementation of 2012 FSAP Key Recommendations (concluded)**

5. Revise the composition of the board of the <i>Fundo Garantidor de Créditos</i> (FGC, Credit Guarantee Fund); use the least-cost principle in deciding FGC support for resolution, with OBA provided only when there is a grave systemic threat (capped at 50% of the FGC's cash resources); and secure adequate funding for the FGC in the event of a systemic crisis.	Partly implemented. A new bill of law is proposed.
6. Remove legislative impediments and strengthen the purchase and assumption and bridge bank statutes.	In process. A new bill for Brazilian bank resolution framework is proposed.
7. Extend legal protection to all financial sector supervisory agencies, and elevate the threshold for actions against employees of these agencies, BCB-appointed directors, interveners, or liquidators to gross negligence.	In process. A new bill of law is proposed.
8. Extend tax incentives on infrastructure bonds to infrastructure FIDCs.	In progress. The authorities note that the certificates of <i>Certificados de Recebíveis Imobiliários</i> (CRI, real estate receivables) and quotas of receivables investment funds (FIDC) are on the verge to be included in the list of instruments with tax incentives.
9. Issue stricter market-making rules, e.g., apply a narrow set of the same benchmarks to all market makers, linked to improved incentives, e.g., access to Ministry of Finance (MOF)'s securities lending facilities.	In progress. The authorities continue to improve the primary dealer system in Brazil.
10. Shift BNDES operations towards co-financing with institutional investors of a broader set of companies and projects to provide market access and facilitate long-term financing.	Implemented but further progress expected.
11. Provide <i>Superintendência de Seguros Privados</i> (SUSEP, Superintendency of Private Insurance) and <i>Superintendência de Previdência Complementar</i> (PREVIC, Superintendency of Complementary Pensions) with the same legal status as <i>Comissão de Valores Mobiliários</i> (CVM, Securities and Exchange Commission) (e.g., fixed-term appointments and clear mandates for board members).	Not implemented.
12. Issue a secondary regulation on brokers' self-regulation, which should include a mandatory affiliation to the self-regulating entity, and closely supervise its implementation.	Not implemented.
13. Implement the required regulation for consolidated supervision, including the introduction of ERM and capital requirements at group level.	Not implemented.
14. Establish a dedicated consumer financial protection unit.	Implemented. A new deputy governor is appointed to enhance the BCB's role in consumer protection and a dedicated department is established.

**8. After a prolonged period of policy easing, the authorities have started to focus on alleviating supply-side constraints and containing inflation.** The initial policy response to the slowdown of 2011 consisted of relaxing the policy stance to boost domestic demand, but supply constraints and weak investor confidence (in part related to private sector's perceptions of high policy uncertainty) rendered this approach ineffective. The authorities have more recently switched their focus to measures aimed at alleviating bottlenecks and bolstering the supply response (including through infrastructure concessions), and have started to tighten monetary conditions to contain inflation.

- *Monetary and exchange rate policy.* In April 2013, the central bank started a monetary tightening cycle; the policy rate has been raised by a total 75 basis points, to 8 percent. This followed a cumulative cut of 525 basis points in the policy rate during 2011–12 (that brought the rate to a decades-low of 7¼ percent). As a result, the real ex-ante policy rate, at about 2½ percent, remains below the neutral rate, and the monetary policy stance remains loose. Furthermore, the effectiveness of monetary policy appears to have been reduced during the easing cycle due to a temporarily weakened credit channel.<sup>1</sup> The market response to recent rate hikes and stepped-up central bank forward guidance has been positive and orderly, with medium- and long-term real interest rates remaining below the levels reached in past tightening cycles. Inflation expectations, in turn, show early signs of an inflexion point. In recent months, the central bank also has intervened in both sides of the foreign exchange market, mainly through non-deliverable swaps, with little impact on international reserve levels. These interventions have been geared at containing exchange rate volatility.
- *Fiscal policy and policy lending.* During 2012, the authorities adopted several measures, particularly tax stimuli, that ran counter to the fiscal consolidation initially envisaged in the budget (Box 4). The fiscal primary surplus in 2012 (excluding proceeds from the sovereign wealth fund), closed at 2.1 percent of GDP and the authorities had to use all budget adjusters/deductions allowed by the budget, as the recourse to extraordinary revenue was insufficient to compensate for higher current expenditures and the cost of stimulus measures.<sup>2</sup> Net lending to public banks also increased by 1.5 percent of GDP in 2012. Stimulus measures have continued in 2013, including a broadening of payroll tax cuts and an extension of tax incentives for car purchases.

<sup>1</sup> See the accompanying 2013 Selected Issues Paper—"Monetary Transmission in Brazil – Has the Credit Channel Changed?"

<sup>2</sup> The 2012 budget targeted a primary surplus equivalent to 3.1 percent of GDP, but allowed through the use of adjusters (pre-authorized discretionary adjustments to the target) for a lower outturn of up to 0.9 percent of GDP, provided that the additional spending was on specific public investment projects under the Growth Acceleration Program (PAC).

### Box 4. Brazil: Fiscal Stimulus

**In response to the sharp deceleration in activity since 2011, the authorities have introduced several rounds of fiscal stimulus.** Following an initial round at the end of 2011 (mostly aimed at supporting consumption and the construction sector), several other rounds of stimulus were announced in 2012 and 2013.<sup>1</sup> These subsequent rounds renewed or expanded the original stimulus measures while increasingly focusing on supply side considerations, in particular labor and energy costs, and inflation control. The table below accounts for the most significant measures taken since end-2011, with the estimated impact on the fiscal accounts for 2012–14.

Brazil: Fiscal Policy Measures  
(Billions of national currency unless otherwise indicated.)

Date of Announcement	Description of the announced measures	Estimated Fiscal Cost		
		2012	2013	2014
1-Dec-11	Consumption tax cuts			
	On consumer durables (IPI), mostly on home appliances	0.4		
	Social Contributions (PIS/Cofins) on some food items	0.9		
3-Apr-12	Reductions in the Financial Transactions tax (IOF) on consumer credit, venture capital, long term foreign investment	1.7		
	Payroll tax exemptions 1/	1.8	5.2	5.5
	Renewal and extension of IPI reductions	0.5		
second Plano Brasil Maior	Expansion of tax relief for investments in ports ( <i>Reporto</i> )	0.2	0.2	0.3
	Other - computers in public schools, support to internet access, government purchase of national items program, exporter credit line, support to cancer treatment services	2.5	1.5	0.6
	21-May-12	IPI reduction for cars	1.7	
21-May-12	Further IOF reduction on consumer loans	2.1	3.6	3.6
	BNDES loan rate decreases for selected credit lines	0.6		
	22-Jun-12	Elimination of fuels tax (CIDE-Combustíveis)	4.7	11.4
27-Jun-12	Renewal of expiring IPI reductions, with addition of new items	0.6		
	Government's purchase of capital goods program	6.6		
29-Aug-12	Renewal of expiring IPI reductions, with addition of new items	1.8	3.3	
	Acceleration of allowed capital goods depreciation rebate		0.6	
	Further downward revisions of BNDES lending rates	n.a.	n.a.	n.a.
13-Sep-12	Extension of payroll tax cuts to new sectors		4.9	5.4
5-Dec-12	Further payroll tax reductions for the construction sector		1.9	3.2
19-Dec-12	Extension of IPI cuts set to expire		3.5	4.9
	Extension of the <i>Reintegra</i> program (tax incentive for exporters) 2/		2.2	2.7
26-Dec-12	Payroll tax cuts for retail sector		1.3	2.1
	Tax cuts over profit participation of workers		1.7	1.9
24-Jan-13	Measures to cut cost of energy for industry and consumers 3/		8.4	8.4
11-Mar-13	Exemption of basic consumer basket and other staples from PIS/Cofins		5.7	9.3
31-Mar-13	Extension of IPI decreases for cars and trucks		2.4	
2-Apr-13	Exemption of IOF on credit to infrastructure and acquisition of capital goods		n.a.	n.a.
5-Apr-13	Extension of payroll tax cuts to 14 new sectors			5.4
23-Apr-13	Exemption of PIS/Cofins on levied on ethanol and some hydrocarbons 4/		1.1	2.2
12-Jun-13	Credit line for home appliances, for MCMV beneficiaries 5/	n.a.	n.a.	n.a.
	<b>Total</b>	<b>25.9</b>	<b>58.9</b>	<b>66.8</b>
	<b>Total in percent of GDP</b>	<b>0.6</b>	<b>1.2</b>	<b>1.3</b>
	<i>of which, tax stimulus</i>	<i>0.4</i>	<i>1.0</i>	<i>1.1</i>

Sources: Ministry of Finance (including Receita Federal); JP Morgan and staff's calculations.

1/ Exemption of social contributions paid by employers. Includes impact of original round of cuts announced in August 2011 (first *Plano Brasil Maior*, see box footnote 1).

2/ The *Reintegra* program was originally part of the first *Plano Brasil Maior* (see box footnote 1).

3/ Lower electricity fees (annual cost of 3.3 billion reais) and direct price subsidies (short run annual cost of 5.1 billion reais).

4/ The measure was accompanied by further public financial support to the ethanol sector (reduced credit rates).

5/ MCMV (Minha Casa Minha Vida) is a home buying subsidy program for low income households.

<sup>1</sup> In August 2011, the government launched a broad program to support the external competitiveness of Brazilian industries (*Plano Brasil Maior*). This program included tax incentives for the purchase of capital goods, financial support for investment (mostly through BNDES), and tax incentives for exporters, particularly in labor intensive industries. Several of the measures included in the Box Table are extensions/renewal of those in the original *Plano Brasil Maior*.

#### Box 4. Brazil: Fiscal Stimulus (concluded)

**Most stimulus measures took the form of tax incentives.** The federal government has repeatedly renewed and expanded tax cuts on the consumption of durables, particularly home appliances and automobiles/trucks (introduced first in August 2011). Similarly, the exemption of employer social contributions (replaced by a tax on gross revenue), initially applied to a few (tradable) sectors was subsequently expanded to many other activities, including retail. Such exemptions, along with some of consumption tax cuts, will likely become permanent. The reform to the PIS/Cofins (social contributions levied on consumption) has been under discussion.

- *Structural policies.* Since the fall of 2012, the authorities have undertaken targeted efforts to bolster investment by boosting infrastructure and reducing high energy costs, but complementary tax reform efforts have stalled. The centerpiece of the authorities' efforts has been a program to increase private participation in infrastructure investment through the tender of concessions for the operation of new roads, ports and airports (anticipated for the second half of 2013) and a Public-Private Partnership model for railroads. Additional programs have focused on airports and seaports. These programs are expected to generate new investments of about R\$159 billion (3 percent of GDP) over the next 5 years. Efforts to simplify the complex inter-state VAT regime, highlighted by business surveys as burdensome and a deterrent to investment, have stalled in the legislature. At the same time, the industrial sector has seen its energy costs decline by an average 18 percent in 2013 due to the government's renegotiation of contracts with utility companies.<sup>3</sup>
- *Macroprudential policy and capital flow measures (CFMs).* The macroprudential policies adopted by Brazil in 2010–11 have been partially unwound in recent months, mainly through reducing effective reserve requirements and easing sectoral capital requirements. The CFMs have continued to be managed actively, with the coverage and rate of the IOF tax being adjusted many times in response to changing financial conditions and market pressures. Over the last 12 months, CFMs have been eased by narrowing the coverage of the IOF tax (first by reducing the maturity of debt inflows subject to the tax and then applying a zero rate on fixed income inflows, and exempting certain investment vehicles). More recently, the IOF tax applicable to short FX derivative positions was reduced to zero percent (Table below).

<sup>3</sup> Some private sector analysts consider that the benefits of this renegotiation may have been partially offset by the adverse private sector reaction to what was perceived as excessive government intervention in the energy sector.

**Capital Flow Measures: Major Changes since mid-2012**

Date	Change in Measure/ Policy
14-Jun-12	IOF tax of 6 percent applied to foreign loans, bond issuance to non-residents and secondary bond market purchases by non-residents with maturities up to 2 years (from 5 years previously)
28-Jun-12	Removal of restriction that limited export prepayment only to agreements with the importer as counterparty
4-Dec-12	Removal of restriction that limited export prepayment up to 5 years (from 1 year)
5-Dec-12	IOF tax of 6 percent applied to foreign loans, bond issuance to non-residents and secondary bond market purchases by non-residents with maturities up to 1 year (from 2 years previously)
31-Jan-13	IOF tax of zero percent applied on inflows to real estate investment funds
4-Jun-13	IOF tax of zero percent applied to all bond issuance to non-residents and secondary bond market purchases by non-residents
12-Jun-13	IOF tax of zero percent applied to all onshore net short positions in foreign currency derivatives - long exposure reduction/ short exposure increases (from 1 percent)

Source: Ministry of Finance, Central Bank of Brazil.

- *Trade policies.* In the second half of 2012, Brazil raised tariffs on imports of 100 goods; the goods belong to many sectors and the imports had represented about 4 percent of total merchandise imports in 2011. Tariff rates were increased up to a maximum of 25 percent, below the 35 percent ceiling consistent with WTO obligations. Import tariffs have remained broadly unchanged since then.

## OUTLOOK AND RISKS

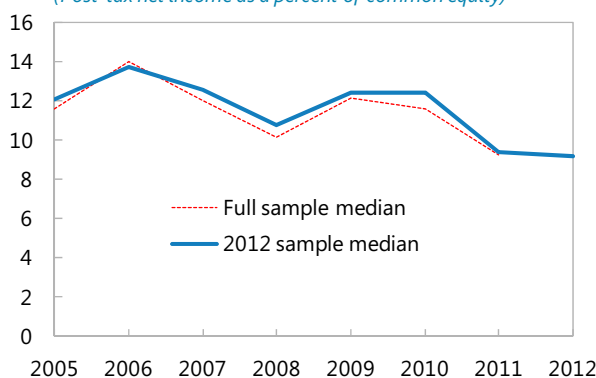
**9. The gradual recovery that started in 2012 is expected to continue through 2013, supported by a sustained pick-up in investment.** Real GDP growth is projected to rise to about 2½ percent this year, below medium-term potential growth because of supply-side constraints, with fixed investment growing by about 7 percent in real terms. Infrastructure build-up will take time to relieve bottlenecks, but a decisive advance on concessions (including in the energy sector) may help bolster business confidence and private investment (given synergies between infrastructure upgrades and returns on private capital). Private sector investment can have a more immediate effect on growth, particularly as it relates to overdue upgrades and expansion of existing capacity (which would imply higher imports). Consumption is expected to remain resilient as the labor market stays buoyant, with a more moderate increase in the minimum wage supporting a sustainable pace of household spending. Improving confidence, the lagged effects of the policy stimulus of 2011–12, high rates of capacity utilization, and unencumbered corporate balance sheets (Box 5) would underpin the recovery in investment. Net exports are likely to impart a small negative contribution as improving external conditions are offset by higher investment-related imports and weak competitiveness. Over the medium term, Brazil is projected to achieve potential growth of about 3½ percent (a downward revision of staff’s and market estimates). Even this lower potential growth will require scaled-up investment (including infrastructure) and an associated improvement in productivity growth (Box 6). Absent comprehensive and decisive reform efforts to boost investment and productivity, Brazil’s potential growth would revert to its long-term historical average of about 3 percent.

### Box 5. Brazil's Corporates: Rising Leverage But Improving Liquidity<sup>1</sup>

**Brazil's non-financial corporate sector has seen profitability decline during the recent economic slowdown.** For the median firm, the return on equity (RoE) and profit margin have fallen from their cyclical 2010 highs. This trend has coincided with a large increase in unit labor costs during this period, and helped explain the weak performance of investment since 2011. These results should be considered with caution because many firms have yet to report comprehensive financial results.<sup>2</sup>

#### Return on equity

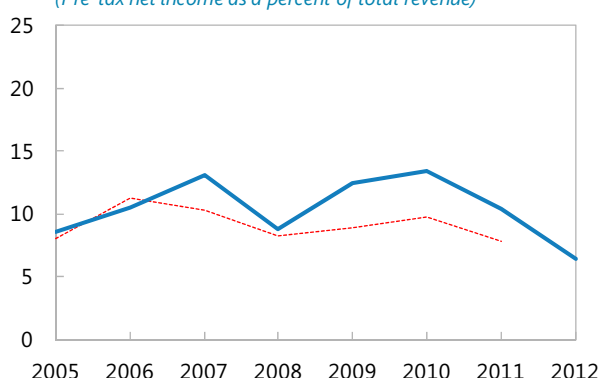
(Post-tax net income as a percent of common equity)



Sources: Worldscope; and Fund staff calculations.

#### Pre-tax Profit Margins

(Pre-tax net income as a percent of total revenue)

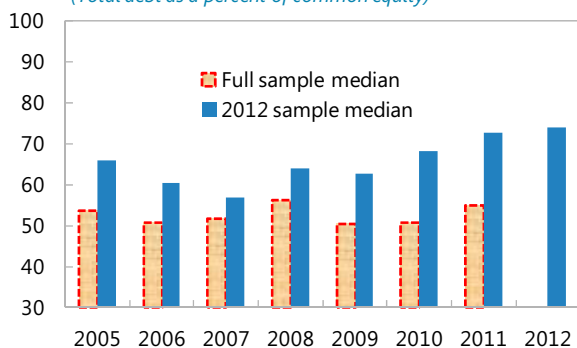


Sources: Worldscope; and Fund staff calculations.

**Firms are increasing leverage but the median rate remains relatively contained.** Leverage, defined as total debt to common equity, broadly increased from 2009–11 but stabilized last year and remains somewhat above the historical average. The distribution of leverage has also become slightly more skewed, pointing to a smaller number of firms with more highly leveraged balance sheets, but in line with Brazil's structure over the last decade.

#### Leverage

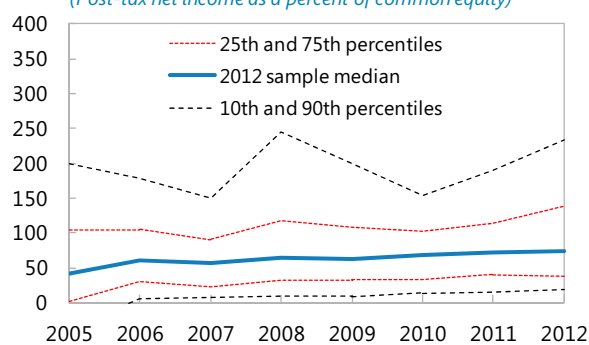
(Total debt as a percent of common equity)



Sources: Worldscope; and Fund staff calculations.

#### Distribution of Leverage

(Post-tax net income as a percent of common equity)



Sources: Worldscope; and Fund staff calculations.

<sup>1</sup> Prepared by Fei Han and Shaun Roache.

<sup>2</sup> This box uses two samples. The first uses data for publically-listed non-financial companies that provided comprehensive balance sheet information each year (hence, the sample changes every year reflecting the entry and exit of firms). For end-year 2011, this sample included 255 firms. The second sample uses data for firms that have already reported for 2012 and uses this same sample of firms each year. For end-year 2012, this sample included 164 firms and reported assets valued at about 57 percent of GDP.

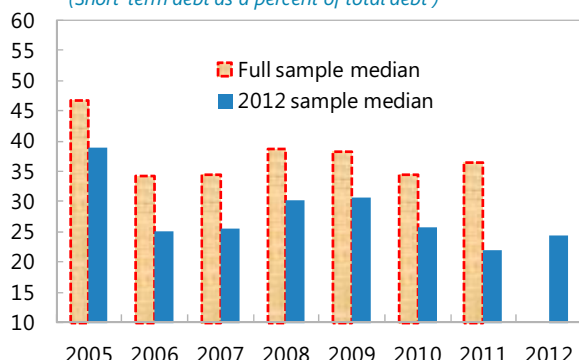


### Box 5. Brazil's Corporates: Rising Leverage But Improving Liquidity (concluded)

**At the same time, firms have taken advantage of benign financial conditions to lengthen average maturity.** The proportion of short-term firm debt at residual maturity has declined. This is likely contributing to a more comfortable liquidity position, with various measures (including the quick ratio) showing that liquidity has improved over the last decade. However, improving liquidity may also partly reflect cyclically low interest rates.

#### Debt structure

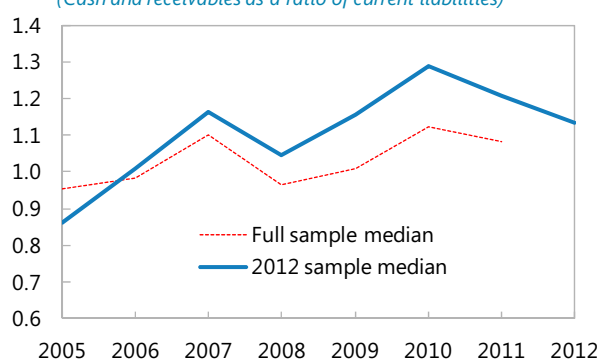
(Short-term debt as a percent of total debt)



Sources: Worldscope; and Fund staff calculations.

#### Liquidity: Quick Ratio

(Cash and receivables as a ratio of current liabilities)

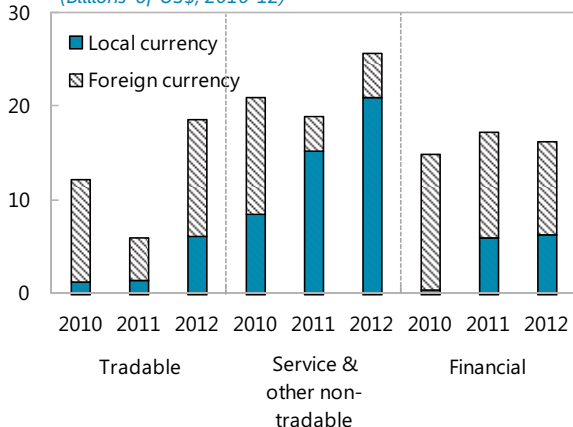


Sources: Worldscope; and Fund staff calculations.

**Corporate bond issuance has picked up in the last three years, largely offset by a reduction in new syndicated loans, with a greater proportion denominated in local currency.** New issuances by the non-tradable sector have largely been denominated in local currency in recent years. Syndicated loans are principally to the tradable sector denominated in foreign currency. A large share of recent issuance has facilitated balance sheet restructuring, including a lengthening of maturities, rather than the financing of new investment. More recently, as global financial conditions have tightened, issuance has begun to moderate in line with other major emerging markets.

#### Corporate Bond Issuance: by Sector and Currency

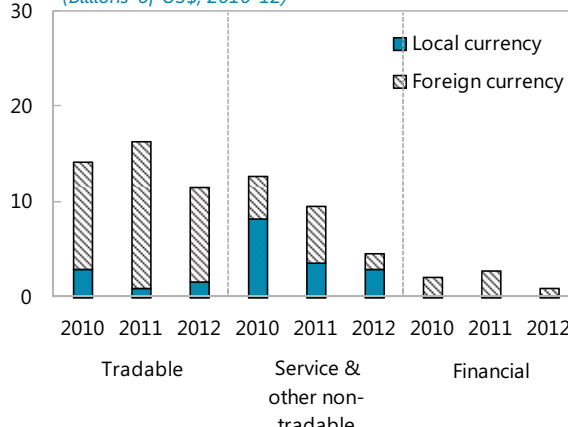
(Billions of US\$, 2010-12)



Sources: Dealogic; and Fund staff calculations.

#### Corporate Syndicated Loan Issuance: by Sector and Currency

(Billions of US\$, 2010-12)



Sources: Dealogic; and Fund staff calculations.

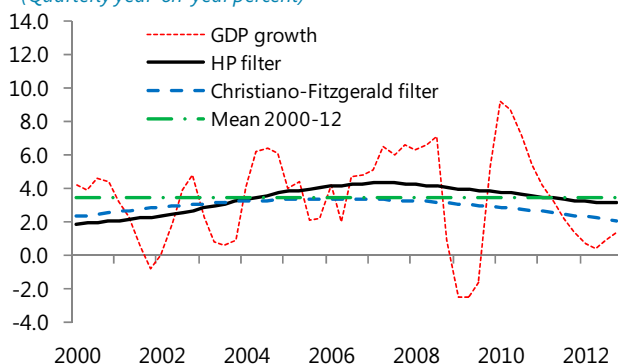
### Box 6. How Fast Can Brazil Grow?

**Brazil's weak performance since 2011 has re-ignited the debate about its medium-term potential growth rate.** Consensus estimates of potential growth have been steadily revised lower and are now at their lowest level since commodity prices began to surge in the mid-2000s. Brazil is not alone in seeing its potential growth rate revised lower with estimates for the larger emerging markets also being marked down.

**A supply-side decomposition suggests that Brazil's sustainable future growth rate is about 3½ percent, about ¾ percentage point lower than assumed by staff in recent years.** This latest estimate is about the same as the average real growth rate from 2000–12, while range of statistical filters, show potential growth at 2–3½ percent.

#### Brazil: GDP Growth Trends

(Quarterly year-on-year percent)



Sources: IBGE; and Fund staff calculations.

**To achieve growth of 3½ percent, Brazil will need to step-up investment, including in infrastructure, and boost productivity above past levels.** Over the next decade, the labor pool will expand at a slower rate, reflecting demographic trends but also employment and participation rates at high levels. Growth will need to rely more on capital accumulation and productivity. The projections below assume that: foreign saving can finance only part of Brazil's required investment needs; domestic saving will rise but only gradually and will stay relatively low; and the government will successfully implement its program of infrastructure investment with important positive effects on productivity. These estimates of potential growth are subject to considerable uncertainty. In particular, if Brazil fails to attain higher productivity, the risks are that long-term growth could fall short of even this downwardly revised estimate (see accompanying Selected Issues Paper).

### Box 6. How Fast Can Brazil Grow? (concluded)

#### Brazil: Supply-Side Decomposition of Growth, 1995-2030

(annualized percent change)

	Actual			Projected		
	1995-99	2000-04	2005-09	2010-14	2015-19	2020-30
<b>Capital, land and productivity</b>						
Total factor productivity	0.3	-0.1	2.3	0.3	1.7	1.7
Capital deepening 1/	0.3	-0.8	-0.5	0.3	0.2	0.3
Land 2/	0.1	0.0	0.0	0.0	0.0	0.0
<b>Labor</b>						
Education	0.7	0.9	1.0	0.6	0.9	0.9
Labor force participation	-0.3	0.2	0.1	0.0	-0.1	0.0
Working age population	0.8	0.4	0.4	0.3	0.2	-0.2
<b>Cyclical factors</b>						
Capacity utilization	0.1	0.5	-0.5	0.6	0.0	0.0
Employment rate	-0.6	-0.7	0.7	0.5	-0.1	-0.1
Hours worked	-0.9	1.1	-1.1	0.3	0.0	0.0
GDP per capita	0.5	1.6	2.5	2.7	2.7	2.5
Population	1.5	1.3	1.0	0.8	0.7	0.5
<b>GDP</b>	<b>2.0</b>	<b>3.0</b>	<b>3.5</b>	<b>3.6</b>	<b>3.4</b>	<b>3.0</b>

Source: IBGE, IPEA, Central Bank of Brazil, World Bank, United Nations and Staff calculations

1/ Measured by the change in the capital output ratio to adjust for capital growth associated with technology.

2/ Because land income is a low share of overall national income, the direct contribution to overall economic growth from even significantly increased land use is only marginal.

#### 10. Inflation is expected to fall gradually towards the mid-point of the target range.

Headline inflation is projected to remain at about 5¾ percent this year and into 2014, and converge gradually to the target mid-point thereafter. The slow convergence to the target, even in the absence of further supply shocks, will reflect: lags between the new investments and the expansion of capacity; continued tightness in labor markets; the effects of exchange rate depreciation, notwithstanding evidence that pass-through has declined in recent years; and inflation inertia which appears to have increased.<sup>4</sup>

**11. The external current account deficit is projected to increase further through 2015, partly as a result of the recovery of investment.** Notwithstanding some cyclical improvement, public and private saving are not likely to increase under current policies, which implies that the pick-up in investment has to be financed by higher foreign saving. From a trade balance perspective, the investment recovery and sustained strength in consumption will result in a significant rebound in imports (considering the high income elasticities observed in previous cycles). Exports are projected

<sup>4</sup> See the accompanying 2013 Selected Issues Paper—"Inflation in Brazil – Is it Still Persistent?"

to grow at a more gradual pace, while the terms of trade are anticipated to worsen somewhat. Over the medium term, the external current account deficit would stabilize at about 3¾ percent of GDP as pre-salt oilfields come online and Brazil becomes a net oil exporter.

**12. The baseline scenario is predicated on a continuation of monetary tightening, broadly unchanged fiscal policy from last year, and successful implementation of infrastructure programs.** Monetary tightening would continue, bringing the real policy interest rate close to its estimated neutral level by about mid-2014. Fiscal policy is expected to be consistent with a primary balance of about 2 percent of GDP in 2013 and 2014 (though meeting those targets will require strict expenditure restraint). This will require the full use of adjustors/discounts to the primary balance target.<sup>5</sup> Policy lending is projected to return to levels close to 1 percent of GDP in 2013 and through 2015 and decline gradually thereafter, as public bank lending to finance infrastructure concessions subsides.<sup>6</sup>

<b>Brazil - Staff Fiscal Baseline, 2010-2014</b>					
(Percent of GDP, unless otherwise indicated)					
	2010	2011	2012	2013	2014
Primary Balance	2.5	3.2	2.1	1.9	2.0
Non-financial Revenue	35.5	35.1	35.5	34.8	34.7
Primary Expenditure	33.0	31.9	33.4	32.9	32.7
Current Expenditure	29.0	20.3	21.2	20.9	20.7
Capital Expenditure 1/	4.0	2.4	2.7	2.4	2.4
Overall Balance	-2.7	-2.5	-2.8	-2.7	-2.9
Structural Primary Balance	1.4	2.7	2.1	1.9	2.0
incl. policy lending 2/	-1.3	1.7	0.7	1.1	1.1
Memo items:					
Real primary expenditure growth	12.1	-0.8	5.8	0.9	2.4
incl. policy lending 2/	10.2	-5.4	7.0	-0.9	2.9
1/ Includes 1.5 percent of GDP in the recapitalization of Petrobras in 2010					
2/ Policy lending in 2010 excludes BNDES participation in the recapitalization of Petrobras.					

**13. Domestic risks are to the downside in the near term, reflecting a deterioration in the growth-inflation trade-off and the potential for policies to exacerbate imbalances.** These risks are linked.

<sup>5</sup> The 2013 budget targets a primary surplus equivalent to 3.3 percent of GDP (under staff estimates of GDP), but pre-authorized discretionary adjustors allow for a deduction of up to 1.4 percent of GDP, provided that this discretionary room is used towards spending in specific public investment projects under the PAC and tax cuts.

<sup>6</sup> This assumption incorporates the recently announced subsidized credit line for beneficiaries of the *Minha Casa Minha Vida* program equivalent to 0.4 percent of GDP.

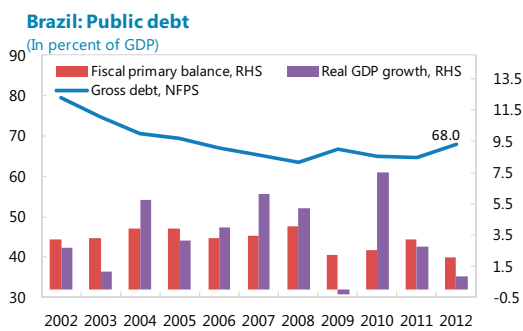
- *Protracted weak investment, worsening demand imbalances and policy stance.* If the factors underlying weak investment and supply-side constraints are more protracted or structural in nature (including for infrastructure investment), or investor confidence remains fragile, including because of social discontent, the recovery could prove more uneven and sluggish than envisaged in the baseline. If, in this context, further demand stimulus is added or if the policy stance is not adjusted to bring about a rebalancing of domestic demand, the external current account deficit would deteriorate more than projected and inflationary pressures would remain elevated (Figure 2).
- *Gradual erosion of the fiscal framework.* Brazil's sound policy frameworks, including the fiscal responsibility law (FRL), have been key for maintaining macroeconomic stability for over a decade. In recent years, there has been an increasing reliance on extraordinary revenues and adjustors to the primary balance target to meet the fiscal target and on large transfers to public banks (policy lending); these actions and policies have started to undermine the credibility of the policy framework and reverse the downward trend in the gross debt to GDP ratio (Box 7).<sup>7</sup>
- *Higher and more persistent inflation.* Slow convergence towards the inflation target and elevated medium-term inflation expectations have increased Brazil's vulnerability to adverse supply shocks. If domestic supply constraints prove more binding than expected, including those stemming from the tight labor market, even a moderate pick-up in domestic demand could forestall inflation convergence. Elevated inflation for a protracted period would affect inflation expectations, increase indexation and inertia, and increase the sacrifice ratio of bringing inflation back to target.
- *Correction in the real estate market and household credit exposure.* Although Brazil's large banks retain substantial buffers against shocks (as identified in the July 2012 FSAP), a large correction of property prices is likely to have adverse financial and real effects. The rapid expansion of credit to new customers including households and small businesses, particularly among public banks, may worsen asset quality and increase potential financial vulnerabilities in a low growth scenario, particularly if labor market conditions were to weaken noticeably (Box 8).

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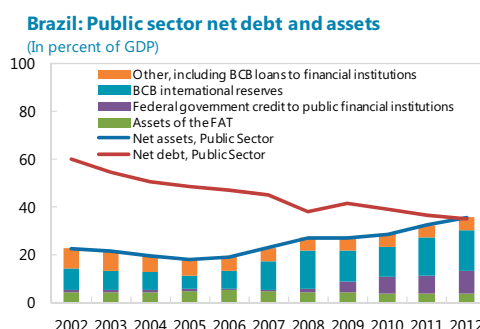
<sup>7</sup> The 2014 draft Budget Law contemplates, again, rather large adjustors to the primary balance target (of up to 1.4 percent of GDP), as well as a proposal to release the federal government from an obligation to cover primary balance shortfalls at the sub-national level. In addition, the borrowing limits set annually by the central government to support state-level investment have been increased in recent years.

### Box 7. Brazil: Public Debt Dynamics in Recent Years

**Fiscal responsibility has been instrumental to lower Brazil's public debt.** The ratio of gross debt to GDP for the non-financial public sector has declined gradually during the past decade. Many years of robust primary surpluses and output growth have supported the decline in gross debt. Net debt has exhibited a larger decline than gross debt reflecting the accumulation of financial assets, notably international reserves and credit to public financial institutions.<sup>1</sup>



Sources: Central Bank of Brazil; Ministry of Finance; and Fund staff estimates.



Sources: Central Bank of Brazil; Ministry of Finance; and Fund staff estimates.

**During this period, active debt management has also improved the debt structure.** The composition of public debt has been strengthened as a result of lengthened maturity; gradual replacement of FX debt and floating-rate and FX-linked domestic securities by fixed-rate and inflation-linked domestic debt; and lower share of non-residents holding of government debt (including external debt). However, roll-over needs remain large, with about a quarter of domestic federal debt maturing every year.

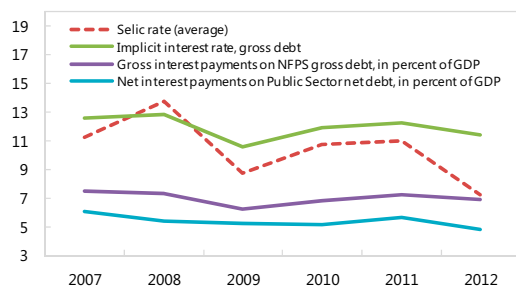
**Since the global crisis, policy lending has contributed significantly to gross public debt.** Subsidized lending by the Treasury to public banks, in particular BNDES, has explained a substantial rise in federal public debt. Treasury transfers to BNDES and other public banks have added 8 percent of GDP to the stock of gross debt during 2008–12. In 2012, the increase in gross public debt was driven by Treasury lending to public banks, which amounted to 1.5 percent of GDP (see Figure 4). Policy lending has not affected the authorities' definition of net debt as financial assets (public bank obligations to the Treasury) have increased accordingly.

**The reduction in public debt has been a key driver of the decline in the interest bill.** More recently, the reductions in the policy rate have also favored debt dynamics. The policy rate cuts implemented since August 2011 have helped reduce the implicit interest rate by about 100 bps to 11½ percent in 2012.<sup>2</sup> However, the sensitivity of the interest bill to policy rate changes is relatively limited, as less than a quarter of total gross debt consists of floating rate securities.

#### Brazil: Federal Public Debt—Indicators

	2002	2012
<b>Share in total debt, in percent</b>		
External debt	23.8	3.0
Domestic debt held by non-residents	1.9	13.9
Domestic debt held by residents	74.2	83.1
<b>Maturity structure of total debt</b>		
Average maturity (years)	3.6	4.0
Percentage maturing in 12 months	34.6	24.4
<b>Profile of domestic debt</b>		
Fixed rate	2.2	41.2
Inflation linked	12.5	35.5
Floating rate	62.9	22.8
Exchange rate	22.4	0.6

#### Brazil: Interest rate on public debt



Sources: Central Bank of Brazil; Ministry of Finance; and Fund staff estimates.

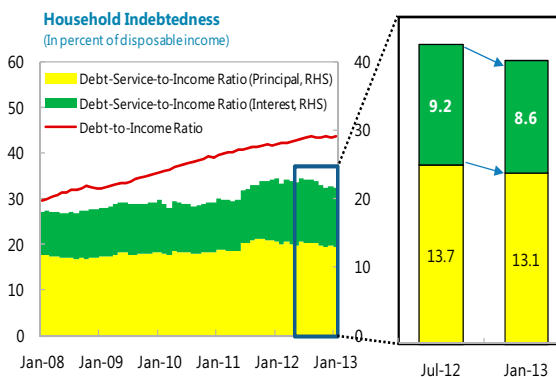
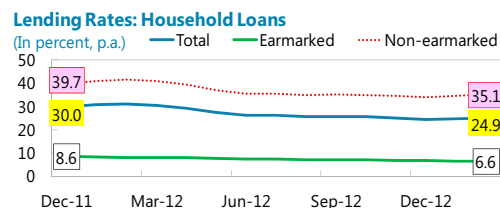
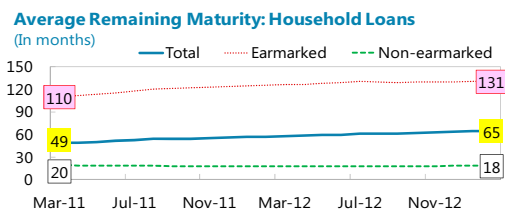
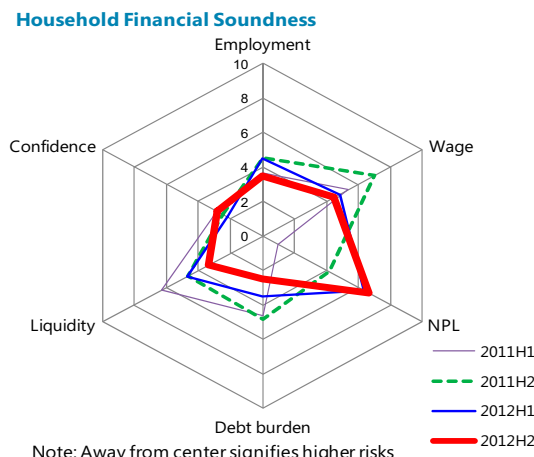
<sup>1</sup> Gross non-financial public sector debt consolidates debt of public enterprises with that of general government. Unlike the authorities' definition, gross general government debt comprises treasury bills at the central bank's balance sheet not used under repurchase agreements (8.7 percent of GDP in 2012).

<sup>2</sup> The implicit interest rate is calculated as overall interest payments over outstanding the stock of debt.

### Box 8. Brazil: Household Financial Soundness<sup>1</sup>

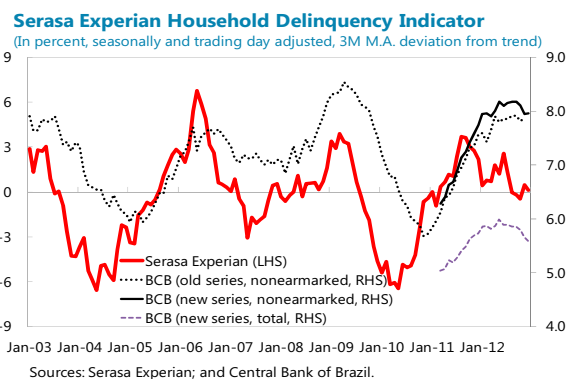
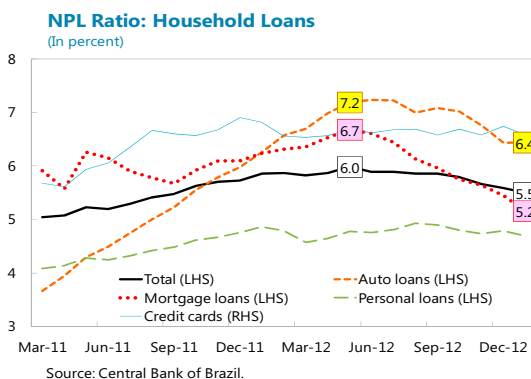
**Household financial soundness improved in 2012, with nonperforming loans (NPLs) starting to decline gradually at the end of the year.** Favorable labor market conditions, with strong wage growth and declining unemployment rate, enhanced households' financial capacity. Debt service costs decreased, liquidity conditions improved and household NPLs gradually declined after peaking in mid-2012.

**The household debt burden has started to decline gradually, due to lengthened debt maturity and reduced in lending rates.** The household debt-service ratio declined 1.2 percentage points from 22.9 to 21.7 percent of disposable income in the last six months, with both principal and interest contributing equal amounts.



Sources: Central Bank of Brazil; and Fund staff calculation.

**Household NPLs have decreased by 0.5 pp from the peak in May 2012 (6.0 percent), and are expected to continue declining.** A significant part of the decline in the delinquency rate has been due to auto and mortgage loans, which represent a large share of household credit, 17.8 and 24.0 percent, respectively. Leading delinquency indicator points to the declining trend continuing, associated with a sustained output recovery and favorable labor market conditions.



<sup>1</sup> Prepared by Heedon Kang (MCM).

**14. External downside risks are mainly associated with global financial conditions and commodity prices.**

- Global financial conditions.* Notwithstanding the steady improvement in Brazil's international investment position and its large foreign reserve buffers, Brazil's continued reliance on foreign saving and its highly integrated financial markets leave it vulnerable to swings in global financial conditions. Key risks are associated with the global financial implications of a sudden or sharp monetary tightening in the U.S. or contagion from an intensification of the crisis in Europe, either of which could prompt an increase in global risk aversion, lower flows to emerging markets, and tighter external financing conditions. If these risks were to materialize and cause a sharp and persistent depreciation of the real, inflationary pressures would increase (notwithstanding the lower exchange rate pass-through of recent years) and monetary policy would have to be tightened accordingly to pin down inflation expectations and preserve price stability. Significantly tighter domestic and external financing conditions may hinder the expected recovery in investment, including the infrastructure concessions program. Vulnerabilities directly linked to the banking system, however, appear to be low, with external liabilities of Brazilian banks accounting for 7 percent of bank assets and foreign banks, mostly funded locally, representing less than 20 percent of banking sector assets.
- Commodity prices and terms of trade.* Exports of commodities represented almost half of Brazil's total goods exports in 2012, making the external position highly vulnerable to large changes in commodity prices. However, although the prices of Brazil's four main commodity exports—iron ore, soybeans, coffee, and sugar—are highly volatile, their cross-correlation is relatively low suggesting that the vulnerability would be large only in the event of a global demand shock.

**15. Brazil's medium-term challenges are to bolster growth through higher productivity and investment, while mobilizing domestic saving to keep the external current deficit at moderate levels.** Brazil has to raise total factor productivity and investment to attain stronger, sustainable growth. Without a concomitant rise in domestic saving, however, high investment would widen Brazil's already high current account deficit. For example, if Brazil's investment to GDP ratio were to increase to average G-20 levels but the domestic saving rate were to remain unchanged the external current account deficit would deteriorate by about 4 percentage points of GDP. Scaling up Brazil's investment sufficiently to boost potential growth above its historical average is likely to require a sustained rise in domestic saving of about 2–3 percentage points of GDP, with a contribution of both public and private savings. Some increase in foreign saving will be necessary to finance higher investment, including in the infrastructure and energy sectors, over the medium term. If the bulk of that foreign saving takes the form of foreign direct investment, there would be positive effects, including on productivity, which would allow Brazil to sustain a potential growth rate of about 3½ percent. To the extent that the higher current account deficit is financed with more volatile sources of capital, Brazil's external vulnerabilities would increase.



## Brazil: Risk Assessment Matrix

Source of External Risks	Relative Likelihood	Impact if Realized
Distortions from unconventional monetary policy in advanced economies (excessive risk-taking followed by broad-based market re-pricing; delays in structural reforms; or side effects from exit modalities)	High	High
Emerging Markets capital flow reversal (associated with a strong unwinding of asset price overvaluation in some countries)	Medium	High
Sharp sustained decline in non-oil commodity prices	Medium	High
Financial stress in the euro area re-emerges (triggered by stalled or incomplete delivery of national and euro area policy commitments)	Medium	Medium
Advanced bond market stress (lack of fiscal sustainability triggers a sharp rise in sovereign risk premium in a. Japan – medium likelihood; or b. the U.S. – low likelihood)	Medium/Low	Medium
Source of Domestic Risks	Relative Likelihood	Impact if Realized
Weak investment	Medium/High	Medium
Higher and more persistent inflation	Medium	Medium
Worsening demand imbalances	Medium	Medium
Continued weakening of the fiscal policy framework	Medium/Low	Medium
Correction in the real estate market and household credit exposures	Low	Medium

## POLICY DISCUSSIONS

*Policy discussions centered on near term supply-side constraints and their implications for the growth-inflation trade-off, how to strengthen Brazil's long-standing policy frameworks, and options to boost long-term growth.*

### A. Economic Outlook and Risks

**16. The authorities anticipate a continuation of the economic recovery and a sustained pick-up in private investment.** The investment recovery is expected to be supported by past and current policy stimulus and recent progress in boosting private sector participation in infrastructure investment. Staff agreed that investment was picking up but argued that greater efforts, including greater policy predictability and measures to rebalance domestic demand and enhance competitiveness, would be important to strengthen investor confidence and raise growth on a sustained basis.

**17. They consider that the main risks to the outlook are external.** The authorities cited the prospect of tighter global financial conditions, including the eventual unwinding of monetary stimulus in the United States, as a key risk to emerging markets (notwithstanding Brazil's substantial buffers). Sharp and prolonged falls in commodity prices, stemming from a sharp slowdown in China, and further disruptions to trade among regional partners are also considered key risks. Staff agreed with these external risks and emphasized that domestic risks also remain material, particularly those related to the policy frameworks and the policy stance.

## B. Near-Term Policy Stance

**18. The authorities indicated that they would tighten macro policies, including fiscal policy if the recovery proceeds as anticipated.** The central bank has recently stepped up the pace of monetary tightening and signaled that it would take the actions necessary to lower inflation towards the mid-point of the official target range. The authorities at the Ministry of Finance indicated that they were expecting an output growth rate above 3 percent in 2013; under such scenario, they would not consider additional stimuli in 2013 and the fiscal primary surplus would improve slightly this year.<sup>8</sup> Staff welcomed these policy intentions and noted that supply constraints, due in part to weak investment and a tight labor market, would likely limit the strength of the recovery. Staff underscored that a gradual fiscal consolidation was necessary in the months ahead, to rebalance demand and support monetary policy.

### Fiscal policy

**19. The authorities consider that fiscal policy can continue to play an important counter-cyclical role.** They noted that recent stimulus has been aimed at boosting investment and competitiveness and that after the normal lags, those measures will impact activity. They also noted the contribution of the tax cuts granted by the government in the anti-inflation fight. Reductions in payroll taxes and tax-exemption of basic consumer goods were viewed as permanent structural measures, while other consumption and financial transaction-based taxes (such as the IPI, gasoline taxes and the IOF) were used to respond to the cycle. Staff noted that the global financial crisis of 2008–09 had to be seen as an exceptional circumstance and that in more normal times monetary policy was the lever that had to be geared at demand management through the business cycles; fiscal policy contribution would normally had to be confined to the automatic stabilizers. Staff indicated that the tax cuts recently enacted would tend to have a transitory effect in reducing inflation and that by stimulating consumption and labor demand (amid cyclically low unemployment) they would ultimately contribute to exacerbate inflationary pressures.

**20. They anticipate an improvement in the primary fiscal surplus in 2013 as the recovery proceeds.** The authorities noted that they did not anticipate further tax stimuli for this year and were not planning to make full use of the adjustors/discounts to the primary balance target allowed

<sup>8</sup> In recent weeks, the authorities have emphasized that the fiscal primary target for 2013 remains at 2.3 percent of GDP, which implies a partial use of the discretionary adjustors allowed by the budget law.

by the budget, provided that the recovery proceeds as expected. For sub-national governments they expect some consolidation in 2013, with no extension of the PROINVESTE program to support investment by state governments. This would imply a small increase in the primary surplus of the general government compared to last year. Staff noted that growth may turn out to be lower than the “3 percent plus” expected by the government, because of limited supply response. Staff supported a credible path of gradual fiscal consolidation, anchored on Brazil’s long-standing primary surplus target (3.1 percent of GDP). It argued that such path of consolidation, as well as greater clarity about the target and its rationale, would help rebalance demand, supporting monetary policy, rebuild policy buffers, and bolster the recovery in confidence.

**21. Policy lending through public banks is expected to moderate.** The authorities noted that the recent expansion of public banks’ market share was aimed at filling the void left by private banks (following the rise in NPLs in 2010–11), and that this process had likely concluded with greater dynamism expected by private bank lending going forward.<sup>9</sup> At the same time, they indicated that public banks were expected to provide the bulk of the financing for the infrastructure and energy concessions in coming years (between 70 and 80 percent). Staff noted that policy lending is a quasi-fiscal operation that affects the overall fiscal stance and debt dynamics. It argued that the private sector had access to financing from private sources and that lowering policy lending was not likely to have a major adverse impact on activity and should take priority in a fiscal adjustment process.

### Monetary and financial policies

**22. There was broad agreement that reducing inflation and inflation expectations should be the key priority of monetary policy.** The central bank reiterated its commitment to inflation targeting and indicated that the recent uptick in inflation was due, in part, to transitory food supply shocks that should unwind through the year. In this context, the recent increases in the policy rate and strengthened communications strategy would help reinforce their anti-inflation credentials. The authorities agreed that inflation inertia may be becoming entrenched and noted that the current policy action would help contain inflation expectations and facilitate a faster convergence of inflation to the target. Staff noted that a frontloaded policy course may help limit the potential sacrifice in terms of activity and the extent to which policy rates would need to rise through the cycle.

**23. The flexible exchange rate remains a key pillar of Brazil’s macroeconomic policy framework and continues to play a key role as shock absorber.** The authorities noted that the interventions in the foreign exchange market in recent months had been sporadic and symmetric, and were aimed at moderating the volatility of the exchange rate, not at stabilizing the nominal rate at a predetermined level. The authorities noted that the recent interventions had been done through the swap market, avoiding a direct effect on international reserves, as this mechanism was deemed to be most effective to reduce currency volatility. They indicated that reserve accumulation,

<sup>9</sup> Since then, the authorities have announced a subsidized credit line (*Minha Casa Melhor*) for beneficiaries of the *Minha Casa Minha Vida* program to buy home appliances and furniture (equivalent to 0.4 percent of GDP).

notwithstanding indications from staff that they are more than adequate based on standard metrics, may be part of the policy response if large private capital inflows were to resume.

**24. Capital flow measures (CFMs) have helped insulate Brazil from large and volatile capital flows and remain part of the policy toolkit.** Since mid-2012, CFMs have been eased in response to a large and sustained decline in gross and net portfolio inflows. The authorities noted that the IOF, particularly on net derivative positions adopted at end-July 2011 (as well as bank reserve requirements on short currency positions), dampened short-term portfolio inflows and contributed to financial stability. They acknowledged that CFMs, particularly when used actively and applied to a broad variety of flows, involve important trade-offs, but are of the view that, overall, the stability benefits more than offset the potential adverse impact on investors' sentiment. The authorities indicated their intention to continue managing actively the IOF, with the rate and coverage adjusted in response to capital flow pressures. Staff concurred that the IOF appears to have been effective and that CFMs involved material trade-offs, and emphasized that to minimize the negative effects (including on preserving deep derivative markets) they should be well integrated with other policies in the broader policy toolkit, and be temporary and non-discriminatory.

**25. Staff recognized that the banking system is sound, but noted that the rapid expansion of public bank balance sheets remains a concern.** The authorities noted that overall bank credit growth had moderated from its peak, NPL ratios had gradually declined, capital adequacy ratios are among the highest in the G-20, and bank liquidity buffers remain ample. In addition, stress tests done by the central bank indicate that the banking system can withstand large shocks, including to economic growth, interest rates, and the exchange rate. The authorities acknowledged staff's concerns regarding the rapid expansion of public bank balance sheet but noted that the NPL ratios at these institutions were much lower than at private banks, their liquidity position remains comfortable, and they remain well provisioned for any potential deterioration in asset quality in the future.

**26. Household balance sheets have improved and housing price increases have moderated, but the authorities concurred that ongoing vigilance is warranted.** The authorities attributed the recent improvement in household NPLs, in part, to a structural change in banks' credit portfolio towards lower risk loans such as payroll and mortgage loans, the lagged impact of lower interest rates, and the effect of macro-prudential measures adopted in 2010. Going forward, it will be important to assess the effect of higher interest rates on delinquency rates. The central bank's new housing price index indicates that recent real estate price increases have been less pronounced than previously thought and have started to moderate.<sup>10</sup> The authorities shared the view that rapid growth in mortgage loans (albeit from low levels) and the potential for feedback loops between house prices and mortgage lending warrant close monitoring.

<sup>10</sup> See the accompanying 2013 Selected Issues Paper "Understanding of Housing Markets in Brazil: Mark II," for a definition of the new housing price index.

**27. There is sustained commitment to advance in the implementation of key financial reforms.** Brazilian banks have progressed well towards implementation of Basel III, in line or ahead of the international calendar, which according to authorities' estimates would require additional capital for only a few banks over the medium term (Box 9). New measures implemented would facilitate this process, including a revised law clarifying the status of deferred tax assets (DTAs) as direct claims on the government, enabling their inclusion in common equity Tier 1 capital. The authorities noted that good progress had been made in implementing key recommendations from the 2012 FSAP Update, including new regulations establishing a positive credit bureau, publishing a house price index, improving financial safety nets, and strengthening the resolution framework. They acknowledged that legal complexities are an obstacle to faster progress in a few areas.

**28. The authorities underscored their commitment to support multilateral and regional trade.** Trade officials noted that the average level of Brazil's common external tariffs has remained broadly unchanged since mid-2012. After increasing tariffs on 100 products in late 2011, compliant with the WTO, the authorities confirmed that the increase initially planned for an additional 100 products has been deferred indefinitely. At the same time, tariffs on some capital goods were lowered in 2013, though the narrow scope of these measures implied little change at the aggregate level.

### C. Strengthening Brazil's Policy Frameworks

**29. The authorities expressed the view that the current fiscal space is sufficient and that fiscal policy should continue to have an active role, including in domestic demand management.** They noted that Brazil's recent fiscal track record and lower interest rates had helped reduce net debt as a percent of GDP, and that the maturity structure of public debt had improved, and argued that both factors had increased fiscal space. Staff acknowledged the progress in improving the structure of public debt, but highlighted that the gross debt to GDP ratio (an indicator that is being monitored by market participants and, in contrast to the authorities' net debt definition, includes the debt associated with on-lending to public banks) had increased moderately in recent years and remains elevated. Staff highlighted the important role that policy lending through public banks had played in building up gross debt and indicated that controlling such lending would have to be an important component of a credible debt reduction strategy. Staff recommended giving greater priority to strengthening the fiscal framework that had served Brazil well in the last decade. To this effect, it advised the authorities to set a target for the primary surplus of the NFPS that allows less discretionary adjustment and that places gross debt back firmly on a downward path.

**30. The authorities restated their commitment to maintain fiscal discipline at the sub-national level.** The mechanisms embedded in the Fiscal Responsibility Law and debt renegotiation contract agreed with the federal government in the late 1990s have helped ensure fiscal discipline of the sub-national governments. Staff encouraged the authorities to maintain these long-standing

### Box 9. Brazil: Basel III Capital Requirements and Estimated Impacts<sup>1</sup>

The Banco Central do Brasil (BCB) has recently published a series of resolutions and circulars implementing Basel III recommendations.<sup>2</sup> The authorities seek to improve the banking sector's ability to absorb losses from shocks and reduce the risk of spillover from the financial sector to real economy. The new rules will go into effect on October 1, 2013, and Brazilian banks will need to build a capital conservation buffer and be subject to the requirement to hold a countercyclical capital buffer (should the authorities determine it is needed) from 2016.<sup>3</sup>

BCB simulations show that banks have strong balance sheet and will be able to comply with the regulatory requirements without the need to raise additional capital over the next years. In a scenario with credit growth and earnings retention based on the average of recent years, no bank will need to raise capital in 2013–16. Over the period 2017–19, some banks may need to raise about R\$15 billion in total, which represents just 2 percent of the total assets in the banking system at end 2012 (R\$697 billion).

**Table 1. Brazil: Minimum Requirements for Regulatory Capital**  
(In percent)

	Basel II	Present in Brazil	Basel III
Common Equity Tier (CET) 1 capital requirement	2	4.7	<b>7.0 – 9.5</b> = minimum (4.5) +conservation buffer(2.5, CB) +countercyclical capital buffer(0 – 2.5, CCB)
Tier 1 capital requirement	4	5.5	<b>8.50 – 11.0</b> = Common Equity Tier 1 (7.0 – 9.5) +Additional Tier 1 (1.5)
Total capital requirement	8	11.0	<b>10.5 – 13.0</b> = Tier 1 minimum (8.5 – 11.0) +Tier 2 minimum (2.0)

**Table 2. Brazil: Phase-in process — Brazil vs. BCBS schedule**  
(In percent)

	2013	2014	2015	2016	2017	2018	2019
Minimum	4.5	4.5	4.5	4.5	4.5	4.5	4.5
+CB	0	0	0	0.625	1.25	1.875	2.5
+CCB	0	0	0	0 – 0.625	0-1.25	0 – 1.875	0 – 2.5
= CET 1	4.5	4.5	4.5	5.125 – 5.75	5.75 – 7.0	6.375 – 8.25	7.0 – 9.5
+Additional Tier 1	1.0	1.0	1.5	1.5	1.5	1.5	1.5
= Tier 1	5.5	5.5	6.0	6.625 – 7.25	7.25 – 8.5	7.875– 9.75	8.5 – 11.0
+ Tier 2	5.5	5.5	5.5	3.875	3.25	2.625	2.0
= Total	11.0	11.0	11.0	10.5 – 11.125	10.5 – 11.75	10.5 – 12.375	10.5 – 13.0

Note: Cells with green color denote the period that Brazil is ahead of (more stringent than) the BCBS implementation schedule.

<sup>1</sup> Prepared by Heedon Kang and Katharine Seal (MCM).

<sup>2</sup> Four resolutions by the National Monetary Council and fifteen circulars by the BCB were released in March 1, 2013 (<http://www.bcb.gov.br/pt-br/Paginas/banco-central-implanta-recomendacoes-de-basileia-iii-1-3-2013.aspx>).

<sup>3</sup> Setting the appropriate level of countercyclical capital buffer is a complex exercise. The Basel Committee has suggested the use of a credit-to-GDP gap indicator, which assesses the growth of the credit-to-GDP ratio and whether it deviates significantly from its long-term trend. The BCB has noted that it will use the gap indicator as one of several variables to be considered. The BCB has also acknowledged that the decision of when to activate or disable the countercyclical buffer is crucial for the tool to produce the desired effect and will require continuous monitoring of all the indicators of systemic risk.

### Box 9. Brazil: Basel III Capital Requirements and Estimated Impacts (concluded)

**The revised Brazilian law allows Deferred Tax Assets (DTAs) derived from timing differences relative to loan loss provisioning to be included in common equity Tier 1 (CET 1) capital.**<sup>4,5</sup> Under the Basel III accord, DTAs arising from timing differences relying on future profitability can normally be recognized as CET 1 capital only up to 10 percent, with any remaining amount being fully deducted.<sup>6</sup> However, following the Italian model, under special circumstances, DTAs arising from timing differences relative to loan loss provisioning can now be converted into “deemed credits” and become direct claims on the government which can be drawn regardless of the existence of future profitability. As the DTAs are no longer contingent claims and do not rely on the entity remaining a going concern, Basel III does not require such credits to be deducted from the CET1 capital.<sup>7</sup> As a result of the legal change, Brazilian banks can claim back their DTAs relative to loan loss provisioning in cases of fiscal loss, bankruptcy or extrajudicial liquidation. The costs of the legal change are estimated in R\$2.84 billion over the 2014–16 period (R\$851 million in 2014, R\$945 million in 2015, and R\$1.04 billion in 2016) and are acknowledged in the budget, unlike the Italian model which has not allowed for these claims in its budget. The overall impact is to protect the capitalization of the Brazilian banks and to strengthen their balance sheets with the explicit government guarantee for such DTAs, although no deduction of the DTAs lowers overall quality of the CET 1 capital.

**Regulation does not require investments in affiliated insurance companies to be deducted from the CET 1 capital.** The BCB requires the deduction of the insurance company’s minimum regulatory capital requirements, but any “excess” capital investment beyond the regulatory minimum is not required to be deducted. This treatment is not consistent with Basel recommendations that require the full deduction. However, it is recognized that the simple full deduction, following the Basel recommendations, would have a punitive impact on the capital of a bank holding an insurance subsidiary, which is a common structure in Brazil. In addition to the deduction of minimum regulatory capital requirements, the parent must hold capital in respect of the risk weighted assets its insurance subsidiaries. Due to this feature, the authorities note that, depending on the mix of assets held by the insurance subsidiary, the treatment may be more conservative than the simple full deduction in some cases. However, the subsidiary would have the ability to manage its asset profile and consequently affect the capital held by the parent.

**The BCB estimates that the impact of new regulations on the credit supply in Brazil would be neutral.** Brazilian banks have high levels of reserves, liquidity and capital, and full compliance with the recommended schedule will help reduce the borrowing cost and expand access to external sources. The phase-in process will allow any adjustment needed, while the publication of the resolutions and circulars will reduce regulatory uncertainty. Banks and rating agencies have signaled that they are well prepared to adopt Basel III capital requirements.

<sup>4</sup> Provisional measure (Medida Provisória #608) passed on February 28, 2013.

<sup>5</sup> Brazilian banks accumulate sizable DTAs because the BCB requires banks to build up expected loss provisions for all loans overdue more than 15 days and 100 percent provision for nonperforming loans more than 180 days, but the tax revenue agency in Brazil is conservative in recognizing losses, allowing the recognition of nonperforming loans only after two years from the starting day of judicial procedures to recover the credit. In addition, the BCB requires 100 percent provision for any losses due to other judicial processes, while tax laws only recognizes these losses when due.

<sup>6</sup> According to International Accounting Standard, DTAs are the amounts of income taxes recoverable in future periods in respect of: deductible temporary differences, the carry-forward of unused tax losses, and the carry-forward of unused tax credits. Temporary differences arise when an expense is immediately booked under accounting standards, but can only be fiscally deducted in future years; the amount of taxes that should be paid due to the temporary non-deductibility of the expense generates DTAs.

<sup>7</sup> The size of DTAs from loan loss provisioning in Brazil is estimated to be approximately R\$ 64 billion, which amounts to 16 and 1 percent of Brazilian banks’ Tier 1 capital and total assets respectively as of end-2012.



mechanisms, and to retain cross-compensation with the federal government to meet the primary target for the nonfinancial public sector.

**31. The authorities would like public banks to continue playing an important role in the provision of long-term financing to the private sector.** They indicated that public banks are expected to retain a major role in the financing of infrastructure and energy concessions. Accordingly, large transfers from the Treasury to public banks are envisaged to continue in coming years, and taper down only gradually over the medium term. Staff indicated that, in some cases, public banks may be important to complete “missing markets,” (for example, by providing long term financing for smaller companies without market access), but pointed to evidence of competition with private bank lending.

#### **D. Domestic Demand Rebalancing and Boosting Long-Term Growth**

**32. Programs aimed at boosting investment in infrastructure and energy are the centerpiece of the government’s efforts to increase potential output growth.** The authorities cited progress in passing legislation paving the way for increased private participation in the expansion and management of ports, recent airport concessions, and upcoming concessions aimed at increasing road capacity along major arteries. Other recent advances include the successful auction of oil exploration rights to 20 domestic and multinational energy companies. Staff welcomed these developments and agreed that undertaking those investments, with appropriate transfer of risks to the private sector, should contribute to upgrade the country’s capital stock and raise productivity. This would be essential to boost potential growth, especially considering that demographic trends would continue to moderate labor force growth.

**33. The authorities concur on the pressing need to increase the investment ratio, and considered that it can largely be financed with foreign saving, particularly in the form of FDI.** They noted that Brazil’s net foreign asset position had improved in recent years, in part because FDI now represents a larger share of foreign liabilities. The expansion of infrastructure and the ensuing alleviation of critical bottlenecks is expected to generate a large payoff in terms of growth potential, while the investment in the energy sector is anticipated to improve Brazil’s external position over the medium term. Staff agreed that external vulnerabilities appear moderate at present and that there is some space to rely on foreign saving for a few more years. At the same time, staff noted that a higher domestic saving rate was needed to support the higher rate of investment over the medium term and keep external vulnerabilities in check. Last year’s public pension reform marks an initial yet important step towards raising domestic savings.<sup>11</sup>

**34. The real exchange rate is moderately overvalued, hindering competitiveness, but the authorities saw room for a larger current account deficit if it was driven by higher investment.**

<sup>11</sup> The public pension reform reduced about ½ percentage point of GDP from the about 7 percentage point of GDP long-term deterioration in the deficit of the social security system that was projected before the reform (IMF Country Report No. 12/191).



The authorities concurred that the *real* overvaluation had been a factor behind the weak investment and the deteriorating external position. However, they were rather sanguine about the estimated gap between the existing current account deficit and the norm indicated by the EBA, because they saw it as reflecting higher investment largely financed by FDI. Staff stressed that a range of indicators pointed to a significant deterioration in competitiveness, notably the large and sustained rise in unit labor costs, and that broad and sustained reform efforts were necessary to restore it. In addition to alleviating pressing infrastructure bottlenecks, these efforts would have to include mobilizing domestic savings (public and private) and reviewing the minimum wage adjustment mechanism to keep unit labor costs in check and improve the investment climate.

**35. The authorities considered that recent tax cuts and reduced energy prices were key to improve business conditions and the investment climate, but staff underscored the importance of broad reforms.** There was a consensus that burdensome taxes and high costs, including energy, have increasingly weighed on investment. The authorities pointed out that recent payroll tax cuts and the lowering of energy tariffs should boost corporate profitability and strengthen incentives to invest. Staff suggested that more fundamental and far-reaching tax reform aiming at simplifying the tax system, lowering tax rates, and reducing the costs of compliance, notably the ICMS (*Imposto de Circulação de Mercadorias e Serviços*) should remain a policy priority.

## STAFF APPRAISAL

**36. During the last decade, Brazil's strong macroeconomic frameworks have contributed to preserve macroeconomic stability, support robust growth, and underpin sustained poverty reduction.** The key pillars of Brazil's macroeconomic frameworks have been the fiscal responsibility law, the inflation targeting regime, and the flexible exchange rate. In addition, a strong prudential framework has underpinned a sound financial sector that withstood well the global financial crisis of 2008–09. The prolonged macroeconomic stability has facilitated the adoption of far-reaching social programs that have produced a remarkable social transformation—in particular, a substantial reduction in poverty and the increase in living standards of large segments of the population.

**37. Brazil's sharp growth slowdown since mid-2011 has reflected binding supply constraints and heightened uncertainty about macroeconomic policies, including excessive fine tuning and stimulus.** In staff's view, this situation calls for a tightening of the policy stance to rebalance demand away from consumption and to restore confidence on the long-standing macroeconomic frameworks. In particular, a steady process of fiscal consolidation, anchored on Brazil's long-standing target for a fiscal primary surplus of 3.1 percent of GDP, would support monetary policy and bolster the recovery in confidence and investment. In addition, a front-loaded monetary tightening will help lower inflation expectations and inertia and limit potential sacrifice effects in terms of activity. More generally, going forward, authorities should assign to monetary policy the main role in aggregate demand management, and focus fiscal policy on rebuilding buffers.

- *The start of decisive monetary tightening is welcome.* The pivotal beginning of the tightening cycle by the central bank is a critical step to contain inflationary pressures. A front-loaded tightening and clear indication of the priority assigned to meeting the target over the relevant horizon will help anchor medium-term inflation expectations, forestall indexation, and contain inflation inertia.
- *The authorities should place higher priority on fiscal consolidation.* A steady decline in the gross debt to GDP ratio will lessen the burden on monetary policy, rebuild fiscal buffers, and enhance confidence in the fiscal framework. The authorities' intention of limiting the use of adjustors to the primary surplus target as well as reducing policy lending in 2013 is welcomed but should not be made contingent on a rapid pace of recovery.
- *The reliance on public banks for demand management and other quasi-fiscal operations should be winded down.* Fiscal policy is more effective when done transparently through the budget and records all actual or potential costs. The envisaged phasing out of policy lending by the authorities is welcome, but the plans to maintain this lending for several more years would continue to increase fiscal risks. The demand management role that has been given to public banks in recent years has resulted in a rapid expansion of their balance sheets and increased gross public debt, creating a potential fiscal burden. A bolder plan to reduce their government-sponsored lending over the coming years would be advisable.

**38. Strengthening Brazil's fiscal framework would require efforts on several fronts, including:**

- *Adhering to a primary surplus target of about 3 percent of GDP that places gross public debt firmly on a downward path.* The primary surplus target of 3.1 percent of GDP, as established in the Budget Guidance Law (without the use of adjustors in normal circumstances or extraordinary operations, and maintaining cross-compensation between the federal government and sub-national governments), would ensure that gross public debt is put firmly back on a downward path.
- *Maintaining fiscal discipline of sub-national governments.* The contribution of subnational governments to the consolidated primary surplus target has declined in recent years, as the rise in current spending has outpaced revenue growth. The long-standing mechanisms to protect fiscal discipline at the subnational level should be preserved.
- *Easing budget rigidities to increase public saving.* Relaxing the budget rigidities that contribute to the high level of public consumption is critical to increase public saving. Modifying the minimum wage indexation mechanism to help contain costs associated with minimum pensions would be a key step.
- *Recognizing contingent fiscal risks.* Contingent risks related to public sector involvement in infrastructure investment and public banks should be more fully quantified and reported in the Fiscal Risks Annex to the annual Budget Guidance Law. Liabilities may arise from a possible deterioration of assets held by public banks, as well as from potential commitments contracted under concession agreements for infrastructure projects.

**39. Ongoing efforts to strengthen financial regulation and supervision are welcome but continued vigilance of potential risks is warranted.** Brazil's financial supervision and banking system remain sound, and the banking system is well placed to implement Basel III. Efforts to strengthen the resolution framework as well as progress in implementing the recommendations from the recent FSAP Update are welcome, but it is important to advance in the full set of the recommendations. Although non-performing loans have declined, risks arising from the past rapid build-up of household credit, in a context of very low unemployment, warrant ongoing vigilance, especially as the likely increase in interest rates may offset some of the recent improvements in debt service capacity. A correction in property prices, although not systemic, could worsen asset quality in public banks due to the rapid expansion of mortgage loans in recent years. Corporate issuance has helped improve balance sheets, but increased leverage in some sectors should be monitored carefully.

**40. The flexible exchange rate should remain the main shock absorber in periods of financial turbulence, and intervention should continue to aim at avoiding excessive volatility.** If global monetary conditions were to tighten unexpectedly and lead to a sudden increase in global risk aversion, the exchange rate should be allowed to depreciate and intervention should be geared at avoiding disorderly market dynamics. On the other hand, if large capital inflow pressures were to re-emerge, the exchange rate should be allowed to appreciate somewhat but be supported by other policies, including some further temporary reserve accumulation and CFMs. Recent increases in tariffs, while consistent with WTO obligations, risk undermining G-20 commitments to avoid trade protectionism.

**41. The authorities' renewed focus on easing supply-side constraints is welcome, but more decisive and comprehensive efforts are needed to enhance productivity and competitiveness and increase potential growth.** Staff agrees that market-based concessions for infrastructure projects (which should adequately transfer risks to the private sector) are likely to increase private investment and bolster business confidence. Increasing the investment to GDP ratio and boosting productivity will be critical to achieve a sustained potential growth rate above the historical average of 3 percent. The increase in investment will have to rely importantly on domestic saving to avoid a buildup of external vulnerabilities. To that end, further pension reform efforts—following last year's important reform of the public pension system—would be an important step.<sup>12</sup> Revising the minimum wage indexation mechanism, together with the efforts to rebalance demand away from consumption, are essential to keep unit labor costs in check and prevent further erosion in competitiveness; this would contribute to bolster the return on capital (particularly in manufacturing) and improve incentives for investment.<sup>13</sup> Other policies should complement these

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<sup>12</sup> See IMF Country Report No. 12/191, Selected Issues Paper Chapter I. Staff analysis suggests that such reforms could increase national saving over the medium term.

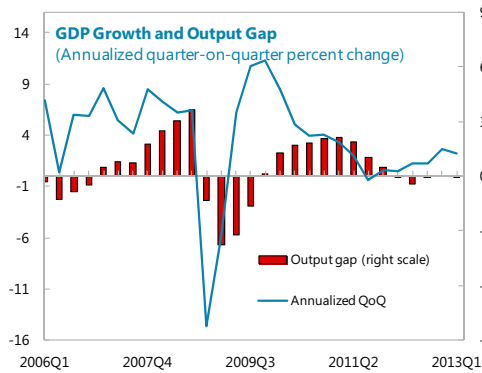
<sup>13</sup> See IMF Country Report No. 12/191, Annex I. Staff identified high and rising unit labor costs, with wage growth outpacing productivity, as a key factor explaining the weak performance of Brazil's manufacturing sector since 2008. Box 5 describes recent developments with the return on equity for Brazil's industrial sector.

efforts to foster private investment, including addressing high and complex taxation (notably the ICMS) and improving business conditions (“custo Brasil”).

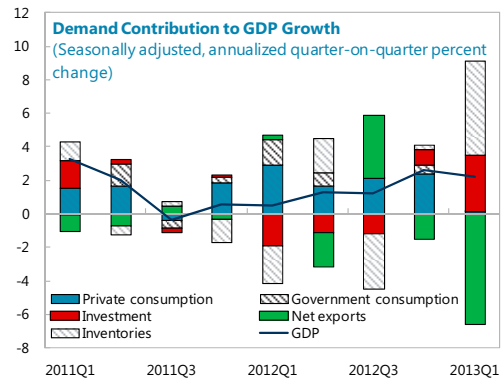
**42. It is recommended that the next Article IV consultation takes place on the standard 12-month cycle.**

**Figure 1. Brazil: Recent Economic Developments**

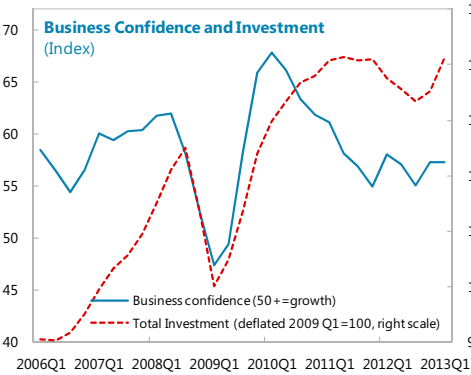
*Growth is recovering gradually with the output gap virtually closed.*



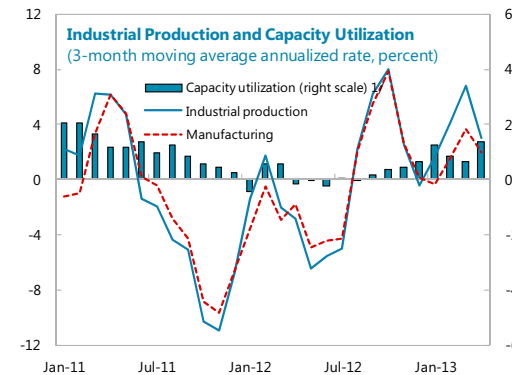
*Investment has begun to recover after a prolonged weakness.*



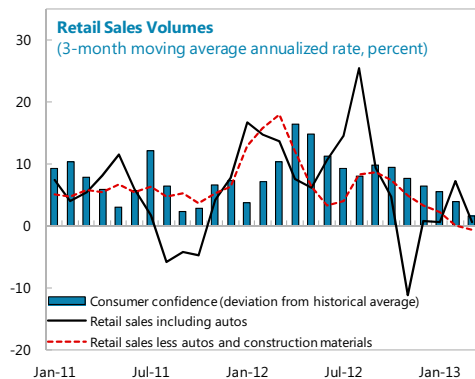
*Weak investment performance during 2011-12 appears to be related with a sharp decline in business confidence.*



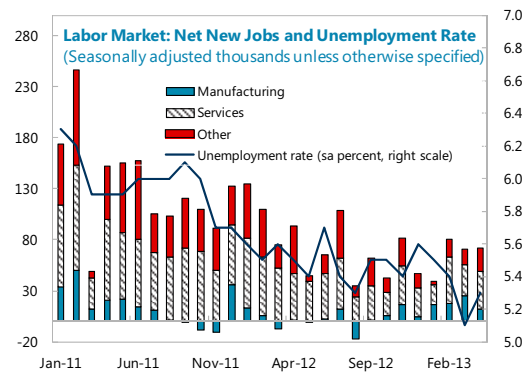
*Industrial production contracted until mid-2012, but seems to be recovering.*



*Household consumption has remained strong, although moderated in Q1 2013.*



*Consumption continues to be well supported by a tight labor market, largely due to the services sector.*

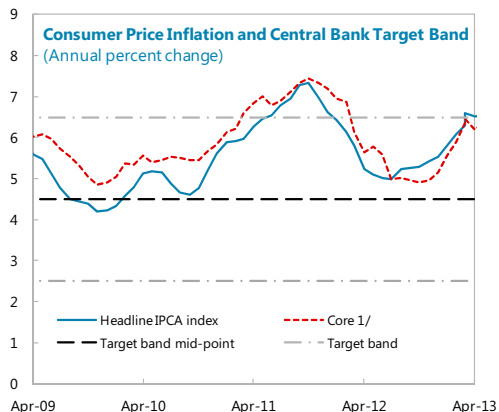


Sources: Haver analytics; IBGE; and Fund staff estimations.

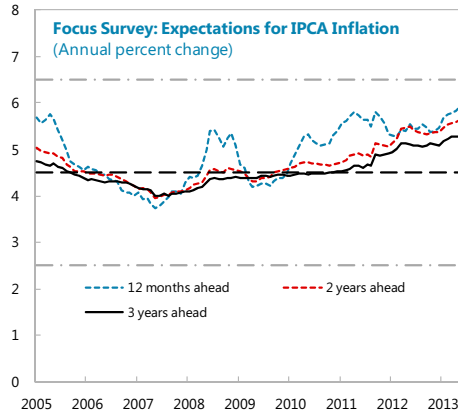
1/ Difference between the current rate and the 10-year average in percentage points.

**Figure 2. Brazil: Inflation**

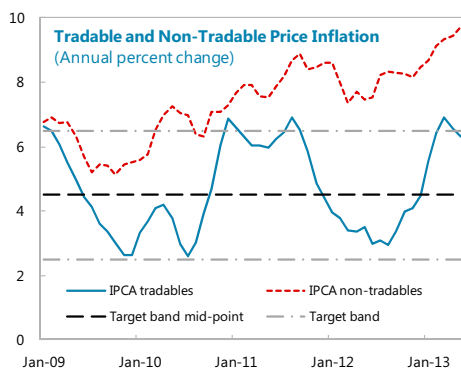
*Inflation has risen since mid-2012 and has reached the upper ceiling of the official target...*



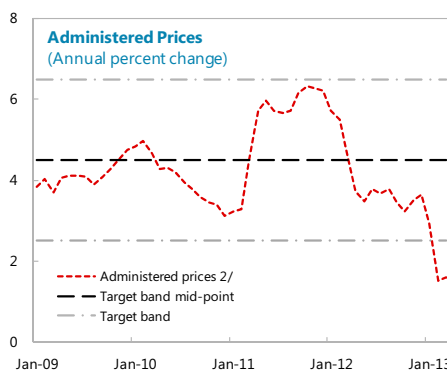
*... and medium-term inflation expectations have been drifting upwards.*



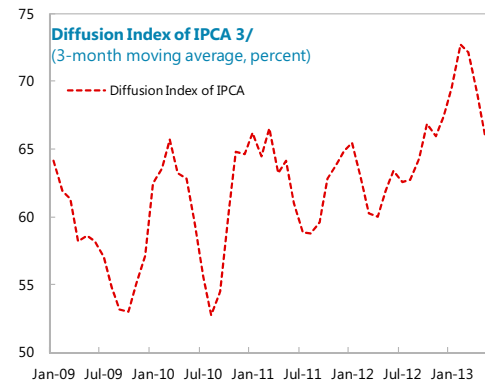
*Non-tradable inflation is running well above the target range, pushed by robust domestic consumption and wage costs.*



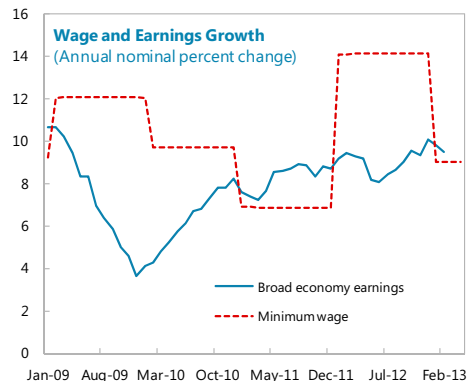
*Administered price inflation declined sharply since early 2012, and is currently below the target floor.*



*Inflation diffusion remains elevated.*



*Wage growth remains strong.*



Sources: Haver analytics; IBGE; and Fund staff calculations.

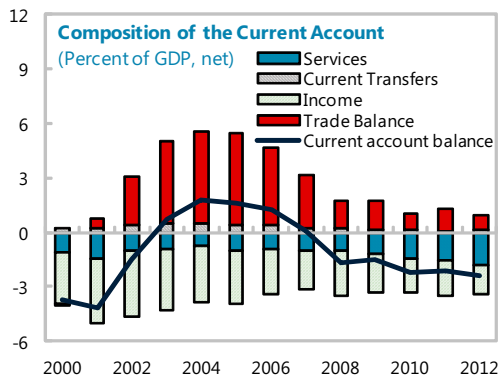
1/ Price index excluding food consumed at home, energy, and regulated and administered prices.

2/ Including the prices of public utility and residential services, public transportation, fuel, health assistance plans, tools and car licences.

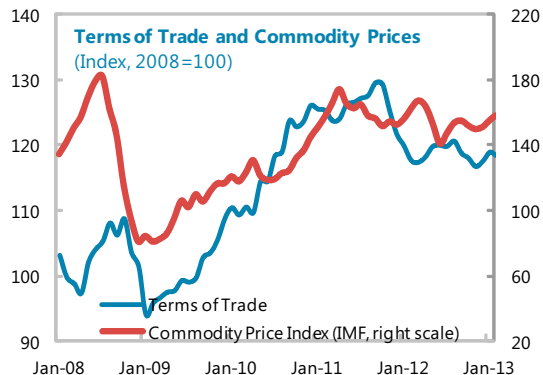
3/ Diffusion index of IPCA is the percentage of items in the IPCA basket that have exhibited an increase in price over the current month.

**Figure 3. Brazil: External Sector**

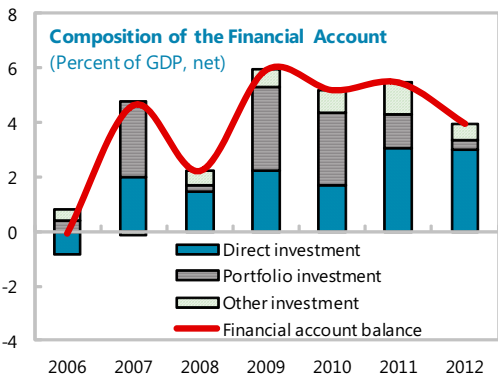
The external current account remains in deficit despite weak growth and strong export prices.



Terms of trade have stabilized at a relatively high level.



Net capital inflows declined in 2012, reflecting lower portfolio flows...



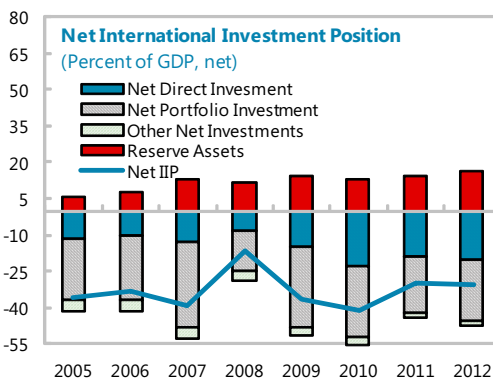
... which resulted in lower reserve accumulation and a weaker real.



Amid high unit labor costs, manufacturing exports have remained stagnant.



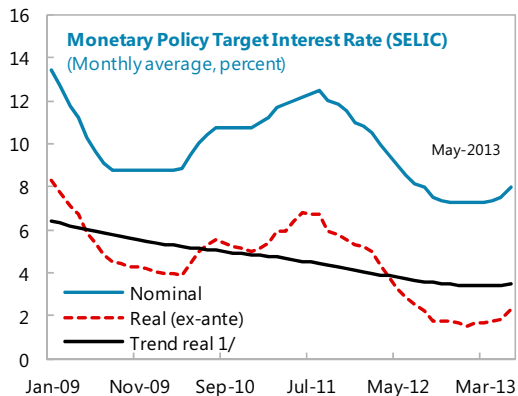
Brazil's net IIP has remained stable.



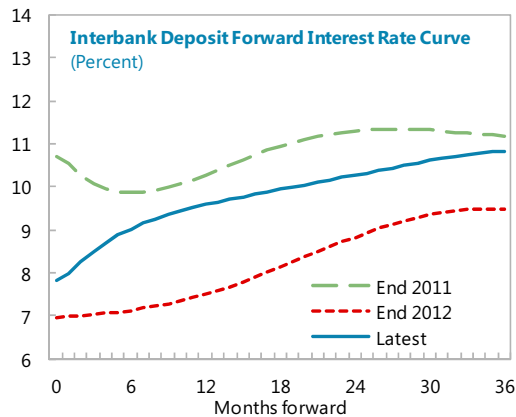
Sources: Central Bank of Brazil; Haver Analytics; and Fund staff calculations.

### Figure 4. Brazil: Macroeconomic Policies

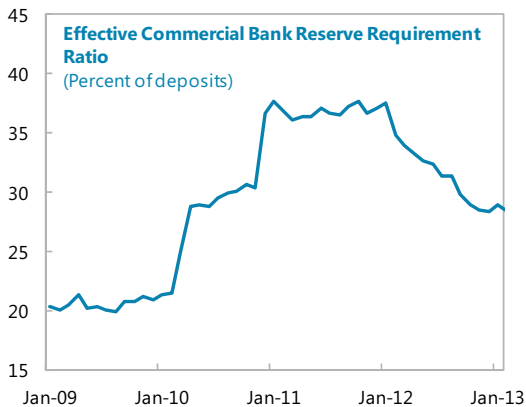
After a substantial easing since mid-2011, the policy rate has been raised by 75 basis points recently.



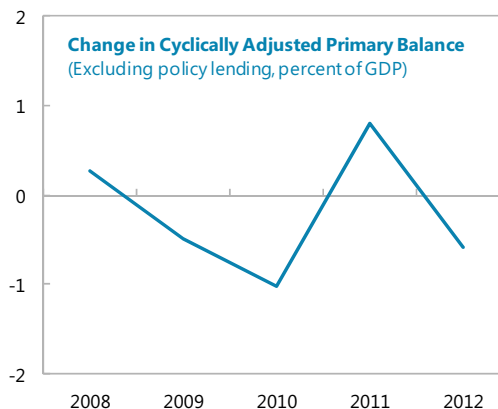
Markets are pricing continued tightening through 2014.



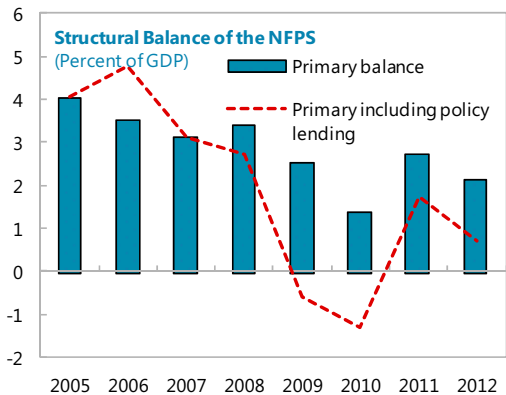
Macroprudential policies, including reserve requirements, also were relaxed in 2012...



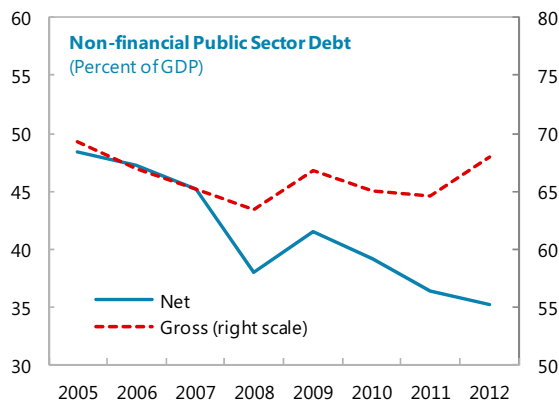
... while fiscal policy turned expansionary.



Policy lending contributed to a deterioration in the primary balance...



... and to the increase in gross public debt.



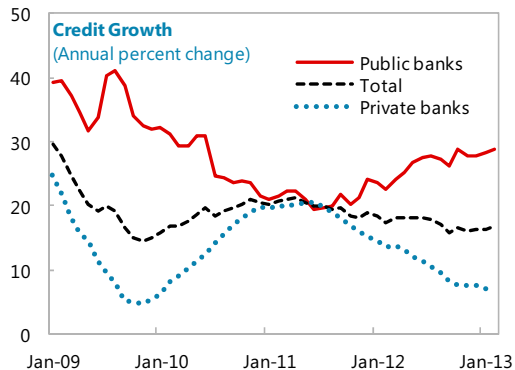
Sources: Central Bank of Brazil; IBGE; Haver Analytics; and Fund staff calculations.

1/ Estimated using a two-sided HP filter that incorporates staff's projections for nominal interest rates over the medium term.

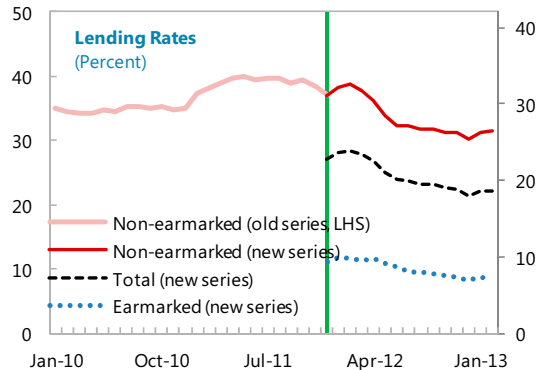


**Figure 5. Brazil: Financial Sector 1/**

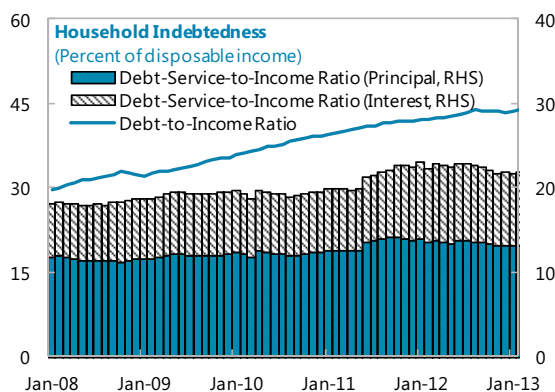
*Credit growth has remained resilient, with public banks offsetting a slowdown in lending by private banks.*



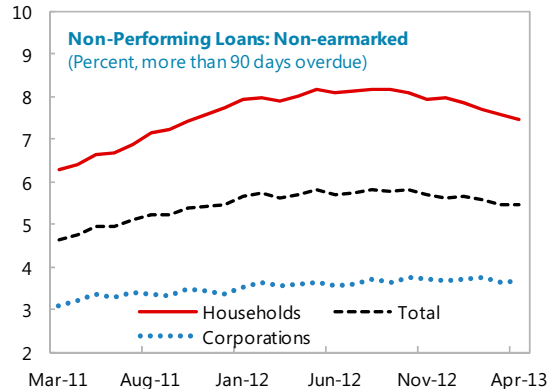
*Lending rates have declined ...*



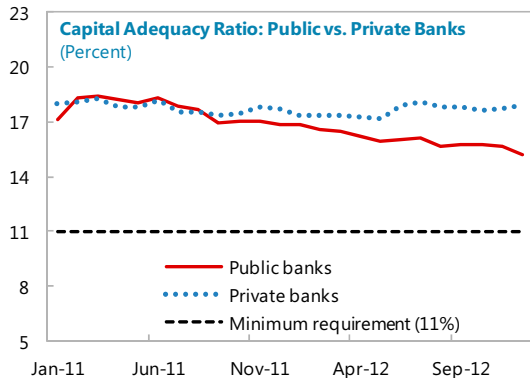
*... helping to stabilize households' debt service ...*



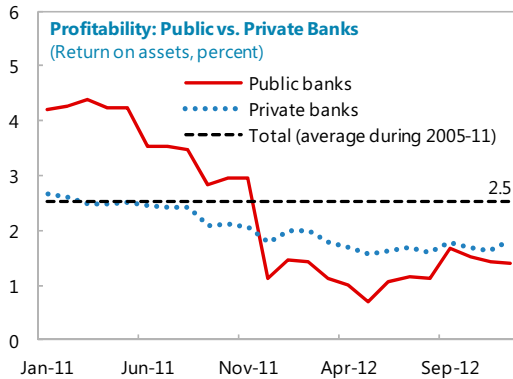
*... and households' NPLs.*



*Capitalization remains high, but rapid credit expansion by public banks has lowered their capital levels ...*



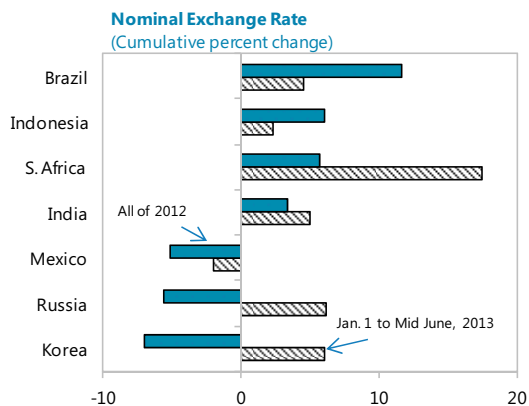
*... and profitability.*



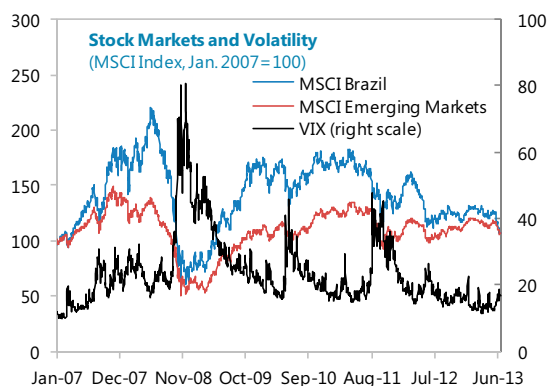
Sources: Central Bank of Brazil; Haver Analytics; CEIC database; Bloomberg; and Fund staff calculations.  
1/In February 2013, the Central Bank of Brazil published new data series on interest rates.

**Figure 6. Brazil: Financial Markets**

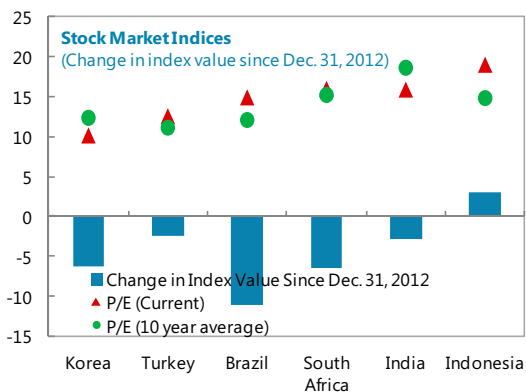
The real depreciated in 2012, and weakened further in the first 5 months of 2013.



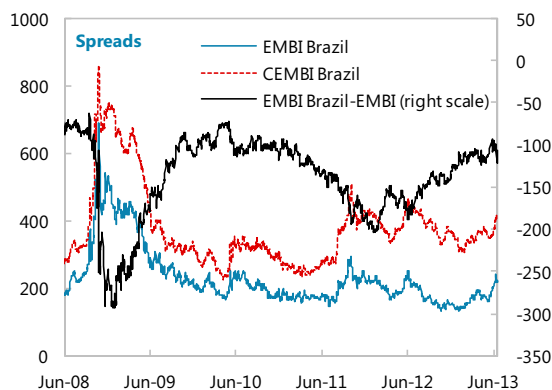
Following a correction in early 2012, the stock market has remained broadly stable.



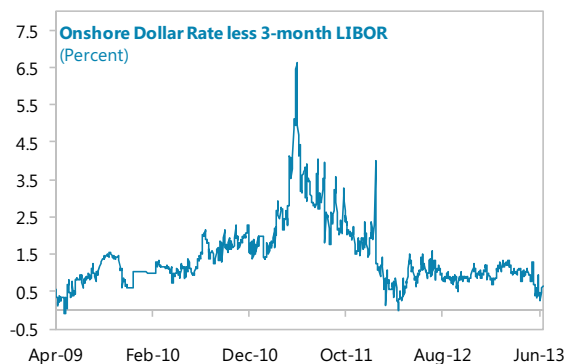
... and close to historical valuations.



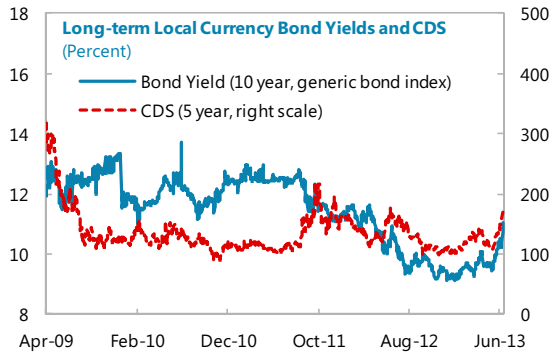
Borrowing spreads have remained below the emerging markets average.



Onshore dollar funding remains unstrained.

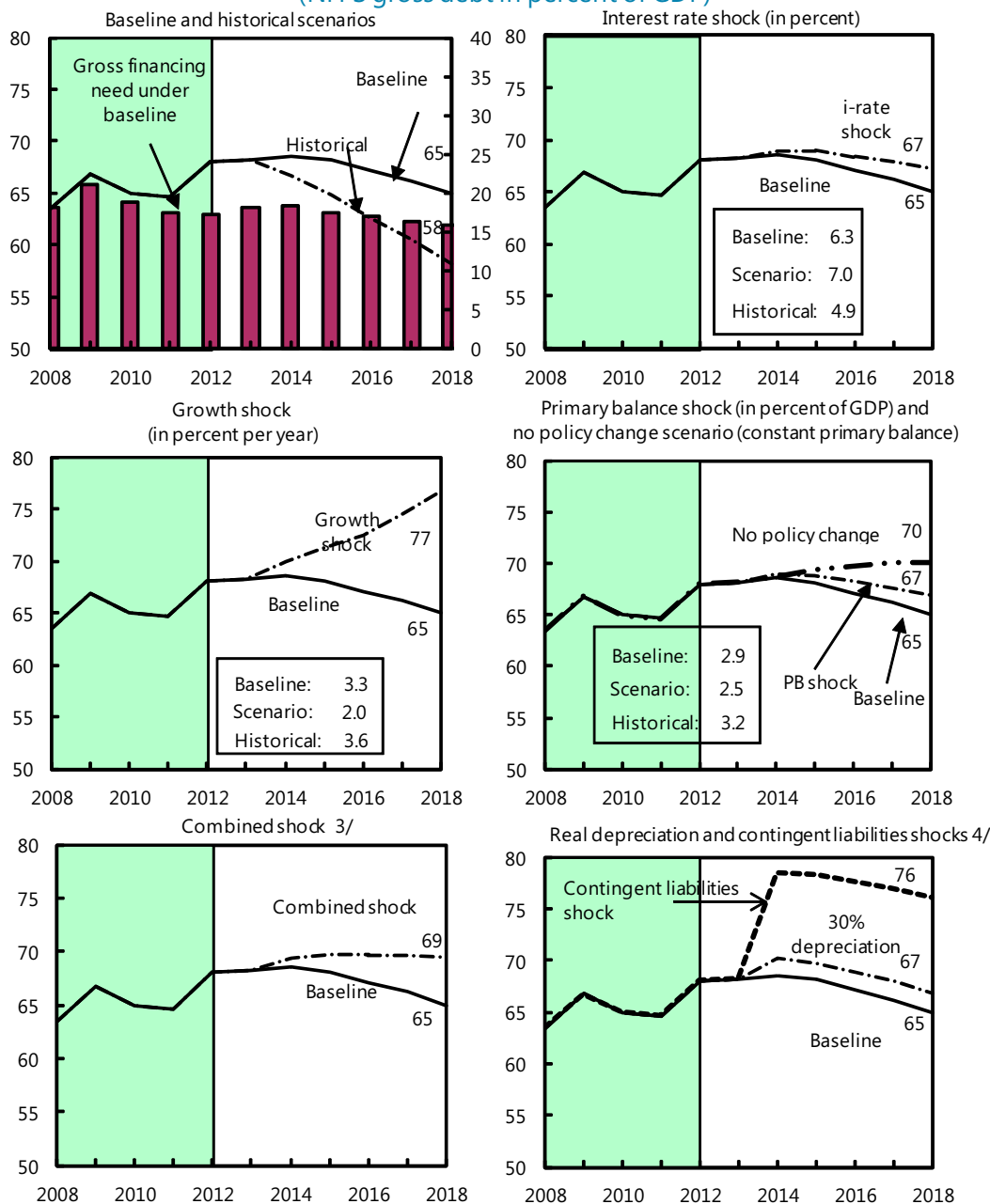


Long-term bond yields and CDS remain low.



Sources: Haver analytics; Bloomberg; Datastream; and Fund staff calculations.

**Figure 7. Brazil: Public Debt Sustainability: Bound Tests 1/ 2/**  
(NFPS gross debt in percent of GDP)



Sources: International Monetary Fund, country desk data, and staff estimates.

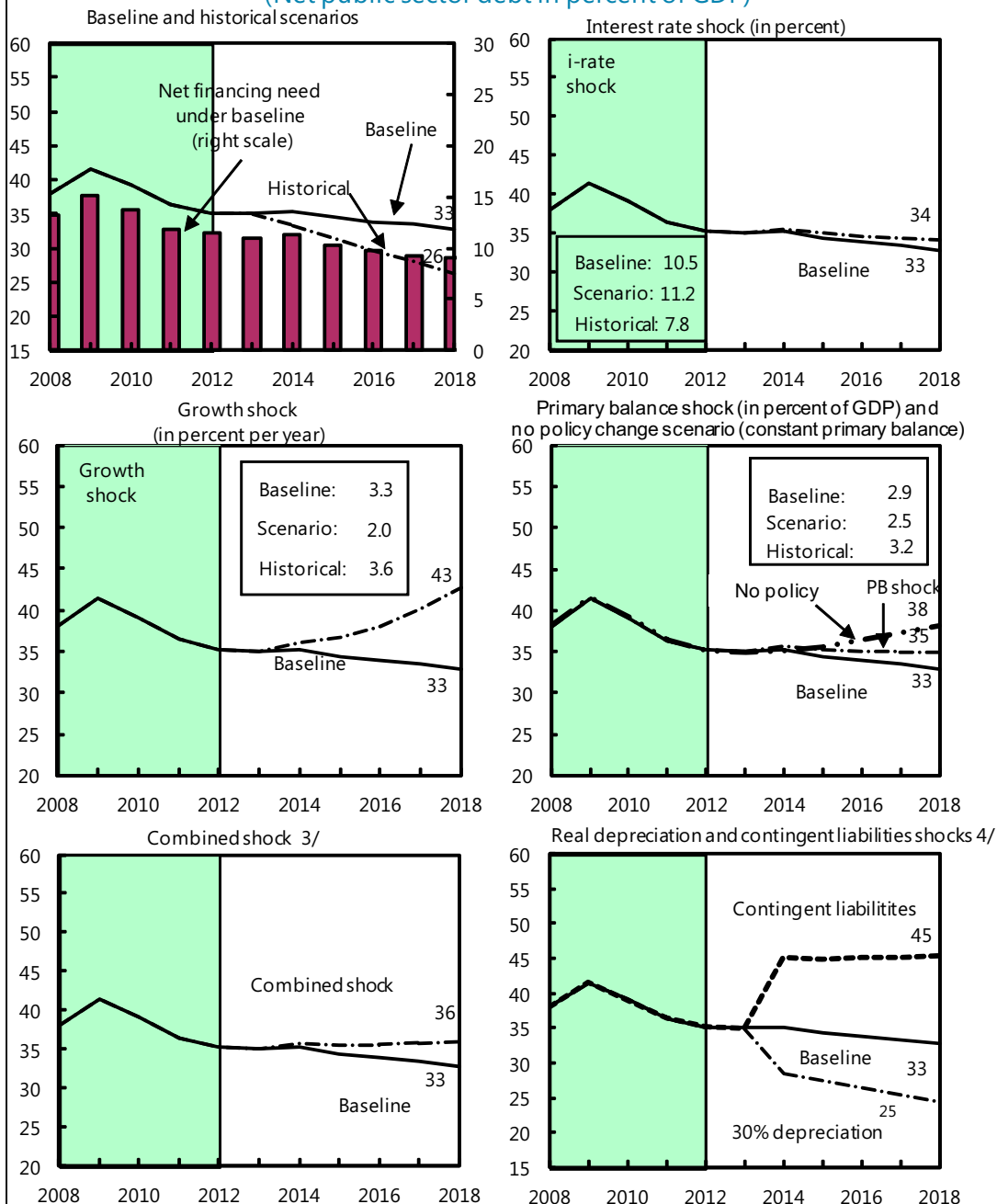
1/ Shaded areas represent actual data. Individual shocks are permanent one-half standard deviation shocks. Figures in the boxes represent average projections for the respective variables in the baseline and scenario being presented. Ten-year historical average for the variable is also shown.

2/ For historical scenarios, the historical averages are calculated over the ten-year period, and the information is used to project debt dynamics five years ahead.

3/ Permanent 1/4 standard deviation shocks applied to real interest rate, growth rate, and primary balance.

4/ One-time real depreciation of 30 percent and 10 percent of GDP shock to contingent liabilities occur in 2014, with real depreciation defined as nominal depreciation (measured by percentage fall in dollar value of local currency) minus domestic inflation (based on GDP deflator).

**Figure 8. Brazil: Public Debt Sustainability: Bound Tests 1/ 2/**  
 (Net public sector debt in percent of GDP)



Sources: International Monetary Fund, country desk data, and staff estimates.

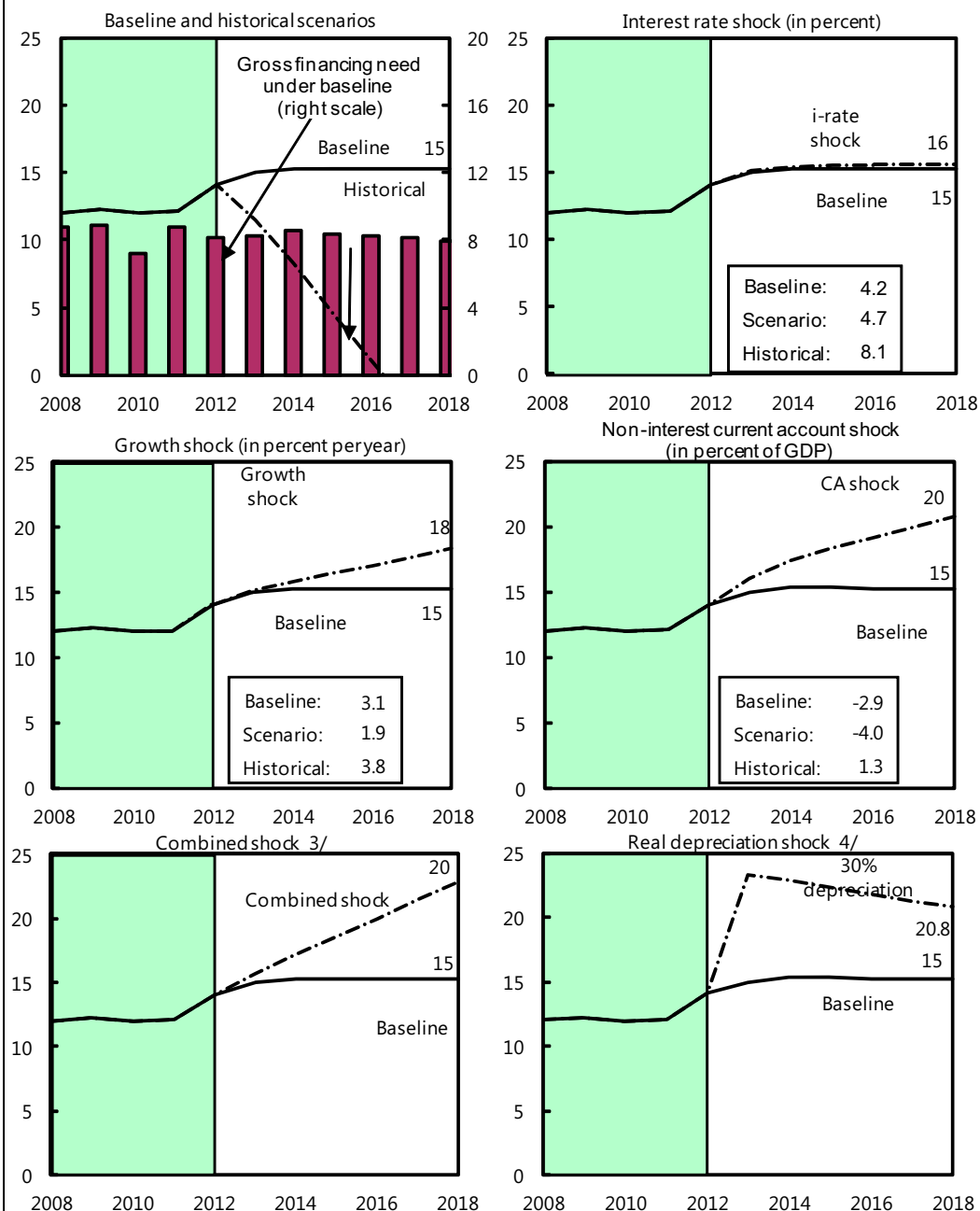
1/ Shaded areas represent actual data. Individual shocks are permanent one-half standard deviation shocks. Figures in the boxes represent average projections for the respective variables in the baseline and scenario being presented. Ten-year historical average for the variable is also shown.

2/ For historical scenarios, the historical averages are calculated over the ten-year period, and the information is used to project debt dynamics five years ahead.

3/ Permanent 1/4 standard deviation shocks applied to real interest rate, growth rate, and primary balance.

4/ One-time real depreciation of 30 percent and 10 percent of GDP shock to contingent liabilities occur in 2014, with real depreciation defined as nominal depreciation (measured by percentage fall in dollar value of local currency) minus domestic inflation (based on GDP deflator).

**Figure 9. Brazil: External Debt Sustainability: Bound Tests 1/ 2/**  
(External debt in percent of GDP)



Sources: International Monetary Fund, Country desk data, and staff estimates.  
 1/ Shaded areas represent actual data. Individual shocks are permanent one-half standard deviation shocks. Figures in the boxes represent average projections for the respective variables in the baseline and scenario being presented. Ten-year historical average for the variable is also shown.  
 2/ For historical scenarios, the historical averages are calculated over the ten-year period, and the information is used to project debt dynamics five years ahead.  
 3/ Permanent 1/2 standard deviation shocks applied to real interest rate, growth rate, and current account balance.  
 4/ One-time real depreciation of 30 percent occurs in 2013.

**Table 1. Brazil: Selected Economic and Social Indicators**

I. Social and Demographic Indicators									
Area (thousands of sq. km)	8,512	Health							
Agricultural land (percent of land area)	31.2	Physician per 1000 people (2010)		1.8					
		Hospital beds per 1000 people (2010)		2.4					
Population		Access to safe water (2010)		98.0					
Total (million) (2012)	196.5	Education							
Annual rate of growth (percent, 2012)	0.8	Adult illiteracy rate (2009)		9.7					
Density (per sq. km.) (2012)	23.1	Net enrollment rates, percent in:							
Unemployment rate (average, 2012)	5.5	Primary education (2005)		94					
		Secondary education (2004)		78					
Population characteristics (2011)		Poverty rate (in percent, 2006)		19.3					
Life expectancy at birth (years)	73	GDP (2012)		R\$4,403 billion					
Infant mortality (per thousand live births)	14			US\$2,253 billion					
Income distribution (2009)		GDP per capita (est, 2012)		US\$11,466					
By highest 10 percent of households	42.9								
By lowest 20 percent of households	2.9								
Gini coefficient (2009)	54.69								
Main export products: Airplanes, metallurgical products, soybeans, automobiles, electronic products, iron ore, coffee, and oil.									
II. Economic Indicators									
				Proj.					
		2008	2009	2010	2011	2012	2013	2014	2018
(Percentage change)									
<b>National accounts and prices</b>									
GDP at current prices		13.9	6.8	16.4	9.9	6.3	8.6	8.9	8.6
GDP at constant prices		5.2	-0.3	7.5	2.7	0.9	2.5	3.2	3.5
Consumption		5.1	4.1	6.3	3.6	3.1	2.0	3.0	3.3
Investment		15.6	-17.7	31.1	3.1	-9.0	8.4	5.5	4.4
Consumer prices (IPCA, end of period)		5.9	4.3	5.9	6.5	5.8	5.8	5.8	4.5
(In percent of GDP)									
Gross domestic investment		20.7	17.8	20.2	19.7	17.6	18.4	18.8	19.7
Private sector		18.5	15.7	17.9	17.4	15.1	16.1	16.5	17.6
Public sector		2.2	2.1	2.3	2.3	2.5	2.3	2.3	2.1
Gross national savings		19.0	16.3	18.0	17.6	15.2	15.3	15.2	16.0
Private sector		20.0	18.2	18.4	19.2	17.4	17.6	17.9	17.7
Public sector		-1.0	-1.9	-0.4	-1.6	-2.2	-2.4	-2.6	-1.7
<b>Public sector finances</b>									
Central government primary balance 1/		2.8	1.3	1.8	2.2	1.7	1.3	1.4	2.2
NFPS primary balance		4.1	2.2	2.5	3.2	2.1	1.9	2.0	3.1
NFPS overall balance		-1.4	-3.1	-2.7	-2.5	-2.8	-2.7	-2.9	-1.8
NFPS overall balance (including net policy lending)		-2.1	-6.2	-5.4	-3.5	-4.2	-3.5	-3.8	-1.9
Public sector net debt		38.0	41.5	39.1	36.4	35.2	35.0	35.2	32.9
NFPS gross debt		63.5	66.8	65.0	64.7	68.0	68.2	68.6	65.0
Of which: Foreign currency linked		5.5	4.0	3.3	3.0	3.3	3.3	3.2	3.1
(Annual percentage change)									
<b>Money and credit</b>									
Base money 2/		-17.4	11.3	131.8	10.8	-13.6	14.8	10.7	8.6
Broad money 3/		17.8	16.3	15.8	18.5	16.6	15.8	15.7	15.5
Bank loans to the private sector		28.1	13.7	23.0	20.2	15.8	16.4	16.0	16.2
(In billions of U.S. dollars, unless otherwise specified)									
<b>Balance of payments</b>									
Trade balance		24.8	25.3	20.1	29.8	19.4	13.0	-2.2	3.4
Exports		197.9	153.0	201.9	256.0	242.6	257.9	257.0	345.8
Imports		-173.1	-127.7	-181.8	-226.2	-223.2	-244.9	-259.2	-342.4
Current account		-28.2	-24.3	-47.3	-52.5	-54.2	-72.3	-84.8	-111.1
Capital account and financial account		29.3	71.3	99.6	109.4	76.7	79.8	85.3	112.8
Foreign direct investment (net)		24.6	36.0	36.9	76.0	68.1	57.7	59.3	69.6
Overall balance		3.0	46.7	48.8	55.7	25.4	7.6	0.5	1.7
Terms of trade (percentage change)		3.5	-3.2	17.0	7.8	-5.8	0.4	-4.9	-0.3
Merchandise exports (in US\$, annual percentage change)		23.2	-22.7	32.0	26.8	-5.3	6.3	-0.4	9.0
Merchandise imports (in US\$, annual percentage change)		43.5	-26.2	42.3	24.5	-1.4	9.7	5.9	8.3
Total external debt (in percent of GDP)		12.0	12.2	12.0	12.1	14.1	15.0	15.3	15.2
<b>Memorandum items:</b>									
Current account (in percent of GDP)		-1.7	-1.5	-2.2	-2.1	-2.4	-3.2	-3.6	-3.7
Gross official reserves		193.8	238.5	288.6	352.0	373.1	380.7	381.2	387.4
REER (annual average in percent; appreciation +) 4/		5.4	0.3	14.4	4.8	-9.0	1.3	...	...
Sources: Central Bank of Brazil; Ministry of Finance; and Fund staff estimates.									
1/ Includes the federal government, the central bank, and the social security system (INSS). Based on 2012 budget, recent announcements by the authorities, and staff projections. Assumes no policy change.									
2/ Currency issued plus required and free reserves on demand deposits held at the central bank.									
3/ Base money plus demand, time and saving deposits.									
4/ Data for 2013 corresponds to the year-to-date change as of April.									

<b>Table 2. Brazil: Balance of Payments</b>							
(In billions of U.S. dollars, unless otherwise indicated)							
	2008	2009	2010	2011	2012	Proj.	
						2013	2018
<b>Current Account</b>	<b>-28.2</b>	<b>-24.3</b>	<b>-47.3</b>	<b>-52.5</b>	<b>-54.2</b>	<b>-72.3</b>	<b>-111.1</b>
Trade balance	24.8	25.3	20.1	29.8	19.4	13.0	3.4
Exports (fob)	197.9	153.0	201.9	256.0	242.6	257.9	345.8
Imports (fob)	-173.1	-127.7	-181.8	-226.2	-223.2	-244.9	-342.4
Nonfactor services, net	-16.7	-19.2	-30.8	-37.9	-41.0	-46.6	-72.2
Income, net	-40.6	-33.7	-39.5	-47.3	-35.4	-41.6	-45.8
<i>Of which:</i> Interest	-5.7	-7.8	-8.7	-7.9	-7.4	-1.5	-2.2
Profits and dividends	-33.9	-25.2	-30.4	-38.2	-24.1	-34.1	-33.8
Current transfers, net	4.2	3.3	2.9	3.0	2.8	2.9	3.5
<b>Capital and Financial Account</b>	<b>29.3</b>	<b>71.3</b>	<b>99.6</b>	<b>109.4</b>	<b>76.7</b>	<b>79.8</b>	<b>112.8</b>
Capital account	1.1	1.1	1.1	1.6	1.5	1.4	0.5
Financial account 1/	28.3	70.2	98.5	107.8	75.2	78.4	112.8
Medium- and long-term capital	36.9	96.5	111.5	135.7	89.5	85.7	111.1
Direct investment, net	24.6	36.0	36.9	76.0	68.1	57.7	69.6
Foreign	45.1	25.9	48.4	66.7	65.3	61.5	75.6
Brazilian	-20.5	10.1	-11.5	9.3	2.8	-3.8	-6.0
Portfolio investment, net	3.5	50.5	56.4	31.2	8.2	14.6	25.2
Other investment, net	8.8	10.0	18.2	28.6	13.1	13.4	16.3
Commercial credit	0.5	-1.0	-0.5	-1.2	-0.5	-0.3	0.2
Loans and other	8.3	7.1	18.7	29.8	13.6	13.7	16.1
<i>Of which:</i> Monetary authority	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Short-term capital	-8.6	-26.3	-13.0	-27.9	-14.3	-7.3	1.2
<b>Errors and Omissions</b>	<b>1.8</b>	<b>-0.3</b>	<b>-3.5</b>	<b>-1.3</b>	<b>3.0</b>	<b>0.0</b>	<b>0.0</b>
<b>Overall Balance</b>	<b>3.0</b>	<b>46.7</b>	<b>48.8</b>	<b>55.7</b>	<b>25.4</b>	<b>7.6</b>	<b>1.7</b>
Memorandum Items:							
Gross reserves (eop) 1/ 2/							
In billions of U.S. dollars	193.8	238.5	288.6	352.0	373.1	380.7	387.4
Net international reserves (eop) 1/ 2/							
In billions of U.S. dollars	193.8	238.5	288.6	352.0	373.1	380.7	387.4
In percent of short-term debt (residual maturity)	235.5	314.6	269.8	394.6	474.3	484.0	490.3
Current account (in percent of GDP)	-1.7	-1.5	-2.2	-2.1	-2.4	-3.2	-3.7
Trade balance (in percent of GDP)	1.5	1.6	0.9	1.2	0.9	0.6	0.1
Merchandise exports (in percent of GDP)	12.0	9.4	9.4	10.3	10.8	11.3	11.6
Merchandise imports (in percent of GDP)	-10.5	-7.9	-8.5	-9.1	-9.9	-10.7	-11.4
Export volume (yoy change, in percent)	-2.5	-10.8	9.5	2.9	-0.3	3.3	8.6
Import volume (yoy change, in percent)	17.6	-17.5	38.2	8.9	-2.3	7.1	7.6
Export price index (yoy change, in percent)	26.3	-13.4	20.5	23.2	-4.9	2.9	0.6
Import price index (yoy change, in percent)	22.0	-10.5	3.0	14.3	0.9	2.4	1.1
Terms of trade (yoy change, in percent)	3.5	-3.2	17.0	7.8	-5.8	0.4	-0.3
Oil price (Brent blend; US\$ per barrel)	97.0	61.8	79.0	104.0	105.0	100.1	86.0
Nominal exchange rate (R/US\$, annual average)	1.83	2.00	1.76	1.67	1.95	...	...
REER (annual average in percent; appreciation +) 3/	5.4	0.3	14.4	4.8	-9.0	1.3	...
GDP in billions of U.S. dollars	1,654	1,622	2,143	2,475	2,253	2,292	2,992
Sources: Central Bank of Brazil; and Fund staff estimates and projections.							
1/ Excludes intercompany debt under direct investment.							
2/ Historical numbers include valuation changes.							
3/ Data for 2013 corresponds to the year-to-date change as of end of April.							

Table 3. Brazil: Main Fiscal Indicators

(In percent of GDP, unless otherwise indicated)

	2009	2010	2011	2012	Proj.					
					2013	2014	2015	2016	2017	2018
<b>FEDERAL GOVERNMENT 1/</b>										
<b>Nonfinancial revenue 2/</b>	<b>22.8</b>	<b>24.4</b>	<b>23.9</b>	<b>24.1</b>	<b>23.4</b>	<b>23.3</b>	<b>23.4</b>	<b>23.4</b>	<b>23.4</b>	<b>23.4</b>
Revenue administered by SRF	14.1	14.1	15.2	14.7	14.4	14.4	14.4	14.5	14.5	14.5
PIT	2.5	2.3	2.6	2.7	2.7	2.7	2.7	2.7	2.7	2.7
CIT	4.4	4.1	4.5	4.2	4.2	4.2	4.2	4.2	4.2	4.2
Indirect Taxes	6.3	6.7	6.9	6.8	6.5	6.5	6.5	6.6	6.6	6.6
Trade taxes	0.5	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Other	0.4	0.4	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Social security contributions	5.6	5.6	5.9	6.3	6.0	5.8	6.0	6.0	6.0	6.0
Other revenue	3.1	4.7	2.8	3.1	3.0	3.0	3.0	3.0	3.0	3.0
<b>Total primary expenditure</b>	<b>21.0</b>	<b>22.6</b>	<b>21.6</b>	<b>22.5</b>	<b>22.1</b>	<b>21.9</b>	<b>21.2</b>	<b>21.3</b>	<b>21.3</b>	<b>21.3</b>
Current expenditures	20.0	20.0	20.3	21.2	20.9	20.7	20.2	20.2	20.2	20.2
Personnel	4.7	4.4	4.3	4.2	4.3	4.3	4.3	4.3	4.3	4.3
Transfers	3.8	3.6	4.0	4.0	3.9	3.9	3.9	3.9	3.9	3.9
Pension benefits	6.9	6.8	6.8	7.2	7.3	7.3	7.2	7.2	7.2	7.2
Other	4.6	5.2	5.2	5.8	5.4	5.2	4.8	4.8	4.8	4.8
Capital expenditures	1.1	2.6	1.3	1.4	1.2	1.2	1.0	1.0	1.1	1.1
<b>Primary balance</b>	<b>1.3</b>	<b>1.8</b>	<b>2.2</b>	<b>1.7</b>	<b>1.3</b>	<b>1.4</b>	<b>2.2</b>	<b>2.2</b>	<b>2.2</b>	<b>2.2</b>
<b>STATES AND MUNICIPALITIES</b>										
<b>Nonfinancial revenue 2/</b>	<b>11.3</b>	<b>11.4</b>	<b>11.6</b>	<b>11.9</b>	<b>11.9</b>	<b>11.9</b>	<b>11.8</b>	<b>11.8</b>	<b>11.8</b>	<b>11.8</b>
Own revenues	8.4	8.5	8.6	8.9	8.9	8.9	8.8	8.8	8.8	8.8
Indirect taxes	7.0	7.0	7.1	7.3	7.3	7.3	7.2	7.2	7.2	7.1
Other	1.5	1.5	1.5	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Transfers from the federal government	2.9	2.9	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
<b>Total primary expenditure</b>	<b>10.8</b>	<b>10.9</b>	<b>10.8</b>	<b>11.5</b>	<b>11.4</b>	<b>11.4</b>	<b>11.0</b>	<b>11.0</b>	<b>10.9</b>	<b>10.9</b>
Current expenditures	9.7	9.6	9.8	10.4	10.3	10.3	10.0	10.0	9.9	9.9
Personnel	5.0	4.9	5.0	5.3	5.3	5.3	5.3	5.3	5.3	5.3
Other	4.7	4.7	4.8	5.0	5.0	5.0	4.7	4.7	4.7	4.7
Capital expenditures and other	1.1	1.3	1.0	1.2	1.1	1.1	1.0	1.0	1.0	1.0
Primary balance of municipalities	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
<b>Primary balance</b>	<b>0.6</b>	<b>0.5</b>	<b>0.8</b>	<b>0.5</b>	<b>0.6</b>	<b>0.6</b>	<b>0.9</b>	<b>0.9</b>	<b>0.9</b>	<b>1.0</b>
<b>PUBLIC ENTERPRISES</b>										
<b>Primary balance</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>-0.1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>NONFINANCIAL PUBLIC SECTOR</b>										
<b>Primary balance</b>	<b>2.2</b>	<b>2.5</b>	<b>3.2</b>	<b>2.1</b>	<b>1.9</b>	<b>2.0</b>	<b>3.1</b>	<b>3.1</b>	<b>3.1</b>	<b>3.1</b>
Primary balance for fiscal target 3/	2.5	3.1	3.2	3.1	3.3	3.1	3.1	3.1	3.1	3.1
Net interest payments of the public sector	5.3	5.2	5.7	4.9	4.6	4.9	4.9	5.0	4.9	4.9
Overall balance	-3.1	-2.7	-2.5	-2.8	-2.7	-2.9	-1.8	-1.9	-1.8	-1.8
Policy lending 4/	3.2	2.7	1.0	1.5	0.8	0.9	0.8	0.5	0.3	0.1
Structural primary balance 5/	2.6	1.4	2.7	2.1	1.9	2.0	3.1	3.1	3.1	3.1
Structural primary balance including policy lending	-0.6	-1.3	1.7	0.7	1.1	1.1	2.3	2.6	2.8	3.0
<b>Memorandum items:</b>										
Growth Acceleration Program	0.6	0.6	0.7	0.9	1.4	1.0	1.0	1.0	1.0	1.0
Net public sector debt 6/	41.5	39.1	36.4	35.2	35.0	35.2	34.4	33.9	33.4	32.9
Gross public sector debt 7/	66.8	65.0	64.7	68.0	68.2	68.6	68.1	67.1	66.2	65.0

Sources: Central Bank of Brazil; Ministry of Finance; Ministry of Planning and the Budget; and Fund staff estimates.

1/ Comprises the central administration; the Central Bank of Brazil; and the social security system.

2/ Excludes proceeds from privatization.

3/ Adjusted for transfers to the Sovereign Wealth Fund in 2008 and withdrawal from it in 2012, and part of Growth Acceleration Program since 2009.

4/ Policy lending to BNDES and other public financial institutions.

5/ Structural primary balance adjusts for output gap and one-off measures in 2009 and 2010 (sale of Eletrobras debt and Petrobras operation).

6/ Includes assets, which mainly comprise international reserves, outstanding liabilities of public financial institutions to the Treasury, financial assets of public enterprises, and assets of the federal labor fund (FAT).

7/ Gross non financial public sector debt consolidates debt of public enterprises with that of general government. Unlike the authorities' definition, gross general government debt comprises treasury bills at the central bank's balance sheet not used under repurchase agreements.



**Table 4. Brazil: Depository Corporations and Monetary Aggregates**

(End of period, in billions of reais)

	2006	2007	2008	2009	2010	2011	2012
I. Central Bank							
<b>Net foreign assets</b>	<b>179.5</b>	<b>317.7</b>	<b>450.9</b>	<b>407.1</b>	<b>474.6</b>	<b>653.8</b>	<b>756.9</b>
Net international reserves	181.0	290.2	438.3	409.4	473.2	659.7	762.5
Other foreign assets (net)	-1.5	27.5	12.7	-2.3	1.5	-5.9	-5.6
<b>Net domestic assets</b>	<b>24.8</b>	<b>-68.9</b>	<b>-245.3</b>	<b>-178.2</b>	<b>55.9</b>	<b>-66.1</b>	<b>-248.9</b>
Net claims on public sector	79.8	84.9	61.8	228.2	292.7	176.4	276.7
Net credit to other depository corporations	-57.4	-153.0	-271.2	-411.5	-227.4	-288.6	-474.1
Other items (net)	-2.4	0.8	35.8	-5.2	9.4	-46.2	51.5
<b>Base money</b>	<b>204.2</b>	<b>248.8</b>	<b>205.6</b>	<b>228.9</b>	<b>530.6</b>	<b>587.7</b>	<b>508.0</b>
Currency issued	85.8	102.9	115.6	131.9	151.1	162.8	187.4
Liabilities to other depository corporations	118.4	146.0	90.0	97.1	379.4	424.9	320.0
Reserve deposits	118.4	43.7	32.0	34.2	55.7	51.5	45.9
Liabilities to other sectors	0.0	0.0	0.0	0.0	0.0	0.0	0.6
II. Depository Corporations 1/							
<b>Net foreign assets</b>	<b>132.2</b>	<b>235.3</b>	<b>343.1</b>	<b>349.6</b>	<b>378.0</b>	<b>488.5</b>	<b>550.4</b>
Net international reserves	181.0	290.2	438.3	409.4	473.2	659.7	762.5
Other foreign assets (net)	-48.8	-55.0	-95.2	-59.8	-95.2	-171.2	-212.1
<b>Net domestic assets</b>	<b>1,242.8</b>	<b>1,396.5</b>	<b>1,578.8</b>	<b>1,885.6</b>	<b>2,210.7</b>	<b>2,579.4</b>	<b>3,027.9</b>
Net claims on public sector	994.6	1,045.8	974.7	1,147.9	1,225.7	1,210.1	1,369.4
Credit to other financial corporations	132.6	204.9	247.6	232.0	294.2	342.7	383.7
Credit to private sector	853.6	1,106.9	1,423.7	1,583.0	2,050.4	2,541.7	3,009.2
Of which: loans to private sector	676.6	880.4	1,127.7	1,282.2	1,577.3	1,895.7	2,194.5
Other items (net)	754.9	978.7	1,092.8	1,130.0	1,418.3	1,585.0	1,838.4
Capital	273.9	335.8	514.4	490.1	613.2	631.2	795.9
Other liabilities excluded from broad money	481.0	642.9	578.4	639.9	805.1	953.8	1,042.5
<b>Broad money (M2) 2/</b>	<b>1,375.0</b>	<b>1,631.8</b>	<b>1,921.9</b>	<b>2,235.2</b>	<b>2,588.7</b>	<b>3,067.9</b>	<b>3,578.3</b>
Currency in circulation	68.8	82.0	92.2	105.6	121.7	131.4	149.6
Demand deposits	107.3	153.6	133.9	147.8	165.2	159.8	182.3
Quasi-money liabilities	1,198.8	1,396.2	1,695.8	1,981.8	2,301.8	2,776.7	3,246.4
(Ratio)							
Multiplier (M2/base money)	6.7	6.6	9.3	9.8	4.9	5.2	7.0
(In percent of GDP)							
Base money	8.6	9.4	6.8	7.1	14.1	14.2	11.5
Broad money (M2)	58.0	61.3	63.4	69.0	68.7	74.0	81.3
M3 3/	58.1	60.8	62.9	68.0	67.6	73.1	79.9
M4 4/	65.8	70.8	73.9	80.3	80.6	85.7	93.2
Financial sector credit to the private sector	36.0	41.6	47.0	48.9	54.4	61.3	68.4
Of which: bank credit	28.6	33.1	37.2	39.6	41.8	45.8	49.8
Memorandum item:							
GDP (in billions of national currency)	2,369	2,661	3,032	3,239	3,770	4,143	4,403

Sources: Central Bank of Brazil; and Fund staff estimates.

1/ Includes the Central Bank of Brazil, commercial banks, multiple banks, financial (money market) investment funds, Banco do Brasil, Federal Savings Bank, state savings bank, investment banks, National Bank for Economic and Social Development (BNDES), state development banks, finance and investment companies, housing credit companies, and mortgage companies.

2/ M2 includes the liabilities to other financial corporations, state and municipal governments, nonfinancial public enterprises, other nonfinancial corporations, and other resident sectors.

3/ Authorities' definition. M3 comprises M2 plus shares in financial investment funds and the net position of the securities used in their purchase agreements transactions with money holding sectors.

4/ Authorities' definition. M4 comprises M3 plus federal, state, and municipal liquid securities held by the public.

Table 5. Brazil: Medium-Term Macroeconomic Framework, Balance of Payments, and External Debt

	2009	2010	2011	Proj.						
				2012	2013	2014	2015	2016	2017	2018
<b>MACROECONOMIC FRAMEWORK</b>										
In percent of GDP, unless otherwise specified										
GDP growth at constant prices (in percent)	-0.3	7.5	2.7	0.9	2.5	3.2	3.0	3.3	3.5	3.5
Consumer prices (IPCA, end of period, in percent)	4.3	5.9	6.5	5.8	5.8	5.8	5.0	4.5	4.5	4.5
Gross domestic investment	17.8	20.2	19.7	17.6	18.4	18.8	19.2	19.4	19.5	19.7
Private sector	15.7	17.9	17.4	15.1	16.1	16.5	17.2	17.3	17.5	17.6
Public sector	2.1	2.3	2.3	2.5	2.3	2.3	2.0	2.0	2.1	2.1
Gross domestic savings	16.3	18.0	17.6	15.2	15.3	15.2	15.6	15.8	15.9	16.0
Private sector	18.2	18.4	19.2	17.4	17.6	17.9	17.5	17.6	17.6	17.7
Public sector	-1.9	-0.4	-1.6	-2.2	-2.4	-2.6	-1.8	-1.8	-1.8	-1.7
External current account balance	-1.5	-2.2	-2.1	-2.4	-3.2	-3.6	-3.6	-3.6	-3.7	-3.7
Central government primary balance	1.3	1.8	2.2	1.7	1.3	1.4	2.2	2.2	2.2	2.2
Consolidated non-financial public sector										
Primary balance	2.2	2.5	3.2	2.1	1.9	2.0	3.1	3.1	3.1	3.1
Overall balance	-3.1	-2.7	-2.5	-2.8	-2.7	-2.9	-1.8	-1.9	-1.8	-1.8
Public sector net debt 1/	41.5	39.1	36.4	35.2	35.0	35.2	34.4	33.9	33.4	32.9
NFPS gross debt 2/	66.8	65.0	64.7	68.0	68.2	68.6	68.1	67.1	66.2	65.0
<b>EXTERNAL DEBT 3/ 4/</b>										
In billions of U.S. Dollars										
<b>Total external debt</b>	<b>198.2</b>	<b>256.8</b>	<b>298.7</b>	<b>316.8</b>	<b>343.2</b>	<b>364.0</b>	<b>384.5</b>	<b>406.6</b>	<b>430.6</b>	<b>455.9</b>
Medium- and long-term	167.2	199.5	258.6	279.3	305.6	326.4	346.9	369.0	393.0	418.3
Nonfinancial public sector	77.2	65.1	57.8	62.9	70.9	77.5	83.6	90.6	98.6	108.2
Private sector	90.1	134.4	200.7	216.4	234.7	248.9	263.3	278.4	294.5	310.2
Short-term	31.0	57.3	40.1	37.5	37.5	37.5	37.5	37.5	37.5	37.5
<b>Medium- and long-term external debt service</b>	<b>61.8</b>	<b>60.4</b>	<b>67.7</b>	<b>66.7</b>	<b>55.3</b>	<b>56.3</b>	<b>59.8</b>	<b>64.6</b>	<b>69.6</b>	<b>78.5</b>
Amortization	45.8	44.8	49.7	49.1	41.1	43.6	45.8	48.0	50.3	51.7
Interest	16.0	15.6	18.0	17.6	14.2	12.6	13.9	16.6	19.3	26.9
In percent of GDP										
<b>Total external debt</b>	<b>12.2</b>	<b>12.0</b>	<b>12.1</b>	<b>14.1</b>	<b>15.0</b>	<b>15.3</b>	<b>15.3</b>	<b>15.3</b>	<b>15.3</b>	<b>15.2</b>
Medium- and long-term	10.3	9.3	10.4	12.4	13.3	13.7	13.8	13.9	13.9	14.0
Nonfinancial public sector	4.8	3.0	2.3	2.8	3.1	3.3	3.3	3.4	3.5	3.6
Private sector	5.6	6.3	8.1	9.6	10.2	10.5	10.5	10.5	10.4	10.4
Short-term	1.9	2.7	1.6	1.7	1.6	1.6	1.5	1.4	1.3	1.3
In percent of gross international reserves										
<b>Medium- and long-term external debt service</b>	<b>25.9</b>	<b>20.9</b>	<b>19.2</b>	<b>17.9</b>	<b>14.5</b>	<b>14.8</b>	<b>15.6</b>	<b>16.8</b>	<b>18.0</b>	<b>20.3</b>
Amortization	19.2	15.5	14.1	13.1	10.8	11.5	12.0	12.5	13.0	13.3
Interest	6.7	5.4	5.1	4.7	3.7	3.3	3.7	4.3	5.0	6.9
<b>Short-term debt</b>	<b>13.0</b>	<b>19.9</b>	<b>11.4</b>	<b>10.1</b>	<b>9.9</b>	<b>9.8</b>	<b>9.8</b>	<b>9.8</b>	<b>9.7</b>	<b>9.7</b>
<b>MEMORANDUM ITEMS:</b>										
Gross reserves (eop) 4/										
In billions of U.S. dollars	238.5	288.6	352.0	373.1	380.7	381.2	381.9	384.0	385.7	387.4
In percent of short-term debt (residual maturity)	314.6	269.8	394.6	474.3	484.0	484.6	485.4	488.2	490.3	492.5
In months of prospective GNFS imports	11.7	11.5	13.9	13.4	13.0	12.2	11.5	10.7	9.9	...
Net international reserves (eop) 4/										
In billions of U.S. dollars	238.5	288.6	352.0	373.1	380.7	381.2	381.9	384.0	385.7	387.4
In percent of short-term debt (residual maturity)	314.6	269.8	394.6	474.3	484.0	484.6	485.4	488.2	490.3	492.5
Short-term debt in percent of total external debt	15.6	22.3	13.4	11.8	10.9	10.3	9.8	9.2	8.7	8.2
Intercompany debt (in billions of U.S. dollars)	79.4	95.1	105.0	124.9	131.7	138.5	145.3	152.1	158.9	165.6
In percent of GDP	4.9	4.4	4.2	5.5	5.7	5.8	5.8	5.7	5.6	5.5
GDP (billion US\$)	1,622	2,143	2,475	2,253	2,292	2,380	2,514	2,662	2,822	2,992
Sources: Central Bank of Brazil; and Fund staff estimates and projections.										
1/ Includes assets, which mainly comprise international reserves, outstanding liabilities of public financial institutions to the Treasury, financial assets of public enterprises, and assets of the federal labor fund (FAT).										
2/ Gross non financial public sector debt consolidates debt of public enterprises with that of general government. Unlike the authorities' definition, gross general government debt comprises treasury bills at the central bank's balance sheet not used under repurchase agreements.										
3/ Excludes intercompany debt under direct investment.										
4/ Historical numbers include valuation changes.										

**Table 6. Brazil: External Vulnerability**

(In billions of U.S. dollars, unless otherwise indicated)

	2004	2005	2006	2007	2008	2009	2010	2011	2012
<b>External indicators</b>									
Exports of GNFS (12-month percent change, US\$)	30.6	23.2	17.1	17.4	23.7	-20.9	29.2	26.0	-4.0
Imports of GNFS (12-month percent change, US\$)	25.8	22.3	23.0	31.0	39.6	-20.7	39.8	23.8	0.6
Terms of trade (12-month percent change)	0.9	0.8	5.3	2.1	3.5	-3.2	17.0	7.8	-5.8
Current account	11.7	14.0	13.6	1.6	-28.2	-24.3	-47.3	-52.5	-54.2
In percent of GDP	1.8	1.6	1.3	0.1	-1.7	-1.5	-2.2	-2.1	-2.4
Capital and financial account	-7.5	-9.5	16.3	89.1	29.3	71.3	99.6	109.4	76.7
<i>Of which:</i> Portfolio investment (net)	-5.2	4.6	4.3	37.9	3.5	50.5	56.4	31.2	8.2
Foreign direct investment (net)	8.3	12.5	-9.4	27.5	24.6	36.0	36.9	76.0	68.1
Fund support (net)	-4.4	-23.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Short-term liabilities of the BCB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Short-term liabilities of commercial banks	16.0	15.7	16.5	27.6	28.2	29.4	51.1	38.1	36.0
Total external debt 1/	201.4	169.5	172.5	193.2	198.4	198.2	256.8	298.7	316.8
In percent of gross reserves	380.4	315.0	200.9	107.1	102.4	83.1	89.0	84.9	84.9
Amortization of external MLT debt (in percent of GNFS exp)	35.4	43.3	34.9	35.6	17.1	25.3	19.2	16.9	17.4
External interest payments (in percent of GNFS exports)	14.0	11.7	10.4	9.3	7.6	8.9	6.7	6.1	6.2
Gross reserves	52.9	53.8	85.8	180.3	193.8	238.5	288.6	352.0	373.1
In months of prospective GNFS imports	6.5	5.4	6.5	9.8	13.3	11.7	11.5	13.9	13.4
In percent of broad money (M2)	5.4	4.6	6.2	11.1	10.1	10.7	11.1	11.5	10.4
In percent of short-term external debt	282.4	286.5	425.1	463.6	531.4	769.7	503.6	876.8	994.1
In percent of short-term external debt by residual maturit	62.4	67.3	92.1	199.6	197.6	255.0	226.7	350.2	414.7
In percent of IMF metric	78.3	70.3	89.6	136.9	177.4	153.0	150.2	181.4	184.9
Exchange rate (R\$/US\$, period average)	2.93	2.43	2.18	1.95	1.83	2.00	1.76	1.67	1.95
REER (annual average in percent; appreciation +)	5.6	22.6	12.1	8.3	5.4	0.3	14.4	4.8	-9.0

Sources: Central Bank of Brazil; Bloomberg; and Fund staff estimates.

1/ Adjusted for reclassification of intercompany loans and recalculation of debt stock.

**Table 7. Brazil: Financial Soundness Indicators, 2008-2012**

(In percent)

	2008	2009	2010	2011	2012
<b>Total banking system</b>					
<b>Capital Adequacy</b>					
Regulatory capital to risk-weighted assets	18.3	19.0	17.7	17.3	16.7
Regulatory Tier 1 capital to risk-weighted assets	14.6	15.3	13.7	13.2	12.0
Capital to assets	10.7	11.3	11.0	10.5	10.2
Gross asset position in financial derivatives to capital	20.1	7.1	7.0	6.0	6.5
Gross liability position in financial derivatives to capital	21.4	10.0	8.4	6.6	7.9
<b>Asset Quality</b>					
Nonperforming loans to total gross loans	3.1	4.2	3.1	3.5	3.4
Provisions to nonperforming loans	188.9	157.3	171.3	155.0	152.0
Government securities to assets	15.4	15.1	13.8	13.2	12.7
<b>Earnings and Profitability</b>					
Return on assets	1.6	2.4	3.2	1.5	1.6
Return on equity	14.3	22.0	28.9	14.0	15.7
<b>Liquidity</b>					
Liquidity assets to short-term liabilities	114.2	118.0	102.4	110.8	109.7
Liquidity assets to total assets	35.2	34.7	32.0	32.1	30.6
Foreign currency denominated liabilities to total liabilities	15.1	8.8	8.9	10.1	10.0
<b>Public banks</b>					
<b>Capital Adequacy</b>					
Regulatory capital to risk-weighted assets	18.0	16.4	17.1	16.8	15.2
Regulatory Tier 1 capital to risk-weighted assets	12.3	11.3	10.9	10.7	9.5
Capital to assets	7.6	7.0	8.9	8.0	7.0
Gross asset position in financial derivatives to capital	3.1	1.1	0.6	0.4	0.7
Gross liability position in financial derivatives to capital	4.9	2.7	2.1	1.5	1.6
<b>Asset Quality</b>					
Nonperforming loans to total gross loans	2.0	2.7	2.0	1.9	1.8
Provisions to nonperforming loans	279.5	203.4	229.0	223.6	211.8
Government securities to assets	21.7	19.6	14.0	13.8	11.7
<b>Earnings and Profitability</b>					
Return on assets	2.2	2.2	4.2	1.1	1.4
Return on equity	27.2	29.9	52.2	13.2	18.7
<b>Liquidity</b>					
Liquidity assets to short-term liabilities	157.1	140.4	151.4	158.2	147.3
Liquidity assets to total assets	33.3	27.9	26.0	25.6	24.5
Foreign currency denominated liabilities to total liabilities	4.6	3.4	4.5	4.4	4.3
<b>Private banks (domestic and foreign)</b>					
<b>Capital Adequacy</b>					
Regulatory capital to risk-weighted assets	18.5	20.6	18.1	17.7	17.9
Regulatory Tier 1 capital to risk-weighted assets	15.7	17.7	15.6	14.8	13.9
Capital to assets	12.6	14.7	12.6	12.4	12.9
Gross asset position in financial derivatives to capital	26.6	9.3	10.3	8.7	9.2
Gross liability position in financial derivatives to capital	27.8	12.7	11.7	9.1	10.8
<b>Asset Quality</b>					
Nonperforming loans to total gross loans	3.7	5.3	3.9	4.6	4.9
Provisions to nonperforming loans	162.5	141.5	151.1	135.0	133.2
Government securities to assets	11.4	11.6	13.6	12.8	13.6
<b>Earnings and Profitability</b>					
Return on assets	1.2	2.6	2.5	1.8	1.8
Return on equity	9.0	19.0	18.5	14.3	14.2
<b>Liquidity</b>					
Liquidity assets to short-term liabilities	98.5	108.7	87.4	95.7	95.5
Liquidity assets to total assets	36.4	39.9	36.5	37.1	35.7
Foreign currency denominated liabilities to total liabilities	22.3	13.2	12.3	14.6	15.1

Sources: Central Bank of Brazil; and Fund staff calculation.

<b>Table 8. Brazil: Statement of Operations of the General Government (GFSM 2001)</b>							
(Percent of GDP)							
	2009	2010	2011	2012	2013	2014	2018
Nonfinancial Revenue	32.8	34.5	34.1	34.6	33.9	33.8	33.8
Taxes	22.6	22.7	23.9	23.7	23.3	23.3	23.3
Social contributions	5.6	5.6	5.9	6.3	6.0	5.8	6.0
Grants	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other revenue	4.6	6.1	4.2	4.7	4.6	4.6	4.6
Primary Expenditure	30.8	32.2	31.1	32.5	32.0	31.8	30.7
Expense	28.7	28.3	28.8	30.0	29.7	29.5	28.6
Compensation of employees	9.7	9.3	9.3	9.5	9.7	9.6	9.5
Use of goods and services	12.1	12.2	12.7	13.2	12.8	12.6	11.9
Consumption of fixed capital	...	...	...	...	...	...	...
Subsidies	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Grants	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Social benefits	6.9	6.8	6.8	7.2	7.3	7.3	7.2
Other expense	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net acquisition of nonfinancial assets	2.1	3.9	2.3	2.5	2.3	2.3	2.1
Acquisitions of nonfinancial assets	...	...	...	...	...	...	...
Disposals of nonfinancial assets	...	...	...	...	...	...	...
Consumption of fixed capital	...	...	...	...	...	...	...
Net Interest Payments	5.3	5.6	6.1	5.4	5.1	5.4	5.2
Gross Operating Balance	-1.2	0.7	-0.8	-0.8	-0.9	-1.1	0.0
Net Operating Balance	...	...	...	...	...	...	...
Net lending (+)/borrowing (-)	-3.3	-3.3	-3.1	-3.3	-3.2	-3.4	-2.1
Net acquisition of financial assets	5.3	4.2	2.0	4.0	...	...	...
Domestic	5.3	4.2	2.0	4.0	...	...	...
Currency and deposits	2.2	1.2	0.6	2.0	...	...	...
Debt securities	0.0	0.0	0.0	0.0	...	...	...
Loans	3.1	3.0	1.4	1.9	...	...	...
Equity and investment fund shares	0.0	0.0	0.0	0.0	...	...	...
Insurance, pensions, and standardized guarantee schemes	0.0	0.0	0.0	0.0	...	...	...
Financial derivatives and employee stock options	0.0	0.0	0.0	0.0	...	...	...
Other accounts receivable	...	...	...	...	...	...	...
Foreign	0.0	0.0	0.0	0.0	...	...	...
Monetary gold and SDRs	0.0	0.0	0.0	0.0	...	...	...
Currency and deposits	0.0	0.0	0.0	0.0	...	...	...
Debt securities	0.0	0.0	0.0	0.0	...	...	...
Loans	0.0	0.0	0.0	0.0	...	...	...
Equity and investment fund shares	0.0	0.0	0.0	0.0	...	...	...
Insurance, pensions, and standardized guarantee schemes	0.0	0.0	0.0	0.0	...	...	...
Financial derivatives and employee stock options	0.0	0.0	0.0	0.0	...	...	...
Other accounts receivable	...	...	...	...	...	...	...
Net incurrence of liabilities	8.6	7.2	5.1	6.9	...	...	...
Domestic	8.6	7.2	5.4	6.7	...	...	...
Currency and deposits	0.0	0.0	0.0	0.0	...	...	...
Debt securities	8.4	7.2	5.4	6.4	...	...	...
Loans	0.3	0.0	-0.1	0.3	...	...	...
Equity and investment fund shares	0.0	0.0	0.0	0.0	...	...	...
Insurance, pensions, and standardized guarantee schemes	0.0	0.0	0.0	0.0	...	...	...
Financial derivatives and employee stock options	0.0	0.0	0.0	0.0	...	...	...
Other accounts payable	...	...	...	...	...	...	...
Foreign	-0.1	0.0	-0.3	0.3	...	...	...
SDRs	0.0	0.0	0.0	0.0	...	...	...
Currency and deposits	0.0	0.0	0.0	0.0	...	...	...
Debt securities	0.3	-0.1	-0.1	0.0	...	...	...
Loans	-0.4	0.1	-0.2	0.3	...	...	...
Equity and investment fund shares	0.0	0.0	0.0	0.0	...	...	...
Insurance, pensions, and standardized guarantee schemes	0.0	0.0	0.0	0.0	...	...	...
Financial derivatives and employee stock options	0.0	0.0	0.0	0.0	...	...	...
Other accounts payable	...	...	...	...	...	...	...

Sources: Central Bank of Brazil; Ministry of Finance; and Ministry of Planning and the Budget.

**Table 9. Brazil: General Government Stock Positions (GFSM 2001)**

(Percent of GDP)

	2007	2008	2009	2010	2011	2012
Stock positions:						
Net worth	...	...	...	...	...	...
Nonfinancial assets	...	...	...	...	...	...
Net financial worth	-44.4	-38.8	-42.5	-39.7	-37.1	-35.9
Financial assets	20.0	24.2	24.0	24.7	27.0	31.5
Domestic	20.0	24.2	24.0	24.7	27.0	31.4
Currency and deposits	18.8	22.2	19.0	17.5	19.0	22.0
Debt securities	0.0	0.0	0.0	0.0	0.0	0.0
Loans	1.2	2.0	5.0	7.2	8.0	9.5
Equity and investment fund shares	0.0	0.0	0.0	0.0	0.0	0.0
Insurance, pensions, and standardized guarantee schemes	0.0	0.0	0.0	0.0	0.0	0.0
Financial derivatives and employee stock options	0.0	0.0	0.0	0.0	0.0	0.0
Other accounts receivable	0.0	0.0	0.0	0.0	0.0	0.0
Foreign	0.0	0.0	0.0	0.0	0.0	0.0
Monetary gold and SDRs	0.0	0.0	0.0	0.0	0.0	0.0
Currency and deposits	0.0	0.0	0.0	0.0	0.0	0.0
Debt securities	0.0	0.0	0.0	0.0	0.0	0.0
Loans	0.0	0.0	0.0	0.0	0.0	0.0
Equity and investment fund shares	0.0	0.0	0.0	0.0	0.0	0.0
Insurance, pensions, and standardized guarantee schemes	0.0	0.0	0.0	0.0	0.0	0.0
Financial derivatives and employee stock options	0.0	0.0	0.0	0.0	0.0	0.0
Other accounts receivable	0.0	0.0	0.0	0.0	0.0	0.0
Liabilities	64.4	63.0	66.6	64.4	64.0	67.4
Domestic	58.6	56.2	60.1	57.0	56.9	59.2
Currency and deposits	0.0	0.0	0.0	0.0	0.0	0.0
Debt securities	54.3	52.0	56.6	54.1	54.1	57.9
Loans	4.3	4.1	3.5	3.0	2.8	1.4
Equity and investment fund shares	0.0	0.0	0.0	0.0	0.0	0.0
Insurance, pensions, and standardized guarantee schemes	0.0	0.0	0.0	0.0	0.0	0.0
Financial derivatives and employee stock options	0.0	0.0	0.0	0.0	0.0	0.0
Other accounts payable	0.0	0.0	0.0	0.0	0.0	0.0
Foreign	5.8	6.8	6.4	7.3	7.1	8.2
Monetary gold and SDRs	0.0	0.0	0.0	0.0	0.0	0.0
Currency and deposits	0.0	0.0	0.0	0.0	0.0	0.0
Debt securities	4.5	5.1	5.3	6.2	6.2	5.2
Loans	1.3	1.8	1.1	1.1	0.9	2.9
Equity and investment fund shares	0.0	0.0	0.0	0.0	0.0	0.0
Insurance, pensions, and standardized guarantee schemes	0.0	0.0	0.0	0.0	0.0	0.0
Financial derivatives and employee stock options	0.0	0.0	0.0	0.0	0.0	0.0
Other accounts payable	0.0	0.0	0.0	0.0	0.0	0.0
Other economic flows:						
Change in net worth from other flows	...	...	...	...	...	...
Nonfinancial assets	...	...	...	...	...	...
Net financial worth	...	...	...	...	...	...
Financial assets	...	...	...	...	...	...
Domestic	...	...	...	...	...	...
Foreign	...	...	...	...	...	...
Liabilities	...	...	...	...	...	...
Domestic	...	...	...	...	...	...
Foreign	...	...	...	...	...	...

Sources: Central Bank of Brazil; and Ministry of Finance.

Table 10. Brazil: NFPS Gross Debt Sustainability Framework, 2010-2018

(In percent of GDP, unless otherwise indicated)

	Actual			Projections						Debt-stabilizing primary balance 9/
	2010	2011	2012	2013	2014	2015	2016	2017	2018	
<b>Baseline: Public sector debt 1/</b>	65.0	64.7	68.0	<b>68.2</b>	<b>68.6</b>	<b>68.1</b>	<b>67.1</b>	<b>66.2</b>	<b>65.0</b>	<b>2.0</b>
<i>Of which: foreign-currency denominated</i>	3.1	2.9	3.2	3.1	3.1	3.0	3.0	2.9	2.9	
Change in public sector debt	-1.8	-0.3	3.4	0.2	0.4	-0.5	-1.0	-0.9	-1.2	
Identified debt-creating flows (4+7+12)	-2.5	-0.4	2.7	0.2	0.5	-0.4	-0.8	-1.1	-1.2	
Primary deficit	-2.5	-3.2	-2.1	-1.9	-2.0	-3.1	-3.1	-3.1	-3.1	
Revenue and grants	37.2	36.6	37.6	36.9	36.8	36.8	36.9	36.9	36.9	
Primary (noninterest) expenditure	34.7	33.4	35.5	35.0	34.8	33.7	33.8	33.8	33.8	
Automatic debt dynamics 2/	-2.7	1.8	3.4	1.3	1.5	1.9	1.8	1.8	1.8	
Contribution from interest rate/growth differential 3/	-2.6	1.4	3.1	1.3	1.5	1.9	1.8	1.8	1.8	
<i>Of which: contribution from real interest rate</i>	1.7	3.0	3.7	2.9	3.5	3.8	3.9	3.9	3.9	
<i>Of which: contribution from real GDP growth</i>	-4.3	-1.6	-0.5	-1.6	-2.0	-1.9	-2.1	-2.2	-2.1	
Contribution from exchange rate depreciation 4/	-0.1	0.4	0.3	...	...	...	...	...	...	
Other identified debt-creating flows	2.7	1.0	1.5	0.8	0.9	0.8	0.5	0.3	0.1	
Privatization receipts (negative)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Recognition of implicit or contingent liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Other (e.g. policy landing and bank recapitalization)	2.7	1.0	1.5	0.8	0.9	0.8	0.5	0.3	0.1	
Residual, including asset changes (2-3) 5/	0.7	0.1	0.6	0.0	-0.1	0.0	-0.2	0.2	0.0	
Public sector debt-to-revenue ratio 1/	174.8	176.4	180.7	184.6	186.1	184.8	181.9	179.3	176.0	
<b>Gross financing need 6/</b>	18.8	17.4	17.2	18.1	18.4	17.4	16.9	16.4	16.0	
In billions of U.S. dollars	387.9	429.7	387.7	414.2	438.2	436.6	450.1	462.5	477.4	
<b>Scenario with key variables at their historical averages 7/</b>				<b>68.2</b>	<b>66.6</b>	<b>64.9</b>	<b>62.7</b>	<b>60.6</b>	<b>58.1</b>	<b>0.8</b>
<b>Scenario with no policy change (constant primary balance) in 2013-2018</b>				<b>68.2</b>	<b>68.7</b>	<b>69.4</b>	<b>69.7</b>	<b>70.0</b>	<b>70.1</b>	<b>2.1</b>
<b>Key Macroeconomic and Fiscal Assumptions Underlying Baseline</b>										
Real GDP growth (in percent)	7.5	2.7	0.9	2.5	3.2	3.0	3.3	3.5	3.5	
Average nominal interest rate on public debt (in percent) 8/	11.9	12.3	11.4	10.7	11.3	11.2	11.4	11.5	11.6	
Average real interest rate (nominal rate minus change in GDP deflator, in percent)	3.7	5.3	6.1	4.8	5.8	6.1	6.4	6.5	6.6	
Nominal appreciation (increase in U.S. dollar value of local currency, in percent)	4.5	-11.2	-8.2	...	...	...	...	...	...	
Inflation rate (GDP deflator, in percent)	8.2	7.0	5.3	6.0	5.5	5.0	5.0	5.0	5.0	
Growth of real primary spending (deflated by GDP deflator, in percent)	12.1	-0.8	5.8	0.9	2.4	-0.3	3.4	3.5	3.4	
Primary deficit	-2.5	-3.2	-2.1	-1.9	-2.0	-3.1	-3.1	-3.1	-3.1	
Sources: Fund staff calculations.										
1/ Non-financial sector gross public debt consolidates debt of public enterprises with that of general government. Unlike the authorities' definition, gross general government debt comprises treasury bills at the central bank's balance sheet not used under repurchase agreements.										
2/ Derived as $[(r - \pi(1+g) - g + ae(1+r))/(1+g+\pi+gr)]$ times previous period debt ratio, with $r$ = interest rate; $\pi$ = growth rate of GDP deflator; $g$ = real GDP growth rate; $a$ = share of foreign-currency denominated debt; and $e$ = nominal exchange rate depreciation (measured by increase in local currency value of U.S. dollar).										
3/ The real interest rate contribution is derived from the denominator in footnote 2/ as $r - \pi(1+g)$ and the real growth contribution as $-g$ .										
4/ The exchange rate contribution is derived from the numerator in footnote 2/ as $ae(1+r)$ .										
5/ For projections, this line includes exchange rate changes.										
6/ Defined as public sector deficit, plus amortization of medium and long-term public sector debt, plus short-term debt at end of previous period.										
7/ The key variables include real GDP growth; real interest rate; and primary balance in percent of GDP.										
8/ Derived as nominal interest expenditure divided by previous period debt stock.										
9/ Assumes that key variables (real GDP growth, real interest rate, and other identified debt-creating flows) remain at the level of the last projection year.										

Table 11. Brazil: Net Public Sector Debt Sustainability Framework 2010-2018

(In percent of GDP, unless otherwise indicated)

	Actual			Projections						Debt-stabilizing primary balance 9/
	2010	2011	2012	2013	2014	2015	2016	2017	2018	
<b>Baseline: Public sector debt 1/</b>	39.1	36.4	35.2	<b>35.0</b>	<b>35.2</b>	<b>34.4</b>	<b>33.9</b>	<b>33.4</b>	<b>32.9</b>	<b>2.0</b>
<i>Of which: foreign-currency denominated</i>	-9.3	-12.8	-13.8	-13.8	-12.9	-12.1	-11.4	-10.6	-9.9	
Change in public sector debt	-2.4	-2.7	-1.2	-0.2	0.2	-0.8	-0.6	-0.5	-0.6	
Identified debt-creating flows (4+7+12)	-2.8	-2.1	-0.5	-0.1	0.1	-0.8	-0.8	-0.9	-0.9	
Primary deficit	-2.5	-3.2	-2.10	-1.9	-2.0	-3.1	-3.1	-3.1	-3.1	
Revenue and grants	37.2	36.6	37.6	36.9	36.8	36.8	36.9	36.9	36.9	
Primary (noninterest) expenditure	34.7	33.4	35.5	35.0	34.8	33.7	33.8	33.8	33.8	
Automatic debt dynamics 2/	-0.3	1.1	1.6	1.8	2.1	2.3	2.3	2.2	2.2	
Contribution from interest rate/growth differential 3/	-0.7	2.2	2.7	1.8	2.1	2.3	2.3	2.2	2.2	
<i>Of which: contribution from real interest rate</i>	2.0	3.2	3.0	2.6	3.1	3.3	3.3	3.3	3.3	
<i>Of which: contribution from real GDP growth</i>	-2.7	-1.0	-0.3	-0.8	-1.0	-1.0	-1.1	-1.1	-1.1	
Contribution from exchange rate depreciation 4/	0.3	-1.1	-1.1	...	...	...	...	...	...	
Other identified debt-creating flows	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Privatization receipts (negative)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Recognition of implicit or contingent liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Other (e.g. policy lending and bank recapitalization)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Residual, including asset changes (2-3) 5/	0.5	-0.6	-0.7	-0.1	0.2	0.0	0.2	0.4	0.3	
Public sector debt-to-revenue ratio 1/	105.3	99.4	93.6	94.7	95.6	93.5	91.8	90.5	88.9	
<b>Gross financing need 6/</b>	13.7	11.9	11.5	11.0	11.3	10.2	9.7	9.3	9.0	
<i>In billions of U.S. dollars</i>	294.6	293.5	259.8	253.1	269.4	256.6	258.4	262.6	268.8	
<b>Scenario with key variables at their historical averages 7/</b>				<b>35.0</b>	<b>33.3</b>	<b>31.4</b>	<b>29.6</b>	<b>28.0</b>	<b>26.1</b>	<b>0.8</b>
<b>Scenario with no policy change (constant primary balance) in 2013-2018</b>				<b>35.0</b>	<b>35.2</b>	<b>35.6</b>	<b>36.3</b>	<b>37.2</b>	<b>38.1</b>	<b>2.3</b>
<b>Key Macroeconomic and Fiscal Assumptions Underlying Baseline</b>										
Real GDP growth (in percent)	7.5	2.7	0.9	2.5	3.2	3.0	3.3	3.5	3.5	
Average nominal interest rate on public debt (in percent) 8/	14.5	16.0	14.2	14.2	15.3	15.2	15.7	15.8	15.8	
Average real interest rate (nominal rate minus change in GDP deflator, in percent)	6.3	9.1	8.8	8.2	9.8	10.2	10.7	10.8	10.9	
Nominal appreciation (increase in U.S. dollar value of local currency, in percent)	4.5	-11.2	-8.2	...	...	...	...	...	...	
Inflation rate (GDP deflator, in percent)	8.2	7.0	5.3	6.0	5.5	5.0	5.0	5.0	5.0	
Growth of real primary spending (deflated by GDP deflator, in percent)	12.1	-0.8	5.8	0.9	2.4	-0.3	3.4	3.5	3.4	
Primary deficit	-2.5	-3.2	-2.1	-1.9	-2.0	-3.1	-3.1	-3.1	-3.1	

Source: Fund staff calculations.

1/ Public sector net debt definition used by the authorities. It comprises federal government (central government, central bank, and social security), states, municipalities, and public enterprises. Public sector assets include central bank international reserves, central bank loans to financial institutions, federal government credit to public financial institutions, and assets of the FAT.

2/ Derived as  $[(r - \pi(1+g) - g + ae(1+r))/(1+g+\pi+g\pi)]$  times previous period debt ratio, with  $r$  = interest rate;  $\pi$  = growth rate of GDP deflator;  $g$  = real GDP growth rate;  $a$  = share of foreign-currency denominated debt; and  $e$  = nominal exchange rate depreciation (measured by increase in local currency value of U.S. dollar).

3/ The real interest rate contribution is derived from the denominator in footnote 2/ as  $r - \pi(1+g)$  and the real growth contribution as  $-g$ .

4/ The exchange rate contribution is derived from the numerator in footnote 2/ as  $ae(1+r)$ .

5/ For projections, this line includes exchange rate changes.

6/ Defined as public sector deficit, plus amortization of medium and long-term public sector debt, plus short-term debt at end of previous period.

7/ The key variables include real GDP growth; real interest rate; and primary balance in percent of GDP.

8/ Derived as nominal interest expenditure divided by previous period debt stock.

9/ Assumes that key variables (real GDP growth, real interest rate, and other identified debt-creating flows) remain at the level of the last projection year.



**Table 12. Brazil: External Debt Sustainability Framework, 2010-2018**

(In percent of GDP, unless otherwise indicated)

	Actual			Projections						Debt-stabilizing non-interest current account 6/ -2.8
	2010	2011	2012	2013	2014	2015	2016	2017	2018	
<b>Baseline: External debt</b>	12.0	12.1	14.1	<b>15.0</b>	<b>15.3</b>	<b>15.3</b>	<b>15.3</b>	<b>15.3</b>	<b>15.2</b>	
Change in external debt	-0.2	0.1	2.0	0.9	0.3	0.0	0.0	0.0	0.0	
Identified external debt-creating flows (4+8+9)	-1.5	-0.8	-2.7	0.1	0.3	0.1	-0.1	-0.2	-1.2	
Current account deficit, excluding interest payments	1.5	1.4	1.6	2.5	3.0	3.0	3.0	3.0	2.8	
Deficit in balance of goods and services	0.5	0.3	1.0	1.5	2.2	2.3	2.3	2.3	2.3	
Exports	10.9	11.9	12.5	13.1	12.6	12.6	12.8	13.0	13.3	
Imports	11.4	12.2	13.5	14.5	14.7	14.9	15.0	15.3	15.6	
Net non-debt creating capital inflows (negative)	-3.6	-2.5	-2.6	-2.6	-2.8	-3.0	-3.2	-3.3	-3.3	
Automatic debt dynamics 1/	0.6	0.3	-1.7	0.2	0.1	0.1	0.1	0.2	-0.7	
Contribution from nominal interest rate	0.9	0.8	0.6	0.5	0.5	0.5	0.6	0.7	0.9	
Contribution from real GDP growth	-0.9	-0.3	-0.1	-0.3	-0.4	-0.4	-0.5	-0.5	-0.5	
Contribution from price and exchange rate changes 2/	0.6	-0.2	-2.2	...	...	...	...	...	-1.1	
Residual, incl. change in gross foreign assets (2-3) 3/	1.3	0.9	4.7	0.8	0.0	-0.1	0.1	0.2	0.0	
External debt-to-exports ratio (in percent)	110.0	101.5	112.2	114.5	121.8	121.1	119.7	117.5	114.4	
<b>Gross external financing need (in billions of US dollars) 4/</b>	154.1	216.8	183.6	188.5	203.5	210.5	218.3	228.6	237.9	
In percent of GDP	7.2	8.8	8.1	5.3	5.0	4.7	4.4	4.1	3.8	
<b>Scenario with key variables at their historical averages 5/</b>				<b>11.4</b>	<b>8.2</b>	<b>4.5</b>	<b>1.1</b>	<b>-2.3</b>	<b>-5.7</b>	<b>-2.8</b>
<b>Key Macroeconomic Assumptions Underlying Baseline</b>										
Real GDP growth (in percent)	7.5	2.7	0.9	2.5	3.2	3.0	3.3	3.5	3.5	
GDP deflator in U.S. dollars (change in percent)	-4.6	1.8	23.0	13.2	10.6	7.6	7.5	7.5	7.5	
Nominal external interest rate (in percent)	7.9	7.0	5.9	4.5	3.7	3.8	4.3	4.7	6.2	
Growth of exports (U.S. dollar terms, in percent)	29.2	26.0	-4.0	6.1	-0.3	6.3	7.0	7.9	8.7	
Growth of imports (U.S. dollar terms, in percent)	39.8	23.8	0.6	9.6	5.2	7.1	6.4	8.1	8.2	
Current account balance, excluding interest payments	-1.5	-1.4	-1.6	-2.5	-3.0	-3.0	-3.0	-3.0	-2.8	
Net non-debt creating capital inflows	3.6	2.5	2.6	2.6	2.8	3.0	3.2	3.3	3.3	
<b>B. Bound Tests</b>										
B1. Nominal interest rate is at historical average plus one standard deviation				15.0	15.4	15.5	15.5	15.6	15.6	-4.3
B2. Real GDP growth is at historical average minus one standard deviations				15.2	15.9	16.4	17.0	17.7	18.4	-3.0
B3. Non-interest current account is at historical average minus one standard deviations				16.0	17.3	18.3	19.1	20.0	20.8	-4.4
B4. Combination of B1-B3 using 1/2 standard deviation shocks				15.7	17.2	18.6	20.0	21.4	22.9	-2.9
B5. One time 30 percent real depreciation in 2006				23.3	22.8	22.3	21.7	21.2	20.8	-4.0

Sources: Fund staff calculations.

1/ Derived as  $[r - g - r(1+g) + ea(1+r)] / (1+g+r+gr)$  times previous period debt stock, with  $r$  = nominal effective interest rate on external debt;  $r$  = change in domestic GDP deflator in US dollar terms,  $g$  = real GDP growth rate,  $e$  = nominal appreciation (increase in dollar value of domestic currency), and  $a$  = share of domestic-currency denominated debt in total external debt.

2/ The contribution from price and exchange rate changes is defined as  $[-r(1+g) + ea(1+r)] / (1+g+r+gr)$  times previous period debt stock.  $r$  increases with an appreciating domestic currency ( $e > 0$ ) and rising inflation (based on GDP deflator).

3/ For projection, line includes the impact of price and exchange rate changes.

4/ Defined as current account deficit, plus amortization on medium- and long-term debt, plus short-term debt at end of previous period.

5/ The key variables include real GDP growth; nominal interest rate; dollar deflator growth; and both non-interest current account and non-debt inflows in percent of GDP.

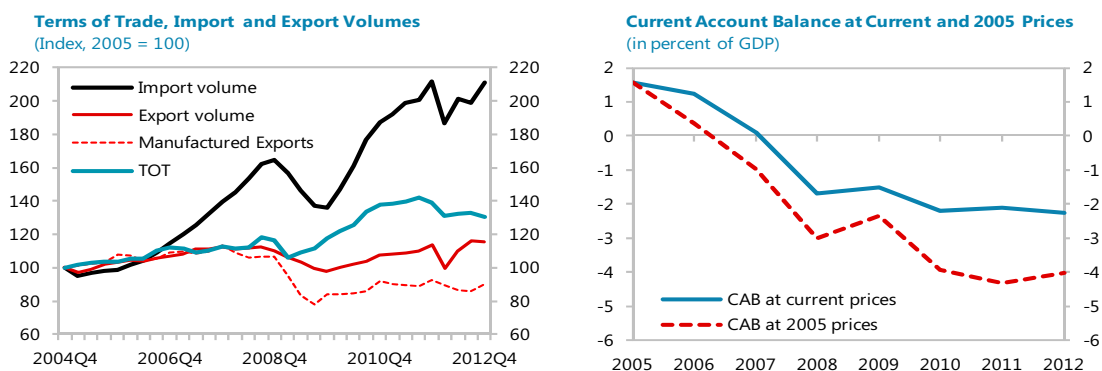
6/ Long-run, constant balance that stabilizes the debt ratio assuming that key variables (real GDP growth, nominal interest rate, dollar deflator growth, and non-debt inflows in percent of GDP) remain at their levels of the last projection year.

## Annex I. Brazil's External Sector Assessment

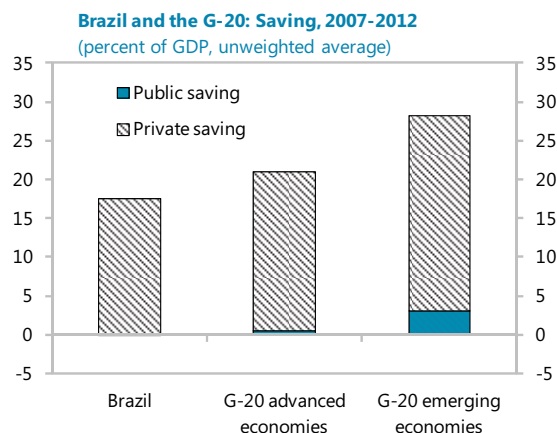
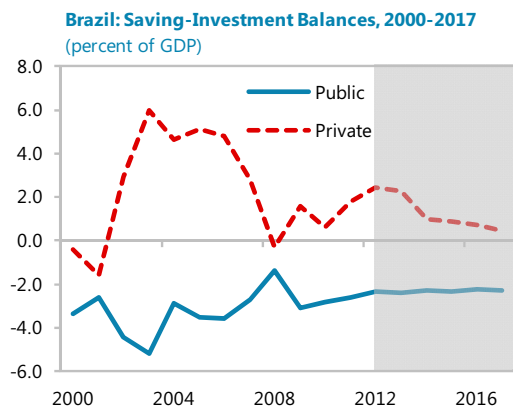
*Brazil's external position appears moderately weaker than implied by medium-term fundamentals and desirable policy settings. Further efforts to increase savings would be needed, including by advancing with pension reform and shifting the structure of public spending away from consumption towards investment. It will be important to maintain a macro policy stance and a policy mix that moderates demand and facilitates rebalancing, along with use of capital flow management measures to manage volatile capital flows.*

### Current Account

**1. Brazil's current account has turned into deficit over the last decade, despite large terms of trade gains.** Import volumes doubled since 2004, supported by strong domestic demand, while export volumes have remained broadly flat. Booming commodity prices have sustained primary exports and helped contain the current account deficit, but the share of manufactured exports has declined. As an illustration of the impact of commodity prices on the trade balance, were the terms of trade to return to their 2005 level, Brazil's current account deficit would have reached 4 percent of GDP in 2012 (compared with the actual 2.4 percent of GDP). In 2013, the current account deficit has widened further to a cumulative 3 percent of GDP in April 2013.<sup>1</sup>



<sup>1</sup> On-off factors related to the oil sector have contributed into the widening of the current account balance in late 2012 and 2013 accounting for about 1/3 of the increase in the current account deficit.



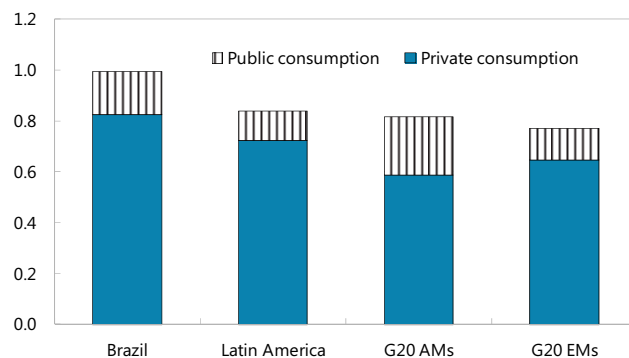
**2. The observed worsening of the current account balance has reflected a recovery of investment and relatively low savings.** The

challenge to Brazil's external sector outlook from a savings-investment perspective is that both private and public savings are relatively low compared with other emerging economies. Since 2004, consumption, both public and private, has accounted for almost all the growth in Brazil, contrasting sharply with other G-20 emerging market peers.

Increasing domestic saving would help

preventing further deterioration in external balances over the medium term and support an increase in investment—also relatively low compared to other emerging economies. Policies that could help bolster savings include further steps to reform the pension system and containing the rate of growth of public consumption.

**Contribution of Consumption to Growth, 2004-12**  
(proportion of cumulative GDP growth explained)



Sources: IMF WEO.

**3. The current account deficit is expected to widen further over the medium term to about 3¾ percent of GDP, under unchanged policies and at the current level of the real**

**exchange rate.** This outlook is based on buoyant growth in imports and some gradual worsening in the terms of trade over the medium term. The ongoing development of Brazil's off-shore ("pre-sal") oil potential, however, introduces considerable uncertainty to these projections.<sup>2</sup> Based on the staff's current estimates, the oil balance—oil exports net of direct oil imports and imports of capital goods

<sup>2</sup> This is related to uncertainty over the potential size of Brazil's oil reserves, the timing for the start of production in new fields, the required investment levels, and potential near-term capacity constraints.

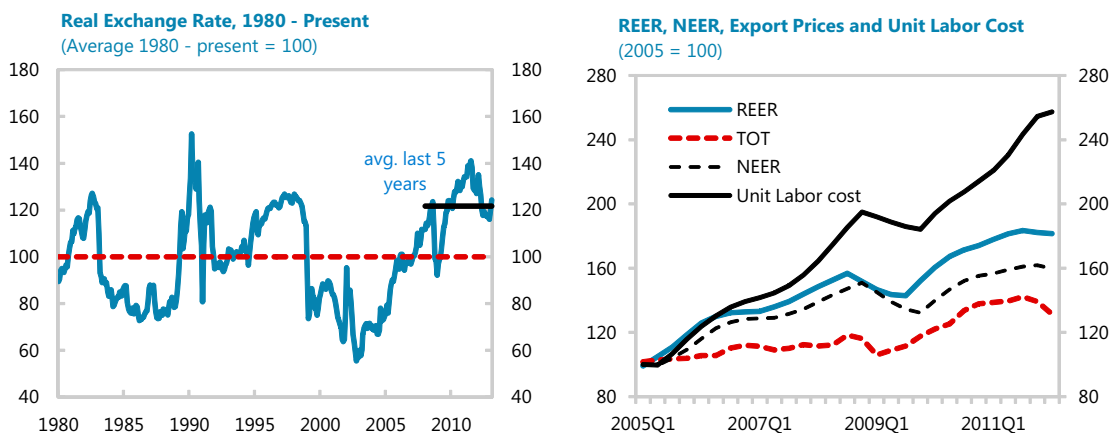
related to the oil sector—is expected to improve by half of one percentage point of GDP from 2012 to 2018. Over the next decade, net oil exports are projected to increase to more than 3 million barrels per day, which would help contain the increase in the current account deficit. These developments, if not offset by higher imports, would help reduce the estimated current account and exchange rate gaps in the long run.

## Exchange rate and relative prices

### 4. Despite a recent depreciation, the real exchange rate remains around pre-crisis levels.

The real effective exchange rate (REER) rose substantially since the early 2000s through mid-2011, but since then it has depreciated, partly reversing the significant appreciation. Since end-2012, the REER depreciated by about 4 percent. However, the REER remains about 15 percent above its long-term average levels. Most of the movement in the REER was due to changes in the nominal effective exchange rate, although in recent years the contribution of inflation differentials has increased.

5. The appreciation has also partly contributed to Brazil's rising unit labor costs. Brazil's terms of trade have increased about 30 percent since 2004, contributing to the appreciation, although there has been some reversal since late 2011, reflecting the decline in some commodity prices. Unit labor costs have grown much faster (by about 150 percent for the same period) on the back of high nominal wage increases and tighter labor market conditions.



## Model based current account and exchange rate valuations

6. Model based estimates suggest that the current account deficit is somewhat larger than its medium-term norm and that the real exchange rate is on the strong side. The staff's analysis suggests that a structural current account deficit of about 1–2 percent of GDP over the medium term and a real exchange rate depreciation of about 10–15 percent would be consistent with

fundamentals and desirable policy settings. These assessments are within the range of model-based estimates:

- The IMF's External Balance Approach and the traditional CGER approach suggest norms for the medium term current account deficit in Brazil in the range of 0.8–2.5 percent of GDP. These estimates could understate the norm given upside uncertainty on oil production and export prospects.
- The estimates for real exchange rate misalignment are similar across the EBA RER and CGER approaches, indicating an overvaluation of about 9–20 percent relative to current and medium term fundamentals.

### Current Account and REER Gaps 1/

	EBA Methodologies (2012) 2/		CGER methodologies (2018) 3/		
	CA Regression	RER Regression	MB	ERER	ES
CA Norm (% GDP)	-2.5	...	-1.2	...	-0.8
CA Gap (% GDP)	0.8	...	-2.1	...	-2.5
Exchange rate gap	...	9	18	11	20
<i>Memorandum items (percent of GDP, unless otherwise noted):</i>					
Change in REER relative to the reference period (%) 4/					-4.0
Actual CA/Y (2012)					-2.3
Cyclically Adjusted CA/Y (2012)					-1.8
Medium term CA/Y (2018)					-3.7

1/ For REER, positive values indicate overvaluation. The estimated gaps are adjusted to impose a multilateral consistency.

2/ The exchange rate gap (RER regression) corresponds to a difference between the actual level of RER and RER under recommended policies.

3/ The macroeconomic balance (MB) approach calculates the difference between the medium term CA balance and an estimated equilibrium CA "norm". The latter is a function of various fundamentals (fiscal balance, old-age dependency ratio, NFA, oil balance, real GDP per capita, and real GDP growth). The ERER is estimated as a function of medium-term fundamentals (NFA, relative productivity differentials, the terms of trade, and trade restrictions). The ES approach calculates the difference between the actual CA balance and the NFA-stabilizing CA balance. The real exchange rate adjustment is calculated to bring the current account balance in line with its NFA-stabilizing level.

4/ Reflects the change in the real exchange rate from its average-2012 level to May 2013.

## Capital account flows, international reserves and international investment position

**7. Following the global crisis, Brazil attracted sizable capital inflows that helped to finance the current account deficit and contributed to currency appreciation (Panel).** In the crisis' aftermath Brazil experienced large capital inflows amid robust economic growth and high interest rate differentials. Foreign capital inflows reached 5¼ and 7½ percent of GDP in 2009 and 2010, respectively, with portfolio flows contributing about half of total inflows. Since mid-2011, however, capital inflows moderated to about 4½ percent of GDP in 2012, with the share of portfolio flows declining to about 15 percent. A number of global and domestic reasons contributed to the moderation, including global uncertainty, tightening of capital flow measures (CFMs), a substantial slowdown in growth and reduction in interest rate differentials (driven by the cumulative cut in policy rate of 525 bps).

**8. Brazil has deployed a wide range of policy tools to manage capital flow pressures, including exchange rate appreciation, reserves accumulation, and the use of macroprudential tools and priced-based CFMs.** Since 2009, CFMs—in particular the tax on inflows (Imposto de Operações Financeiras, IOF)—have been applied to moderate flows and influence their composition, adjusting the rate and coverage to account for changes in the composition of capital flows (including imposing the tax on derivatives transactions). The implementation of the framework has responded to the intensity of pressures, reducing FX intervention and CFMs when inflow pressures subsided.<sup>3</sup> The broad use of the policy toolkit has helped to manage the challenges posed by capital inflows. There is some evidence that CFMs have been successful in helping to reduce portfolio inflows although the evidence on a persistent effect on the exchange rate is unclear.

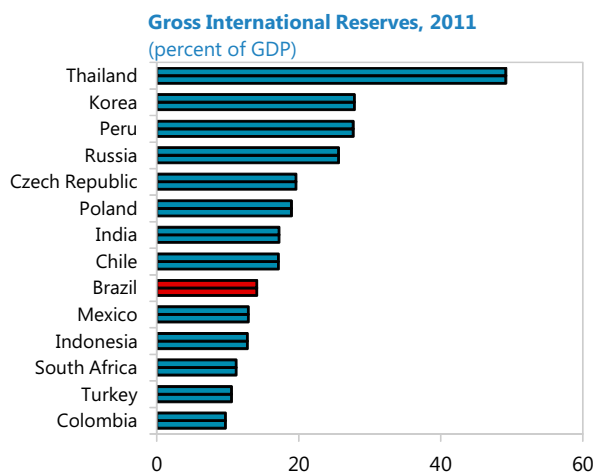
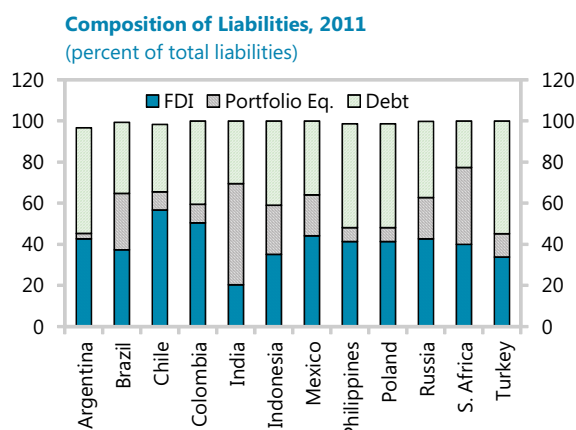
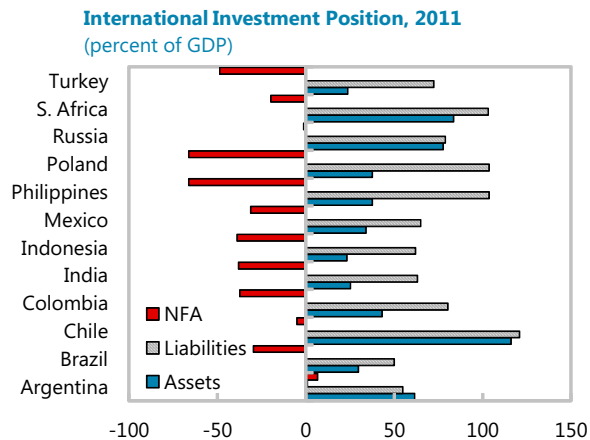
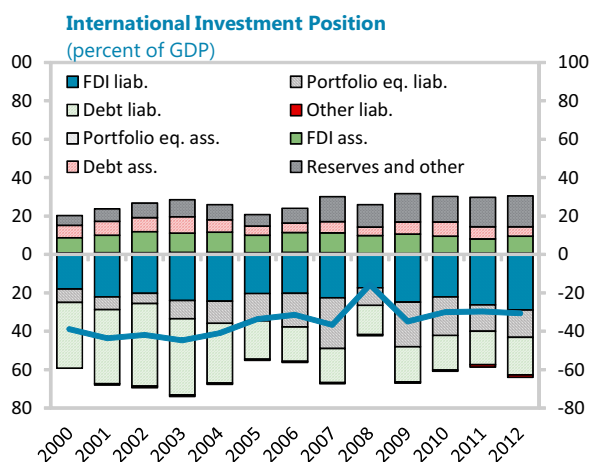
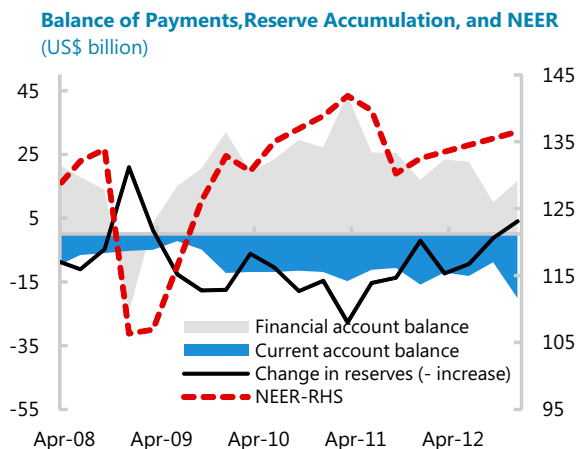
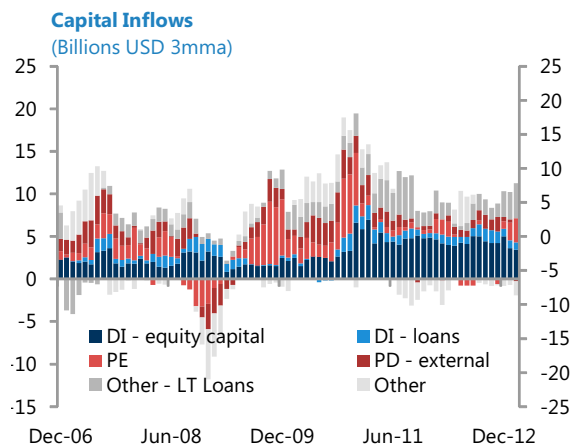
**9. Central bank intervention has focused on reducing the volatility of the exchange rate.<sup>4</sup>** With the moderation of capital inflows, the pace of accumulation of international reserves stopped in 2012. International reserves have stabilized at around US\$380 billion, and are considered more than adequate with respect to various metrics, including the IMF's composite adequacy measure. As such, Brazil is well placed to withstand potential external risks. Further temporary reserve accumulation may take place in the context of managing capital flows.

<sup>3</sup> The IOF on fixed income instruments and net currency derivative positions was reduced to zero in June 2013.

<sup>4</sup> In June 2013, the central bank conducted a number of currency swap auctions for a total amount of about \$20 billion.

**10. Brazil's net foreign asset (NFA) position and its composition have improved in recent years.** The NFA position has strengthened from -45 percent of GDP in 2003 to -30 percent in 2012. FDI liabilities account for about half of total liabilities. Brazil's NFA position and external debt levels are relatively low compared with other emerging market economies. However, with the envisaged widening of the current account deficit (at a constant real exchange rate), the NFA position would worsen over the medium term. In the longer run, as Brazil's large "pre-sal" oil reserves come on line, added efforts to increase savings and therefore strengthen the country's external NFA position would be appropriate.

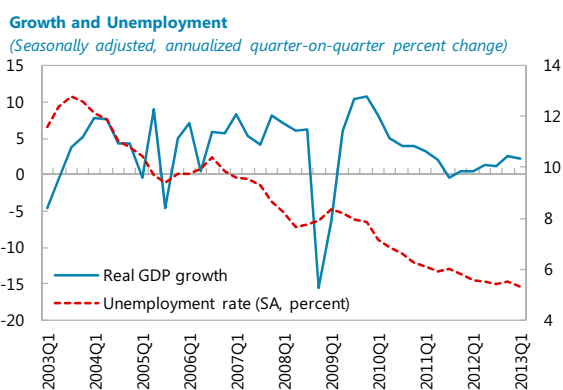
## Brazil: Capital Flows and Net Foreign Asset Position



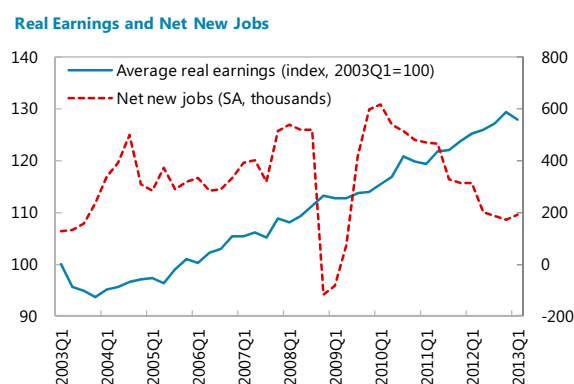


## Annex II. Why is Brazil's Labor Market Tight?<sup>1</sup>

**1. Brazil's labor market continued to tighten in 2011-12 even as economic growth slowed, which contributed to rapid real wage growth and robust household spending.** The unemployment rate has trended lower for the last decade and has exhibited minimal cyclicality, notwithstanding considerable variation in the economic cycle. In particular, the lack of sensitivity of the unemployment rate to growth during 2011–12 has been remarkable. Job creation has moderated from high levels but remains positive and real earnings have risen at a steady and rapid pace, reflecting a buoyant labor market but also large increases in the minimum wage. Tight labor market conditions have underpinned consumption and supported the ongoing expansion in household credit, intensifying demand and cost-push pressures on inflation. At the same time, the tight labor market has contributed to the large increase in unit labor costs, reducing competitiveness and hindering incentives for investment (particularly in manufacturing).

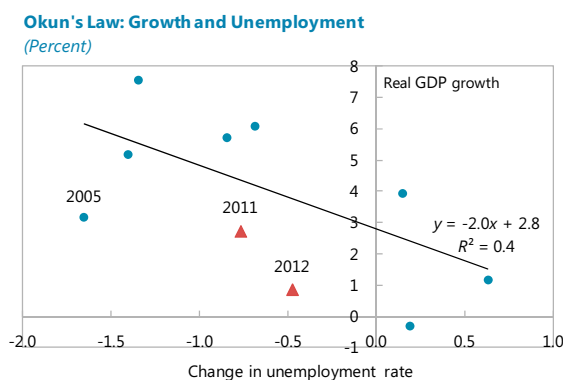


Sources: IBGE; Haver analytics; and Fund staff calculations.



Sources: IBGE; Haver analytics; and Fund staff calculations.

**2. The strength of the labor market remains a puzzle.** The typical relationship between economic growth and changes in the unemployment rate (Okun's Law) is not as strong in Brazil as in advanced economies. Since 2004, weak growth in Brazil has often been accompanied by an increase in unemployment. In contrast, in the last two years (and especially in 2012), weak growth has been



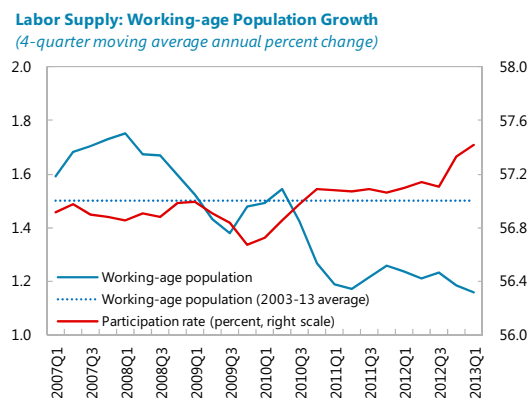
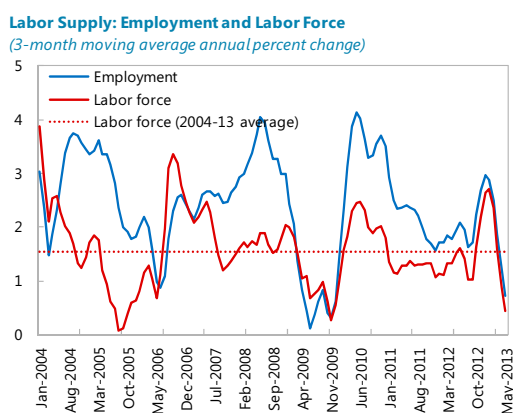
Source: IBGE; Haver analytics; and Fund staff calculations.

<sup>1</sup> Prepared by Fei Han, Zulima Leal, and Shaun Roache.

associated with a continued decline in unemployment to levels that are likely below estimates of the NAIRU.<sup>2</sup>

**3. What explains such a tight labor market during a period of subdued growth?** A number of structural and cyclical factors are often put forward to explain this apparent puzzle, which are explored below: moderating labor force growth; the sectoral composition of growth; labor hoarding reflecting skills shortages and frictional costs; and fiscal measures aimed at supporting employment.

**4. Labor force growth has moderated during 2011–12 due to slowing growth in the working-age population.** The labor force has varied with the cycle over the last decade but a slowing trend has emerged in recent years, leaving its growth below that for employment since 2010. This mainly reflects structural demographic factors as the rate of expansion of the working-age population since 2007 has declined substantially. At the same time, the participation rate has remained broadly stable with falling participation rates for the 15–24 age group—reflecting more years spent in education—largely offset by an increase in the participation rate of the workers over 25 years old.



**5. The balance of growth, notably a strong service sector offsetting a weak industrial sector, has contributed to net job creation.** The labor-intensive service sector expanded by a cumulative 4 percent during 2011–12 compared to near stagnation in industry and an outright decline in manufacturing. Over the same period, the broadly defined service sector accounted for 80 percent of the net new jobs created, more than offsetting weak job creation in the industrial sector. Service sector expansions typically have a large impact on the labor market, with staff estimates showing that the response of net new job creation to a one percentage-point increase in

<sup>2</sup> Estimates of the natural rate of unemployment (or NAIRU) are subject to considerable uncertainty given the behavior of unemployment in recent years.

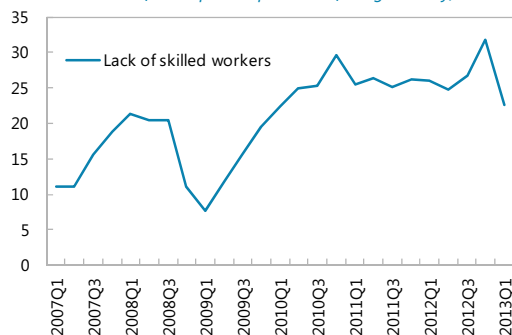
sectoral GDP growth has been almost 4 times larger for services than for manufacturing during 2001–12. Going forward, even partial rebalancing of growth towards manufacturing may ease tightness in labor markets.

**6. Labor hoarding in the manufacturing sector, likely reflecting skills shortages and frictional costs, has contributed to the tight labor market.**

Total value added by the manufacturing sector has declined by a cumulative 2 percent during 2011–12 but manufacturing employment has remained broadly unchanged over the same period. One reason appears to be the shortage of skilled workers (itself a result of a tight labor market) as highlighted in surveys of manufacturing firms. In addition, frictional labor market costs, including hiring barriers, remain high in Brazil, encouraging firms that anticipate a future recovery in activity to retain workers.<sup>3</sup>

**CNI Industrial Survey: Lack of Skilled Workers**

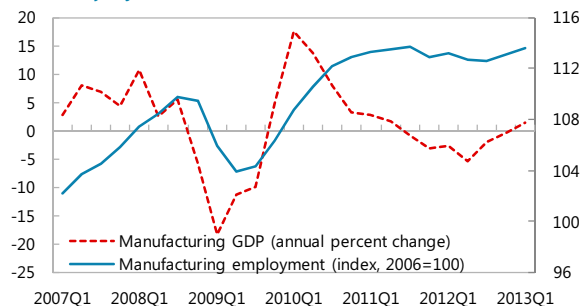
*(Percent of industrial enterprises that report lack of skilled workers as one of the top three problems facing industry)*



Source: CNI

**Manufacturing Employment and GDP**

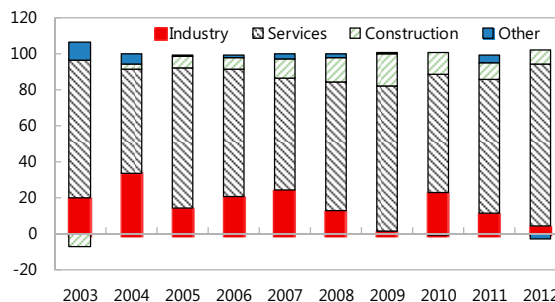
*(Seasonally adjusted)*



Sources: Haver analytics; and Fund staff calculations.

**Net New Jobs Created**

*(Percent)*



Sources: Haver analytics; and Fund staff calculations.

**7. Fiscal measures, particularly cuts in payroll taxes paid by employers, may have also supported labor demand.** Most literature on Brazil’s labor market finds that payroll tax cuts tend to reduce unemployment.<sup>4</sup> The burden of the social security tax paid by employers has been reduced

<sup>3</sup> According to the World Bank Doing Business Survey, dismissal costs in Brazil have been low and broadly unchanged compared to other LA5 countries. However, Brazilian companies have been constrained by the hiring process where fixed contracts are prohibited for activities involving permanent tasks, particularly during the last two years when manufacturing GDP growth has declined substantially.

<sup>4</sup> For instance, Bosh and Esteban-Pretel (2009) found that payroll tax cuts, by boosting labor demand, tend to increase formal employment and reduce unemployment rate (a non-neutral effect).

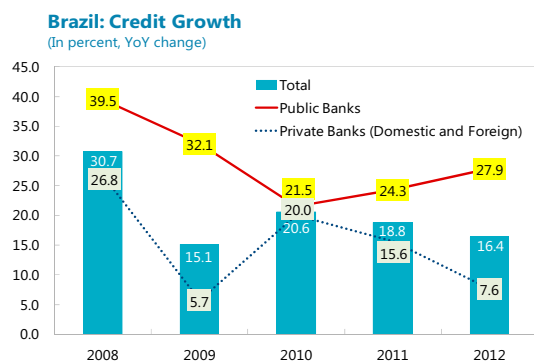
for various sectors a number of times during 2011–12. Initially focused on the manufacturing sector, these payroll measures have been broadened over time and now encompass a wide range of sectors, including some services.<sup>5</sup>

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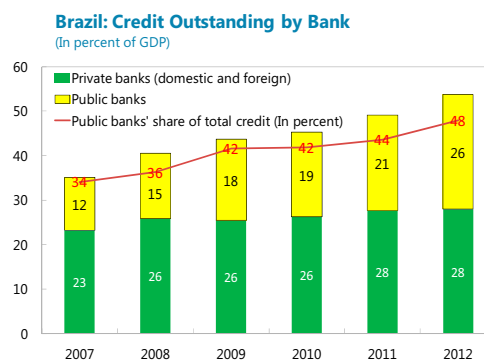
<sup>5</sup> Measures aiming at reducing the payroll tax burden, including rates cuts and other changes, have been implemented 13 times in total during 2011–12 according to the Secretariat of the Federal Revenue of Brazil.

## Annex III. Public Banks' Rapid Expansion<sup>1</sup>

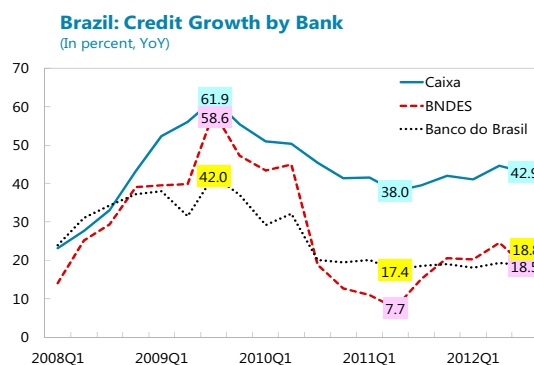
**1. Public banks have increased their lending operations very rapidly since the global financial crisis.** They have carried out a social lending mandate to expand access to finance and support development: Caixa focuses on housing loans; Banco do Brasil supplies a large amount of rural credit; and BNDES provides financing for long-term investments in economic development programs.<sup>2</sup> They have also played a demand management role by offsetting private banks' slower credit supply to sustain overall credit growth. In 2011 and 2012, lending by public banks grew over 25 percent per annum on average, compared to about 10 percent of private banks, increasing their share of total credit to 48 percent. Notably, Caixa expanded its credit portfolio by over 40 percent in this period.



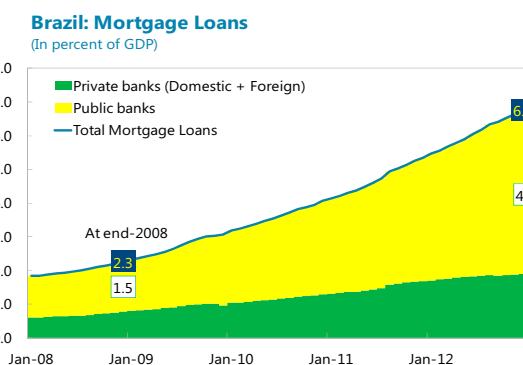
Sources: Central Bank of Brazil; and IMF staff calculation.



Sources: Central Bank of Brazil; and IMF staff calculation.



Sources: Central Bank of Brazil; and IMF staff calculation.



Sources: Central Bank of Brazil, CEIC database, and IMF staff calculation.

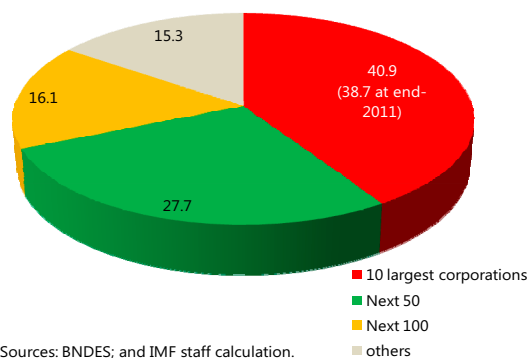
<sup>1</sup> Prepared by Mercedes Garcia-Escribano (WHD) and Heedon Kang (MCM).

<sup>2</sup> BNDES has recently enhanced its market development role: the holding company of BNDES (BNDESPar) has issued corporate bonds under the "New Fixed Income Market" program, which the private capital markets association (Anbima) launches to facilitate long-term financing operations. This program aims to support secondary market liquidity, including through standardization of issuances, a liquidity improvement fund, and a liquidity guarantee fund. See Park (2012) for detailed information. BNDES also signed an agreement to foster a market for environmental assets together with the state of Rio de Janeiro and Acre in March 2013.

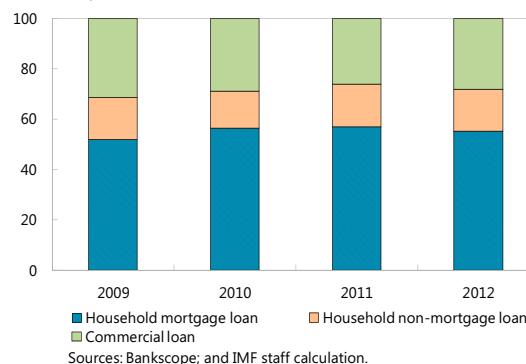
**2. The substantial credit expansion in recent years by public banks has been financed significantly with transfers from the Treasury.** Before 2008, public banks' funding mainly relied on the earmarked allocation from savings account (SBPE), workers' severance fund (FGTS), and workers' protection fund (FAT). Since the global financial crisis, the Treasury has provided subsidized direct lending to public banks, mostly to BNDES. In 2012, the Treasury lent 1 percent of GDP to BNDES and 0.5 percent to Caixa and Banco do Brasil. As a result of these operations, by end-2012, total net obligations from public banks to the Treasury stood at 9.2 percent of GDP, of which 8.4 percent were with BNDES. The fiscal cost of government lending has also increased as the long-term interest rate (TJLP)—the rate public banks pay on obligations to the Treasury—was reduced by 100 bps to 5 percent during 2012, with the lower rate applying to all outstanding loans.

**3. Public banks continued to focus on specific credit segments entailing low risk, but recently Caixa increased its exposure to other types of credit.** Banco do Brasil continued to expand both payroll-deducted loans and rural credit. BNDES intensified portfolio concentration by increasing its share of loans to 10 largest customers from 38.7 to 40.9 percent, such as Petrobras, Vale, and Eletrobras. While Caixa kept playing a key role in the housing market and the payroll-deducted loan market, it raised somewhat the share of overdraft, credit card, and non-payroll personal loans in its portfolio in 2012.<sup>3</sup>

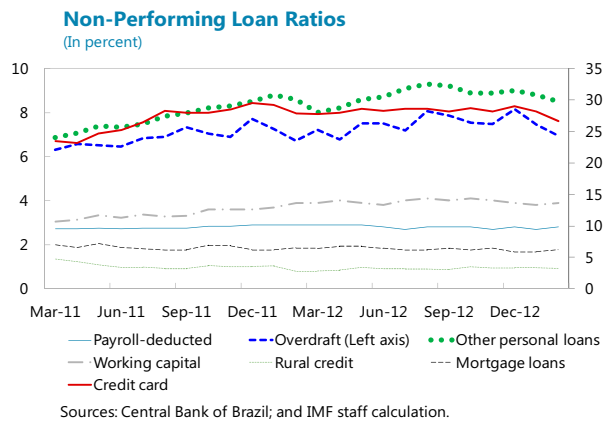
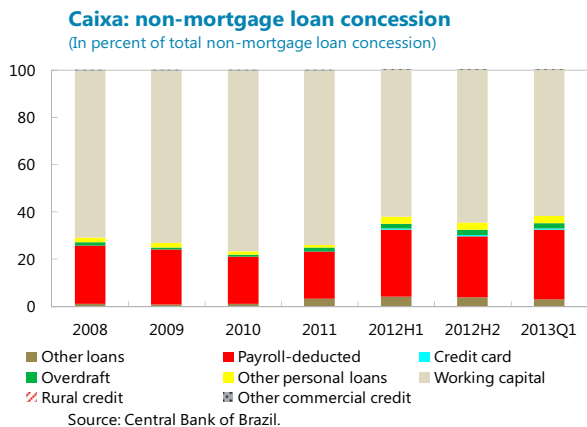
**Concentration of BNDES Loans**  
(In percent)



**Caixa: Loan Portfolio**  
(In percent of total loans)

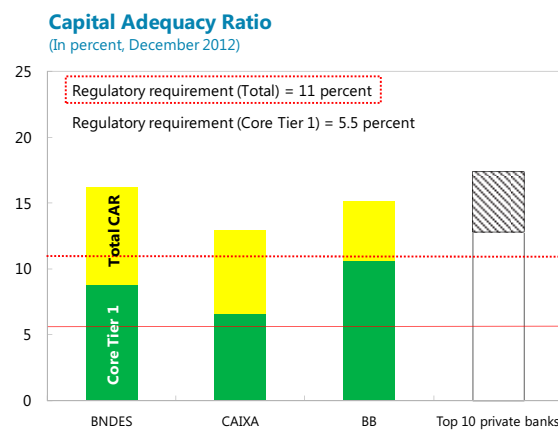
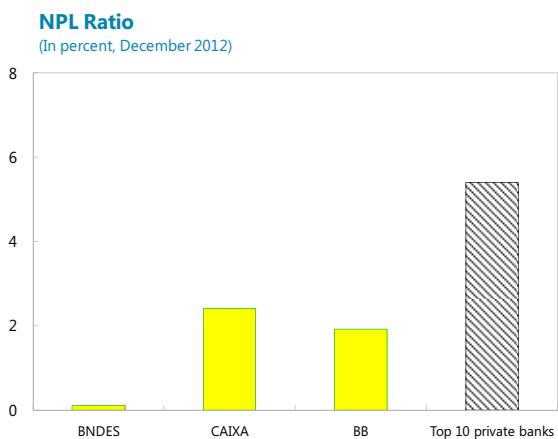


<sup>3</sup> Mortgage loans have increased about threefold from 2.3 to 6.8 percent of GDP after the financial crisis with Caixa's share at about 70 percent of the total.



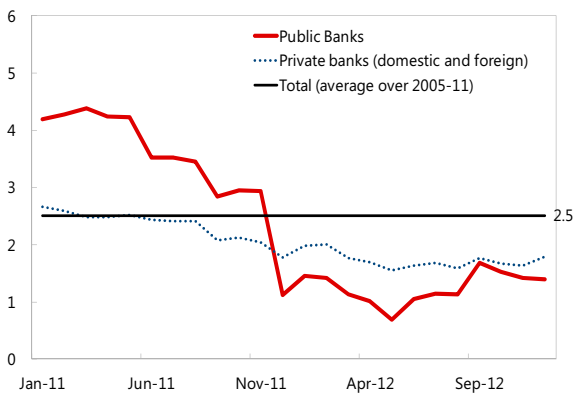
#### 4. Rapid credit growth by public banks, particularly Caixa, warrants close monitoring.

Public banks' credit portfolios have traditionally been less risky than those of private banks, thanks to subsidized lending rates, prudent loan-to-value ratios for mortgage loans and government guaranteed low-income housing loans (Caixa), and lending to low credit risk borrowers (BNDES). Currently, public banks have low default rates (2 percent), and are capitalized above regulatory requirements (11 percent). However, the rapid credit expansion in recent years represents a risk that warrant close monitoring. Public banks' return on assets dropped sharply in 2012, with reduced profit margins from lower lending rates, and their capital adequacy ratio (CAR) has continued to decline. Caixa's capitalization is close to minimum regulatory requirement, and its NPL ratios by vintage show recently a marginal uptick.

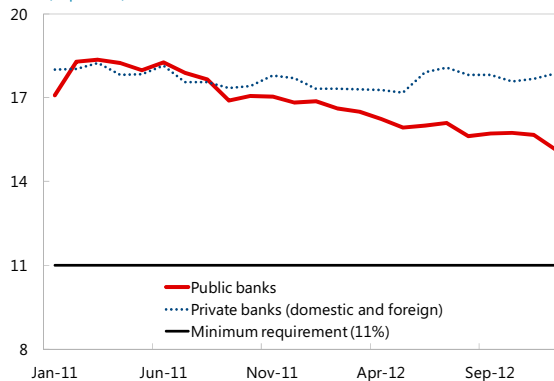


Sources: Central Bank of Brazil; and IMF staff calculation.

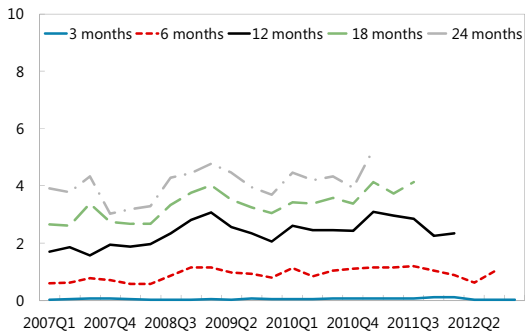
**Return on Assets**  
(In percent)



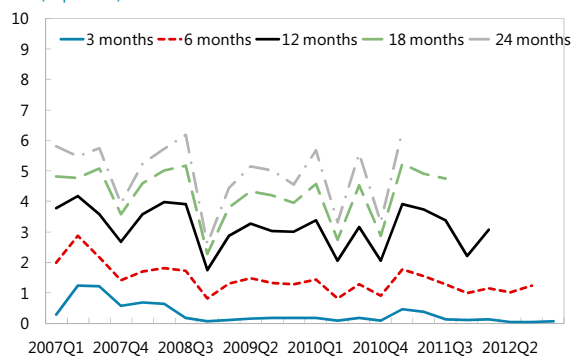
**Capital Adequacy Ratio**  
(In percent)



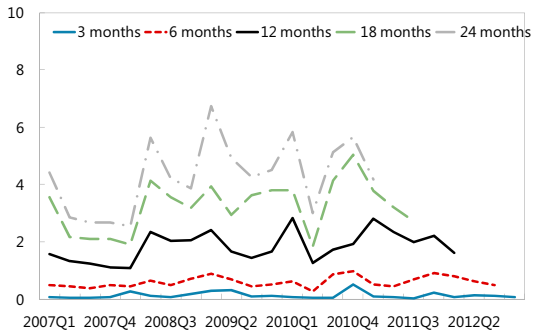
**Caixa: NPL ratios for mortgage loans by vintage**  
(In percent)



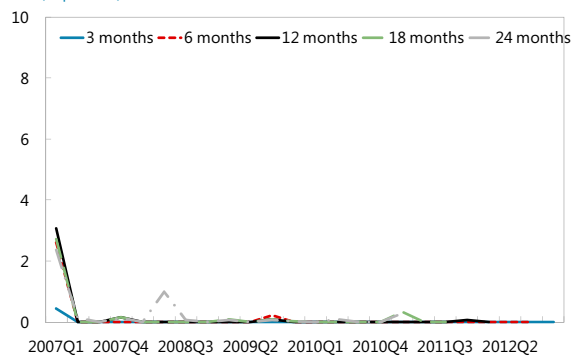
**Caixa: NPL ratios for non-mortgage loans by vintage**  
(In percent)



**Banco do Brasil: NPL ratios by vintage**  
(In percent)



**BNDES: NPL ratios by vintage**  
(In percent)



Sources: Central Bank of Brazil; and Fund staff calculation.





# BRAZIL

## STAFF REPORT FOR THE 2013 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

July 3, 2013

Prepared By

The Western Hemisphere Department  
(In collaboration with other departments, the World Bank  
and the Inter-American Development Bank)

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## FUND RELATIONS

(As of May 31, 2013)

**Membership Status:** Joined January 14, 1946; Article VIII

### General Resources Account:

	SDR Million	Percent Quota
Quota	4,250.50	100.00
Fund holdings of currency	3,221.95	75.80
Reserve Tranche Position	1,028.63	24.20
Lending to the Fund		
New Arrangement to Borrow	1,059.68	
Holdings Exchange Rate		

### SDR Department:

	SDR Million	Percent of Allocation
Net cumulative allocation	2,887.08	100.00
Holdings	2,594.13	89.85

**Outstanding Purchases and Loans:** None

### Financial Arrangements:

Type	Date of Arrangement	Expiration Date	Amount Approved	Amount Drawn
(SDR Million)				
Stand-by	09/06/2002	03/31/2005	27,375.12	17,199.64
<i>Of which:</i> SRF	09/06/2002	09/05/2003	7,609.69	7,609.69
Stand-by	09/14/2001	09/05/2002	12,144.40	11,385.37
<i>Of which:</i> SRF	09/14/2001	09/05/2002	9,950.87	9,950.87
Stand-by	12/02/1998	09/14/2001	13,024.80	9,470.75
<i>Of which:</i> SRF	12/02/1998	12/01/1999	9,117.36	6,512.40

**Projected Payments to the Fund** (SDR million; based on existing use of resources and present holdings of SDRs):

		<b>Forthcoming</b>			
	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Principal	0.00	0.00	0.00	0.00	0.00
Charges/interest	0.09	0.19	0.19	0.19	0.19
<b>Total</b>	<b>0.09</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>

**Safeguards Assessments:** A safeguards assessment of the Banco Central do Brasil (BCB) was completed in June 2002 and updated in March 2005.

**Exchange Rate Arrangement:** Since January 18, 1999, Brazil's de facto and de jure foreign exchange regime has been classified as floating. Brazil continued to avail itself of the transitional arrangements of Article XIV, Section 2, of the Fund's Articles of Agreement through November 1999, while no longer maintaining restrictions under this Article. In a letter dated November 11, 1999, the Brazilian authorities informed the Fund that they accepted the obligations of Article VIII, Sections 2(a), 3, and 4, effective November 30, 1999.

Foreign exchange regulations have been liberalized further in recent years. In March 2005, the foreign exchange markets were unified; the requirement that residents transferring foreign exchange abroad do so through CC5 accounts (nonresident financial institutions accounts) was eliminated and export surrender requirements were simplified; limits and restrictions for the purchase and sale of foreign exchange and for international transfers in *reais* were eliminated for most transactions, except for: (a) investments in the capital and derivatives markets; and (b) investments abroad made by institutions authorized to operate by the central bank and for all funds subject to specific regulations. At present, central bank prior approval is no longer required for virtually all transactions.

In August 2006, remaining foreign currency controls at the central bank on export proceeds and import payments were abolished. The surrender of foreign exchange for exports was increased to the last working day of the corresponding month in the year following the date of shipment (and 360 days before shipment), and exporters were allowed to permanently keep up to 30 percent of their export proceeds abroad. Other measures introduced in August 2006 included: (a) the elimination of fines for delays or lack of execution of foreign exchange contracts for operations up to US\$3,000; (b) the possibility of registering in domestic currency (at the central bank) all foreign capital held by corporations in Brazil and not yet registered or subject to other forms of registration; and (c) the possibility of making payments in *reais* for duty-free store purchases.

In September 2006, restrictions for investments in the capital and derivatives markets were eliminated. In April 2007, regulations on investments abroad by investment funds were liberalized further, subject to prudential rules set by the Securities and Exchange Commission of Brazil. In March 2008, exporters were allowed to keep 100 percent of their export proceeds abroad, up from the 30 percent limit established in August 2006. In May 2008, banks were authorized to hold

accounts offshore in *reais*. In July 2008 changes were made (a) allowing firms not registered to act in foreign exchange markets to make transactions of up to US\$3,000 without prior authorization; (b) permitting settlement in *reais* of foreign exchange transactions between authorized Brazilian banks and foreign banks; and (c) raising to US\$50,000 the limit on financial and trade transactions not subject to registration requirements for nonbank financial institutions. In November 2008 authorized banks were permitted to use accounts in entities domiciled offshore to settle real-denominated obligations with nonresident accounts.

### **Last Article IV Consultation**

The last Article IV consultation with Brazil was concluded by the Executive Board on July 9, 2012. Brazil is on the 12-month cycle. Joint Fund/World Bank missions visited Brazil in 2002 for the Financial Sector Assessment Program (FSAP), which was discussed by the Board in December 2002. A FSAP Update mission took place in March 2012.

### **Technical Assistance**

**Fiscal Affairs Department (FAD).** In September 2001, an FAD mission conducted a fiscal ROSC, and in December 2001 a mission provided Technical Assistance (TA) on tax reform. Subsequent missions have discussed the scope for increasing investment in infrastructure within a framework of continued fiscal responsibility, including during a follow-up visit in November 2004. In July 2008, a ROSC on fiscal transparency was undertaken for the state of São Paulo, which also received a seminar on performance budgeting in November 2008. In December 2009 a mission visited São Paulo to examine the state's medium-term expenditure framework with the purpose of improving fiscal performance and the quality of public expenditure. In November 2010, a short-term expert visited São Paulo to provide advice on cost accounting and a long-term advisor was installed in February 2011 to support efforts in this area. In April a follow-up mission evaluated progress in implementing the program budgeting and cost accounting systems. In May 2011, a short-term expert followed-up on the implementation of the program budgeting reforms. Between July 2011 and May 2012, FAD conducted several missions on public financial management, focusing on the review of the cost accounting systems and on improvements to the budgeting system.

**Statistics Department (STA).** Several missions have visited Brazil during 1998–2011 to provide TA on monetary and financial statistics, quarterly national income accounts, and government finance. These missions also assisted the authorities in the subscription to the SDDS, improving the analytical quality of Brazil's monetary aggregates, and the implementation of GFSM 2001. Recent missions have assisted the Ministry of Finance, the Banco Central do Brasil and the Instituto Brasileiro de Geografia e Estatística with the compilation of government finance statistics, price indices and the new national accounts framework, with greater emphasis on the consistency across macroeconomic statistics.

**Monetary and Capital Markets Department (MCM).** Missions visited Brazil in 2000 to assess observance of the Code of Good Practices on Transparency in Monetary and Financial Policies and compliance with the Basel Core Principles for Effective Banking Supervision. In August and

December 2009, missions visited to assist the capital markets regulator (CVM) in considering mutual funds development and regulation, and issues surrounding securitization and valuation of financial securities. A mission visited in August 2009 to work on credit risk modeling for financial oversight. In March 2010 a mission visited the National Treasury to initiate a technical cooperation project on term-structure modeling and debt management. A follow up mission to present preliminary results took place in January 2011. The project was completed in May 2011 with the publication of an IMF working paper (No. 11/113), "On Brazil's Term Structure: Stylized Facts and Analysis of Macroeconomic Interactions".

### **Resident Representative**

The Fund maintains a resident representative office in Brasilia. The Resident Representative is Mr. Carlos Fernandez Valdovinos, who assumed the post in July 2011.

## RELATIONS WITH THE WORLD BANK<sup>1</sup>

**On November 1, 2011, the World Bank approved its new Country Partnership Strategy (CPS) for Brazil, which will guide the Group's overall program in the country for FY 2012–2015.** The new CPS builds on, and deepens, the last FY 2008–2011 Country Strategy. The World Bank Group has been a valued partner for Brazil, providing integrated and often multi-sector development solutions tailored to its needs. The GoB's demand for a continued strong partnership with the WBG is evidenced by the pre-payment of IBRD loans, in an approximate amount of \$6.7 billion between 2009 and 2011, so as to open space for sub-national lending within IBRD's Single Borrower Limit.<sup>2</sup> The Bank has also benefited greatly from Brazil's unique demands, which required the WBG to adapt and learn. Innovation and knowledge have been the central elements of this relationship, with strong flows of knowledge transfers to, from, and within Brazil, supported by a large impact evaluation program. The FY 12–15 CPS seeks to take these achievements further by maintaining the focus on knowledge generation and transfer, with greater emphasis on inclusiveness in line with President Rousseff's goal of eradicating extreme poverty. In this context, the Bank and IFC will expand their support for the Northeast, Brazil's poorest region, and for sustainable development in the Amazon, the Cerrado, and other fragile ecosystems.

**Brazil's priorities for its partnership with the WBG are focused on second-generation development problems that require innovative solutions.** These involve improvements in national policy frameworks and new ways to implement programs with sub-national governments and at the firm level. The WBG will help address these challenges, and help achieve the overarching goal of higher rates of inclusive and sustainable growth by focusing on four strategic objectives: (i) increase the efficiency of public and private investments; (ii) improve the quality and expand the provision of public services for low income households; (iii) promote regional economic development through improved policies, strategic infrastructure investments, and support for the private sector in frontier areas; and (iv) further improve sustainable natural resource management and enhance climatic resilience while contributing to local economic development and helping to meet rising global food demand. Brazil is looking to the Bank as a partner in the dissemination of the country knowledge and development experiences to other countries.

**At the Federal level, Brazil's demand is concentrated in knowledge and strategy development services.** These require a combination of AAA and knowledge-intensive lending, but also leaving room for other financial solutions as needed. The Federal Government is also interested in the Bank's support to sub-national Governments as a way of enhancing the implementation of national policies, ranging from the fiscal responsibility framework to strategic social and infrastructure

<sup>1</sup> Prepared by the World Bank.

<sup>2</sup> Current calculations suggest that maximum IBRD lending space under the US\$16.5 billion Single Borrower Limit is US\$2.0 billion for FY 14 and US\$1.5 billion in FY 15, or a combination thereof. The Bank is currently working with the Government to explore options on how to continue the engagement despite such restrictions.

investment programs. Sub-national governments demand integrated multi-sector development solutions, combining technical and financial support and using tailored instruments. The private sector seeks highly customized financing packages to help meet unique business and growth objectives.

**The CPS identifies an indicative IBRD lending program in the order of US\$1.8 billion for FY 14.**

While this is in line with annual lending in FY 08–11, it is equivalent to about 0.3% of total public expenditures. IFC's own-account investment program is forecast at about US\$1.5 billion annually in FY 13–14, a minute fraction of total private sector investment. Thus, if the WBG is to have a significant impact in Brazil, this cannot be derived exclusively from the size of its financial contributions, which are bound to be small with respect to the country's own resources. Rather, the WBG will seek to have a development impact in Brazil through the knowledge contributions that it will embed in its various activities. In particular, the Bank Group will deploy its resources according to the following principles. Flexibility: Adjusting areas of engagement and instruments to better respond to the country's evolving needs. Selectivity: Focusing on areas where Brazil faces second-generation development challenges and can benefit most from the Group's knowledge and experience. Innovation: Supporting innovative investments and policy reforms that can be replicated locally and internationally, and offering innovative services and instruments (e.g. result-based and multi-sector loans, partial credit risk and other guarantees). Leveraging: Increasing the use of leveraged resources from government, the private sector and other development partners, to maximize development impacts.

**IFC will continue responding to the needs of a rapidly-evolving private sector with a suite of competitive financial and advisory products.**

In FY 11, Brazil had IFC's largest single country new business and mobilization program in the world. While IFC does not expect to increase business volumes significantly, the nature of its involvement is changing toward (i) a greater focus on smaller, more difficult investments in poorer, frontier regions such as the Northeast and North; (ii) supporting innovation and competitiveness, promoting South-South knowledge transfers and encouraging access to new markets and products, and (iii) increasing IFC's advisory support to sub-national Governments for PPPs in infrastructure, social sectors, and the environment. IFC sharply expanded its activities in Brazil during the previous CPS period. As of March 31, 2013, IFC commitments in Brazil stand at \$2.46 billion.

**MIGA has a long history of promoting investment into Brazil with a strong focus on the power sector, aimed at alleviating the imbalance of electricity supply and demand caused by the geographic distance and climate difference across regions.**

Other projects spanned manufacturing, financial, transportation, telecommunications and oil and gas sectors. The team is currently working on a transport project in the state of São Paulo. The project consists of: (i) \$729 million in investments by the State of São Paulo, Brazil (SoSP), toward sustainable transportation; (ii) a \$300 million from an IBRD loan; (iii) \$300 million from private banks; (iv) an NHSFO guarantee from MIGA; and (v) a \$129 million equity investment from SoSP's own funds. MIGA will go to Board once prospective lenders are identified by SoSP. MIGA has also seen increasing demand for political risk insurance from Brazilian investors going into emerging markets

## BRAZIL

and has issued guarantees to three projects in Latin America thus far. Among the projects by Brazilian investors currently in the pipeline, Tumarín Hydroelectric Power project is likely to close in FY 14. The 253 MW hydroelectric dam is a \$1.1 billion project that will supply nearly 25% of all Nicaragua's energy needs once it is completed in 2016, according to plans. The dam will be built in La Cruz de Río Grande, a rural and bucolic farming community of some 3,000 people in the South Atlantic Autonomous Region.





## RELATIONS WITH THE INTER-AMERICAN DEVELOPMENT BANK<sup>3</sup>

**The IDB's New Country Strategy with Brazil was approved on May 9, 2012.** This was established for the period 2012–2014 and is comprised of six strategic objectives: (1) stimulate social and productive inclusion; (2) improve the condition of the country's infrastructure (3) promote the development of sustainable cities; (4) improve the institutional capacity of public entities; (5) increase the sustainable management of natural resources and climate change mitigation and adaptation actions; and (6) promote development through the private sector.

**For 2013, total loan approvals are estimated to reach US\$3,546 million, including US\$1,530 million in Policy-Based Loans to four States (Amazonas, Alagoas, Pernambuco and Rio Grande do Sul).** In addition, the IDB program in the period estimates approvals of US\$42.5 million in grants for Technical Cooperation.

**In 2012, the IDB approved 23 loans amounting to US\$2,009 million.** Most of the lending went to support institutional strengthening and modernization of the state (43%) and productivity and infrastructure (34 %). Lending to subnational governments corresponded to 66% of total lending to Brazil, and included two Policy-Based Loans (Rio Grande do Sul and Bahia) for US\$800 million.

Loans Approved 2012 <sup>1</sup> in US\$ million						
	Living conditions and efficiency in the cities	Productivity and infrastructure	Institutional strengthening and modernization of the state	Poverty, equity and human capital	Total	# of loans
Subnational gov.	343.52	669.21	252.01	60.00	1,324.74	16.00
Central gov.	-	-	610.00	66.00	676.00	3.00
Private sector	-	9.00	-	-	9.00	4.00
<b>Total</b>	<b>343.52</b>	<b>678.21</b>	<b>862.01</b>	<b>126.00</b>	<b>2,009.74</b>	<b>23.00</b>

1/: Based on the IDB's Strategy Areas for the period 2004–07 and updated for 2009–11.

**Brazil is the largest IDB borrower.** The current active portfolio consists of 101 loans to the public sector (US\$9,463 million) and 9 loans to the private sector (US\$584 million). Brazil's outstanding debt with the IDB amounts to US\$14,340 million (as of end 2012) and from the current portfolio US\$6,931 million have not been disbursed yet (as of June 2013).

<sup>3</sup> Prepared by the Inter-American Development Bank.

## STATISTICAL ISSUES

(As of June 28, 2013)

### I. Assessment of Data Adequacy for Surveillance

**General:** The quality of macroeconomic statistics has improved significantly, and data provision is adequate for surveillance.

**National Accounts:** The national accounts estimates are compiled based on the guidelines of the *1993 System of National Accounts*. The availability of annual and quarterly supply and use tables also contribute to the development of consistent national accounts estimates. The series (data and supporting methodological notes) are available on the internet (<http://www.ibge.gov.br>) and in *International Financial Statistics (IFS)*.

**Price Statistics:** Since July 1999, the official consumer price index has been the Broad Consumer Price Index (IPCA) compiled by the Brazilian Statistical Institute (IBGE). The IPCA covers changes in the prices of goods and services purchased by households earning between one and forty times the minimum wage in 11 metropolitan areas. Wholesale price indices are compiled only by the Getúlio Vargas Foundation (FGV). The export price data include total unit values of exports, and unit values and wholesale prices of coffee exports. The IBGE compiles a monthly producer price index of manufacturing activity with a December 2009 base.

**Government Finance Statistics:** The Ministry of Finance and the Brazilian Central Bank (BCB) compile and disseminate government finance statistics using the *Government Finance Statistics Manual (GFSM) 2001* presentation. The reported statistics include the statement of government operations and financial balance sheet for the consolidated central government (comprising the National Treasury and Social Security) as well as financing operations and the financial balance sheet for the general government. The reported data are compiled by converting the nationally published data, which still broadly follow the *GFSM 1986* framework. The data reflect the movements of the single treasury account and are on a cash basis except for interest. The gross debt indicator excludes government securities under the central bank's outright ownership, making international comparisons difficult.

In 2009, the Brazilian authorities developed a migration plan for the full implementation the *GFSM 2001*. This plan comprises the introduction of a new accounting framework based on the International Public Sector Accounting Standards (IPSAS), which merges the traditional budgetary approach, the accrual based accounting, and some additional internal controls into a single system. This new accounting framework significantly enhances the usefulness of the Brazilian public sector accounting information, which will be a significant step towards the compilation of complete *GFS* in a systematic way, and is expected to be in place in 2015.

### I. Assessment of Data Adequacy for Surveillance (continued)

**Monetary and Financial Statistics:** The BCB compiles and publishes monetary and financial statistics, with concepts, definitions, and classification that are broadly in line with the *Monetary and Financial Statistics Manual (MFSM) 2000*. In close cooperation with STA, the BCB introduced the standardized report forms based on accounting data in March 2013. However, the institutional coverage of the other financial corporations needs to be expanded to include insurance corporations, open pension funds, capitalization funds, and exchange houses.

The BCB regularly reports quarterly FSIs to the IMF for publication. Currently, the BCB reports all core and 17 encouraged FSIs, with data beginning in Q1 2005. Plans are under way to compile the rest of the encouraged FSIs.

**External Sector Statistics:** Brazil disseminates quarterly data on the balance of payments and international investment position. External data are compiled according to the fifth edition of the *Balance of Payments Manual*. The BCB is supplementing the registry of the foreign exchange system with surveys on transportation, insurance, and other services. Compilation of reinvested earnings and undistributed branch profits item in the current account and reinvested earnings item in the financial account could be improved, as the registry of the foreign exchange system does not capture these transactions. Quarterly balance of payments data are reported. The BCB publishes the data for monthly balance of payments and the Data Template on International Reserves and Foreign Currency Liquidity with a lag of one month. Brazil reports quarterly total external debt position data with a three-month lag to the World Bank's Quarterly External Debt Statistics database.

### II. Data Standards and Quality

Subscriber to the Fund's Special Data Dissemination Standard (SDDS) since 2001. Uses SDDS flexibility options on the timeliness of the general government operations and depository corporations survey.

**Implementing G-20 DGI recommendations:** The authorities have already implemented a good number of the recommendations and work is underway to implement the remaining ones. Further progress would focus on monetary and financial statistics, external position and flow statistics, real estate price indexes, general government statistics, and sectoral accounts.

No data ROSC is publicly available.

**Brazil: Table of Common Indicators Required for Surveillance  
As of June 28, 2013**

	Date of Latest Observation	Date Received	Frequency of Data <sup>7</sup>	Frequency of Reporting <sup>7</sup>	Frequency of Publication <sup>7</sup>
Exchange Rates	5/31/13	5/31/13	D	D	5/31/13
International Reserve Assets and Reserve Liabilities of the Monetary Authorities <sup>1</sup>	5/31/13	6/4/13	D	D	D
Reserve/Base Money	May 13	6/18/13	D	D	D
Broad Money	April 13	6/4/13	M	M	M
Central Bank Balance Sheet	May 13	6/18/13	M	M	April 13
Consolidated Balance Sheet of the Banking System	April 13	6/4/13	M	M	M
Interest Rates <sup>2</sup>	5/31/13	6/4/13	D	D	D
Consumer Price Index	May 13	6/07/13	M	M	M
Revenue, Expenditure, Balance and Composition of Financing <sup>3</sup> – General Government <sup>4</sup>	December 12	5/13/13	M	M	M
Revenue, Expenditure, Balance and Composition of Financing <sup>3</sup> – Central Government	May 13	6/25/13	M	M	M
Stocks of Central Government and Central Government-Guaranteed Debt <sup>5</sup>	May 13	6/24/13	M	M	M
External Current Account Balance	May 13	6/21/13	M	M	M
Exports and Imports of Goods and Services	May 13	6/3/13	M	M	M
GDP/GNP	Q1 2013	5/29/13	Q	Q	Q
Gross External Debt	May 13	6/21/13	M	M	M
International Investment Position <sup>6</sup>	May 13	6/21/13	Q	Q	Q

<sup>1</sup>Any reserve assets that are pledged or otherwise encumbered should be specified separately. Also, data should comprise short-term liabilities linked to a foreign currency but settled by other means as well as the notional values of financial derivatives to pay and to receive foreign currency, including those linked to a foreign currency but settled by other means.

<sup>2</sup>Both market-based and officially-determined, including discount rates, money market rates, rates on treasury bills, notes and bonds.

<sup>3</sup>Foreign, domestic bank, and domestic nonbank financing.

<sup>4</sup>The general government consists of the central government (budgetary funds, extra budgetary funds, and social security funds) and state and local governments.

<sup>5</sup>Including currency and maturity composition.

<sup>6</sup>Includes external gross financial asset and liability positions vis-à-vis nonresidents.

<sup>7</sup>Daily (D); weekly (W); monthly (M); quarterly (Q); annually (A); irregular (I); and not available (NA).

**Statement by the IMF Staff Representative on Brazil**  
**Executive Board Meeting**  
**July 26, 2013**

1. This note reports on information that has become available since the staff report was issued and does not alter the thrust of the staff appraisal.
2. The central bank of Brazil continued tightening monetary policy, raising the policy rate by 50 bps to 8.50 percent in its July Monetary Policy meeting, in line with staff baseline projections, for a cumulative 125 bps since April. In its communications it highlighted that recent data point to a continued recovery in output, which would be supported by both consumption and investment, but that there remain risks associated with business and household confidence. Headline inflation as of end-June was 6.7 percent on a year-on-year basis, above the ceiling of the inflation tolerance band (6.5 percent), but has started to decelerate at the margin linked in part to lower food inflation.
3. A wave of social demonstrations in early June appears to have subsided. A localized protest against planned increases in bus fares in São Paulo gave way to several nationwide protests. The grievances behind the protests were varied, ranging from discontent with the poor quality of public services to slow progress in the fight against corruption, and appear to have been directed at institutions and political parties broadly. The government has announced several initiatives to address the grievances aired at the demonstrations, including: strengthening fiscal controls at all levels of government to help reduce inflation; organizing a plebiscite on a reform of the political system to eradicate corruption; stepping up investment in hospitals; increasing investment in urban transportation and reducing some taxes on diesel; and earmarking for education the royalties from some oil concessions. In addition, bus fare increases were rolled back; the state of São Paulo cancelled the scheduled increase in toll fares; and the import tariff for beans, an important food staple, was reduced to zero.
4. The global re-pricing of assets that followed the change in expectations regarding the pace of normalization of U.S. monetary policy affected Brazil's financial markets in May-June. Asset price volatility increased substantially but has subsided more recently. The *real* has depreciated by about 5 percent in nominal terms against the US dollar since end-May (2 percent in nominal effective terms), more than other emerging markets, with occasional central bank intervention through non-deliverable foreign currency swaps to limit excess volatility. Local currency sovereign bond yields have increased by about 120 bps during the same period, as a result of both global factors and the expected tightening of monetary policy in Brazil. Equity prices have also underperformed other emerging markets, linked in part to weaker growth prospects. Other financial indicators like CDS and EMBIG spreads have moved broadly in line with emerging market peers. The authorities' response included further easing of capital flow management measures (CFMs) adopted in recent years, including by eliminating the term for pre-payment of exports subject to the Financial

Transaction Tax (IOF), lowering to zero the rate for reserve requirements on short dollar positions held by local banks, and reducing the capital requirements on bank exposure to currency fluctuations.



INTERNATIONAL MONETARY FUND



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International Monetary Fund  
Washington, D.C. 20431 USA

### **IMF Executive Board Concludes 2013 Article IV Consultation with Brazil**

On July 26, 2013, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation with Brazil.<sup>1</sup>

During the last decade, Brazil's strong macroeconomic frameworks have contributed to preserve macroeconomic stability, support robust growth, and underpin sustained poverty reduction. The key pillars of Brazil's macroeconomic frameworks have been the fiscal responsibility law, the inflation targeting regime, and the flexible exchange rate. In addition, a strong prudential framework has underpinned a sound financial sector that withstood well the global financial crisis of 2008–09. The prolonged macroeconomic stability has facilitated the adoption of far-reaching social programs that have produced a remarkable social transformation—in particular, a substantial reduction in poverty and the increase in living standards of large segments of the population.

Brazil's economy is recovering gradually from the slowdown that began in mid-2011. Consumption remained resilient last year underpinned by low unemployment and broad gains in real wages, although it has slowed somewhat more recently. After a protracted period of weakness, investment has begun to recover in recent quarters while business confidence has firmed. With the economy estimated to be operating close to potential, supply-side constraints have restrained near-term growth and exacerbated inflationary pressures. Low unemployment has also contributed to demand-pull and cost-push inflation pressures. End-of-period inflation, the reference measure for inflation-targeting in Brazil, has been below the upper limit of the  $4\frac{1}{2} \pm 2$  percent target range for several years; it has been running however in the upper range of the target band, while medium-term inflation

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<sup>1</sup> Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board. At the conclusion of the discussion, the Managing Director, as Chairman of the Board, summarizes the views of Executive Directors, and this summary is transmitted to the country's authorities. An explanation of any qualifiers used in summings up can be found here: <http://www.imf.org/external/np/sec/misc/qualifiers.htm>.



expectations have risen above the mid-point target. The authorities have started to focus on alleviating supply-side constraints (including infrastructure bottlenecks) and containing inflationary pressures by tightening monetary policy.

The external current account deficit has widened, reflecting weaker external demand, buoyant consumption and, more recently, a pickup in investment and temporary disruptions in oil production. The real exchange rate depreciated over the last year, most recently as part of a broader realignment across emerging markets. At the same time, unit labor costs in U.S. dollars have remained broadly unchanged, limiting the impact on competitiveness, as the effect of the weaker currency has been offset by rapid growth in real wages and stagnant labor productivity gains. Capital inflows, particularly portfolio flows, subsided in 2012 linked to a weaker growth outlook and lower interest rates in Brazil, and the use of capital flow measures. More recently, global financial volatility and higher global risk aversion have further dampened portfolio inflows to Brazil. Equity prices have declined and corporate debt and equity issuances have slowed, in line with other major emerging markets. Foreign direct investment inflows, however, have remained robust. International reserves have remained broadly stable at a high level following a halt in reserves accumulation since mid-2012.

Financial conditions have tightened but credit growth has remained strong, driven by public banks' lending. Mortgage lending has continued to grow strongly, but remains a relatively small share of total credit. Real estate prices, though moderating, have continued to increase. The authorities have made progress in implementing key recommendations of the 2012 Financial Sector Assessment Program (FSAP) Update.

### **Executive Board Assessment**

Executive Directors commended the Brazilian authorities for their long-standing commitment to sound policy frameworks, notably the fiscal responsibility law, inflation targeting, the flexible exchange rate, and a strong prudential regime. They noted that these frameworks, together with the implementation of social programs, have underpinned macroeconomic stability and remarkable growth over the past decade, lifting living standards and reducing poverty.

Directors observed that, in addition to headwinds from external conditions, domestic supply-side constraints and policy uncertainties may be holding back near-term growth. A tighter policy stance would help address persistent price pressures, safeguard confidence in policy frameworks, and set the stage for a medium-term rebalancing of demand away from consumption. In this context, Directors welcomed the initiation of a monetary tightening cycle, and agreed that monetary policy should remain geared at containing inflationary pressures and anchoring inflation expectations. They underscored the need for a steady, measured pace of fiscal consolidation, anchored on Brazil's long-standing primary surplus target. Some Directors saw a continued role for fiscal stimulus as a counter-cyclical tool.

More generally, Directors considered that monetary policy should play the main role in aggregate demand management, with fiscal policy focused on rebuilding buffers.

Directors highlighted the importance of adhering to a primary surplus target that places public debt firmly on a downward path. They encouraged efforts to maintain fiscal discipline at the sub-national level, ease budget rigidities to increase public savings, and recognize more fully potential fiscal risks associated with public bank assets and infrastructure concession agreements. Directors also recommended a gradual reduction of policy lending to public banks to improve debt dynamics. A number of Directors considered that a more detailed assessment of Brazil's public debt encompassing net and gross concepts would permit an enhanced interpretation of fiscal developments and prospects.

Directors welcomed the substantial progress in strengthening financial regulation and supervision. They observed that Brazil's banking system is sound and well placed to implement Basel III ahead of schedule. Directors noted nevertheless that some risks, notably those associated with household credit and mortgage loans, warrant ongoing vigilance. They welcomed the progress in implementing most of the recommendations of the recent Financial Sector Assessment Program Update.

Directors concurred that the flexible exchange rate remains the main shock absorber in periods of financial turbulence, and welcomed the authorities' intention to limit interventions in the foreign exchange market to moderating excessive volatility. They agreed that Brazil has an adequate toolkit to deal with capital inflow pressures, by allowing the exchange rate to appreciate somewhat, supported by other policies, including some further temporary reserve accumulation and carefully-considered capital flow management measures.

Directors supported the focus of reforms to ease supply-side constraints, noting that the government's market-based concessions program would boost investment and alleviate infrastructure bottlenecks. They emphasized that comprehensive efforts to boost productivity, competitiveness, and investment are critical for raising potential growth. To this end, it will be important to increase domestic saving, improve the minimum wage indexation mechanism, and continue to reform the pension system. Other efforts to foster private investment should include streamlining taxation and improving business conditions.

## Brazil: Basic Data, 2006-2012

	2006	2007	2008	2009	2010	2011	2012
	(Annual percentage changes, unless otherwise indicated)						
<b>National accounts</b>							
GDP at current prices	10.4	12.3	13.9	6.8	16.4	9.9	6.3
GDP at constant prices	4.0	6.1	5.2	-0.3	7.5	2.7	0.9
Private consumption	5.2	6.1	5.7	4.4	6.9	4.1	3.1
Public consumption	2.6	5.1	3.2	3.1	4.2	1.9	3.2
Gross Investment	8.0	15.6	15.6	-17.7	31.1	3.1	-9.0
Exports	5.0	6.2	0.5	-9.1	11.5	4.5	0.5
Imports	18.4	19.9	15.4	-7.6	35.8	9.7	0.2
<b>Prices</b>							
Consumer price index (IPCA, period average)	4.2	3.6	5.7	4.9	5.0	6.6	5.4
Consumer price index (IPCA, end of period)	3.1	4.5	5.9	4.3	5.9	6.5	5.8
GDP deflator	6.1	5.9	8.4	7.1	8.3	7.0	5.4
Terms of trade	5.3	2.1	3.5	-3.2	17.0	7.8	-5.8
	(In percent of GDP)						
<b>Public finances</b>							
Federal government 1/							
Nonfinancial revenue 2/	23.0	23.3	23.6	22.8	24.4	23.9	24.1
Primary expenditure	20.9	21.1	20.6	21.0	22.6	21.6	22.5
Primary balance	2.2	2.2	2.8	1.3	1.8	2.2	1.7
Nonfinancial public sector							
Primary balance	3.3	3.5	4.1	2.2	2.5	3.2	2.1
Net interest payments	6.8	6.1	5.5	5.3	5.2	5.7	4.9
Overall balance	-3.5	-2.7	-1.4	-3.1	-2.7	-2.5	-2.8
Policy lending 3/	-2.3	-2.7	-2.1	3.2	2.7	1.0	1.5
Nonfinancial public sector gross debt 4/	67.0	65.2	63.5	66.8	65.0	64.7	68.0
Public sector net debt 5/	47.3	45.1	38.0	41.5	39.1	36.4	35.2
	(12-month percentage changes, unless otherwise indicated)						
<b>Money and credit</b>							
Base money 6/	12.6	21.8	-17.4	11.3	131.8	10.8	-13.6
Broad money (M2) 7/	18.0	18.7	17.8	16.3	15.8	18.5	16.6
Credit to the private sector	21.7	30.1	28.1	13.7	23.0	20.2	15.8
	(In billions of U.S. dollars, unless otherwise indicated)						
<b>Balance of payments</b>							
Current account	13.6	1.6	-28.2	-24.3	-47.3	-52.5	-54.2
Merchandise trade balance	46.5	40.0	24.8	25.3	20.1	29.8	19.4
Exports	137.8	160.6	197.9	153.0	201.9	256.0	242.6
Imports	-91.4	-120.6	-173.1	-127.7	-181.8	-226.2	-223.2
Services, income, and current transfers (net)	-32.8	-38.5	-53.0	-49.6	-67.4	-82.3	-73.6
Capital and financial account	16.3	89.1	29.3	71.3	99.6	109.4	76.7
Foreign direct investment (net)	-9.4	27.5	24.6	36.0	36.9	76.0	68.1
Portfolio investment (net)	4.3	37.9	3.5	50.5	56.4	31.2	8.2
Other capital (net)	21.3	23.7	1.3	-15.2	6.3	2.2	0.4
Errors and omissions	0.6	-3.2	1.8	-0.3	-3.5	-1.3	3.0
Change in net international reserves	32.0	94.5	13.4	44.7	50.1	63.4	21.1
Current account (in percent of GDP)	1.3	0.1	-1.7	-1.5	-2.2	-2.1	-2.4
Outstanding external debt (in percent of GDP)	15.8	14.1	12.0	12.2	12.0	12.1	14.1
Debt service ratio (in percent of exports of goods and services)	45.4	44.8	24.8	34.2	25.9	23.0	23.6
Gross reserves/short-term external debt (residual maturity, in percent)	100.0	231.3	235.5	314.6	269.8	394.6	474.3

Sources: Central Bank of Brazil; Ministry of Finance; and IMF staff estimates.

1/ Includes the central government, central bank, and social security system.

2/ Excludes proceeds from privatization.

3/ Policy lending to BNDES and other public financial institutions.

4/ Gross non financial public sector debt consolidates debt of public enterprises with that of general government. Unlike the authorities' definition, gross general government debt comprises treasury bills on the central bank balance sheet not used under repurchase agreements.

5/ Includes assets, which mainly comprise international reserves, outstanding liabilities of public financial institutions to the Treasury, financial assets of public enterprises, and assets of the federal labor fund (FAT).

6/ End of period. Currency issued plus required and free reserves on demand deposits held at the central bank.

7/ End of period. Base money plus demand, time and saving deposits

**Statement by Mr. Nogueira Batista, Executive Director for Brazil,  
Mr. Oliveira Lima, Alternative Executive Director for Brazil,  
and Mr. Santarosa, Governor Advisor  
July 26, 2013**

1. We would like to thank staff for the report and the selected issues paper.

**Economic activity**

2. Brazil's rapidly growing economy underwent a marked slowdown in 2011 and 2012. This rather unexpected deceleration can be attributed to adverse external circumstances and also to domestic factors, notably the restrictive policies adopted at the end of 2010 and in the first half of 2011 and, perhaps more fundamentally, relatively low investment rates and the exhaustion of a credit-based consumer durables cycle.

3. Recovery from the slowdown has been more difficult than expected, despite a series of measures taken by the government to foster growth. The Brazilian economy started to pick up in the last quarter of 2012 and the latest results point to somewhat stronger growth in the current year. In annual terms, seasonally adjusted, GDP grew 2.5 percent quarter-over-quarter in the last quarter of 2012 and 2.2 percent in the first quarter of 2013. Industrial production has been recovering recently, increasing 1.7 percent in the first five months of 2013 when compared with the same period of 2012.

4. Job creation has continued, maintaining unemployment at historic lows and helping hold up consumption, while inflation has remained within the target range. To boost the country's competitiveness and productive capacity, the authorities have provided incentives for investment and production, including for private sector engagement in key infrastructure projects. Long-due measures were taken to reduce payroll taxes and the cost of electrical energy.

**Fiscal policy**

5. Fiscal responsibility remains a cornerstone of Brazil's economic policy. The overall deficit of the consolidated public sector has exhibited a declining trend in the last ten years, falling from 5.2 percent of GDP in 2003 to 2.5 percent in 2012.<sup>1</sup> This is rather low by international standards and reflects persistent primary surpluses as well as a reduced burden of interest payments. The latter reflects in turn lower interest rates and a declining debt-to-GDP ratio. The authorities and the IMF staff expect the overall deficit to narrow slightly in 2013.

6. The authorities' commitment to a primary balance of 2.3 percent of GDP in 2013 was reaffirmed last Monday, when an additional reduction in current expenditure of 10

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<sup>1</sup> The consolidated public sector includes the federal government, the central bank, the social security system, state and municipal governments, as well as state-owned enterprises (except Petrobras and Eletrobras).

billion reais (0.2 percent of GDP) was announced for this year. Investment and priority spending in areas such as health, education and social transfers were not affected.

7. In recent years, fiscal policy has been employed in a countercyclical manner. If we take, for example, IMF staff's estimates of changes in the structural primary balance (which adjusts for output gap and one-off measures) as the basis to assess the overall stance of fiscal policy, we will conclude that policy was contractionary in 2011, expansionary in 2012, and is projected to be roughly neutral in 2013 (see Table 3 of the staff report). This is consistent with estimates published by the central bank. At the end of 2010 and in 2011 (mainly in the first half of the year), fiscal as well as monetary and macro prudential policies were tightened in response to the perception that the economy was overheating. As the international environment worsened during 2011, mainly due to the euro area crisis, fiscal and other policies were reversed to stimulative mode.

8. One can debate whether it is appropriate to add "policy lending" (to the national development bank and other public financial institutions) to the structural primary balance, as IMF staff does. If one does include estimates of "policy lending", the overall stance of fiscal policy, broadly defined, was projected to turn contractionary in 2013 even before the measures announced last Monday (see Table 3). Thus, fiscal policy may be becoming restrictive even though economic recovery is still in its early stages – a point not highlighted by staff.

9. The basic strength of fiscal policy becomes clearer when one considers the evolution of some of the main components of the federal government's accounts in recent years. For instance, from 2002 to 2012, the wage bill dropped from 4.8 to 4.3 percent of GDP and interest payments from 7.7 to 4.9 percent of GDP. The deficit in the social security system fell from 1.7 percent of GDP in 2007 to 0.9 percent of GDP in 2012. For these and other reasons, we are intrigued by the somewhat negative tone of staff's assessment of Brazilian fiscal policy and prospects.

### **Public debt**

10. Over the last decade, robust fiscal results as well as economic growth have put the consolidated net public debt firmly on a downward path, from 60 percent of GDP in 2002 to 35 percent in 2012. In the same period, gross debt as defined in the staff report has also declined relatively to GDP, but less sharply, from 80 to 68 percent (see Box 7 of the staff report). The discrepancy between the reductions in net and gross debt is to a great extent associated with the rapid accumulation of international reserves since 2006. As staff notes, it also reflects lending by the treasury to public financial institutions, mainly the national development bank. This lending does not affect the net public debt since the government's financial assets (public banks' obligations to the treasury) increase accordingly.

11. The measurement of gross public debt has been a point of contention between staff and the authorities for some time. Staff's definition includes all treasury securities held by the central bank. The authorities have explained at length why they consider

appropriate to exclude from gross debt numbers part of the securities in the central bank's portfolio, namely those that are not being used in liquidity-absorption repos. Only those being used for this purpose actually represent liabilities with the public and should be counted in the government's debt.

12. It should be noted that the Brazilian authorities adopted this methodology back in 2008 in a transparent and consistent manner. According to this methodology, the gross debt to GDP ratio of the general government was 58.7 percent in December 2012. Therefore, the IMF staff's preferred definition overestimates the ratio of gross government debt to GDP by almost 10 percentage points.

13. Yet, even if we consider gross public debt under the IMF staff's misleading definition, the data do not confirm staff's assertion that the downward trend in the gross debt to GDP ratio has been reversed. This ratio was 64.2 percent in May 2013, 3.2 percentage points lower than at the end of the previous year and 1.7 percentage points lower than in May 2012. This reduction is not captured in the figure in Box 7 since staff has not included the most recent available data. Nevertheless, what the figure does clearly show is the decline in the ratio of gross debt to GDP since 2002.

14. Furthermore, the profile of public debt improved considerably in the last decade. The average maturity of the federal debt has gradually been extended, whereas its composition changed radically, entailing a substantial reduction in interest rate- and exchange rate-related vulnerabilities. At end-2012, fixed interest rate securities accounted for 41.2 percent of total federal debt, versus a mere 2.2 percent in 2002, while the share of exchange rate-linked debt decreased from 22.4 percent to 0.6 percent of total debt, as reported by staff. When its external assets are also considered, the Brazilian public sector is a net external creditor (by as much as 14 percent of GDP). This provides an automatic debt stabilizer when there is an external shock and the currency depreciates.

### **Monetary and financial sector policies**

15. From August 2011 to October 2012, the Central Bank of Brazil (BCB – *Banco Central do Brasil*) lowered the policy rate by 525 basis points to 7.25 percent, bringing both nominal and real rates to their lowest levels in recent Brazilian history. Price pressures in the second half of 2012 – triggered in great part by the increase in food prices in the international markets – brought twelve-month consumer inflation to 6.6 percent in March 2013. In order to keep inflation in check, the BCB started in April 2013 to gradually increase the policy rate, which now stands at 8.5 percent. Thus, monetary as well as fiscal policies are being tightened despite the fact that growth recovery has only recently begun.

16. Inflation expectations have already responded to the increase in the policy rate. The latest market projections from the BCB's survey, published every Monday, indicate that inflation is expected to remain under control, closing 2013 at the same level of 2012 and within the target range for the tenth consecutive year.

17. Brazil's financial sector regulation and supervision have traditionally been strong, as recognized by IMF staff including in last year's FSAP. Most 2012 FSAP recommendations have been implemented or are in process of being implemented. However, not all recommendations are considered appropriate. A case in point is the recommendation to create a multi-partite, high-level financial stability committee. The Brazilian authorities consider that the institutional arrangement for systemic risk monitoring and coordination is adequate and does not require modification, for the following reasons. First, the Financial Stability Committee is well placed in the central bank, given that banks, which the BCB regulates and supervises, are the main potential sources of systemic financial risk. Second, coordination with other regulators is ensured by the Committee for Regulation and Supervision of Financial, Capital, Insurance, Pension and Capitalization Markets (COREMEC – *Comitê de Regulação e Fiscalização dos Mercados Financeiro, de Capitais, de Seguros, de Previdência e Capitalização*) as well as by several Memoranda of Understanding between financial regulators. Finally, top-level coordination is undertaken at the National Monetary Council (CMN – *Conselho Monetário Nacional*), which is the highest financial system authority and congregates the officials ultimately responsible for all regulatory institutions.

18. Non-performing loans (NPLs) remain low, particularly in public banks, even though the overall credit-to-GDP ratio has almost doubled over the last 8 years. Private banks' NPLs have increased somewhat but are below 5 percent of total loans, while public banks' NPLs have been stable at about 2 percent of total loans (see Table 7 of the report). A substantial part of credit expansion has been connected to mortgages, which were virtually non-existent until recently and are expected to continue growing at a fast pace. Despite this recent growth, housing credit accounts for only 7 percent of GDP. Recently, credit growth has moderated and housing prices have stabilized. According to the BCB, staff's concerns about financial stability and a possible large correction in the real estate market seem overdone.

19. Banks have sufficient capital to absorb even extreme shocks. Simulations by the central bank, mentioned in Box 9 of the staff report, show that most banks will not need to raise additional capital to comply with Basel III rules. The implementation of the Basel III parameters will start in October 2013 and follow the internationally agreed timeline.

### **External sector**

20. At 2.4 percent of GDP, the current account deficit in 2012 was moderately higher than in previous years, being however entirely financed by FDI inflows. In 2013, the current account deficit has risen further and the central bank projects a deficit of 3.2 percent of GDP, nearly 90 percent of which covered by FDI. Despite the higher deficit, Brazil's external position remains solid given the relative stability of FDI and, more importantly, high international reserves (US\$ 369 billion dollars at end-June 2013). The use of CFMs in times of abundant international liquidity has also contributed to limit the country's external vulnerability by containing excessive portfolio and other volatile capital flows.

21. Brazil's capacity to attract long-term foreign capital remains strong. National treasury bonds (Global 2023) were issued in the international markets in September 2012 and May 2013 at yields of 2.7 and 2.8 percent per year respectively, the lowest rates ever for a Brazilian external bond issuance. Foreign direct investment (FDI) reached US\$ 65 billion last year, positioning Brazil as the world's fourth largest investment destination, according to the UNCTAD 2013 World Investment Report.

### **Investment and employment**

22. The staff report may convey an excessively negative assessment of investment activity in Brazil. We recognize that investment is still relatively low and that sustaining adequate economic growth rates in the long-term will require substantial additional efforts. But one should not neglect a number of indications that investment has begun to recover. National Account data show that investment rebounded since the last quarter of 2012, particularly in the first quarter of 2013 when the annualized quarter-over-quarter expansion reached almost 20 percent.

23. Infrastructure investments have tripled in real terms over the last ten years, reaching about US\$ 100 billion in 2012, according to data published by the Finance Ministry. The second phase of the Growth Acceleration Program (PAC – *Programa de Aceleração do Crescimento*) is already showing results in areas such as urban development, transportation and energy. In 2012, the government launched the Logistics Investment Program (PIL – *Programa de Investimento em Logística*). The PIL focuses on the renewal and integration of the Brazilian transportation network in partnership with the private sector and consists of a wide range of concessions, including for highways, railways, airports and ports. The auction for the construction of the railway and the operation of the first high-speed train in Brazil is scheduled for next September. The government is also proceeding with the 11th and 12th bidding rounds for gas exploration and the first bidding round of the pre-salt oil layer. In the electricity sector, a series of auctions will be carried out between 2013 and 2017 for the generation of 33,000 MW from hydropower, wind power and other sources, as well as the installation of 23,200 kilometers of transmission lines. In order to foster investment projects in infrastructure, a number of tax benefits and facilitating measures were enacted for resident and nonresident investors, including innovative financing instruments such as infrastructure debentures and receivables investment funds (FDICs – *Fundos de Investimento em Direitos Creditórios*).

24. Furthermore, the authorities have taken a series of other steps to increase the country's competitiveness and to encourage investment and production. Measures such as the payroll tax relief for 40 economic sectors, the new automotive regime for 2013-2017, and the program for reducing energy costs have improved competitiveness and are conducive to higher economic growth.

25. A dynamic labor market has been a key element in the improvement of living standards in Brazil, an issue regrettably absent from the report. In 2012, the net creation of formal jobs reached 1.3 million and the rate of urban unemployment fell to 5.5 percent,



a historical low. In total, more than 16 million formal jobs were created in the last ten years, in what is likely the largest sustained employment creation in Brazilian history – and possibly one of the largest in modern history in any country barring China. Moreover, the share of the employed population with 11 years or more of schooling has increased from 33.6 to 46.3 percent since 2004. The expansion of the formal labor market coupled with targeted transfers to low-income households and higher education levels have driven millions out of poverty and improved income distribution.