INTERNATIONAL MONETARY FUND

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BRAZIL

July 2017

2017 ARTICLE IV CONSULTATION—PRESS RELEASE; STAFF REPORT; AND STATEMENT BY THE EXECUTIVE DIRECTOR FOR BRAZIL

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 2017 Article IV consultation with Brazil, the following documents have been released and are included in this package:

- A **Press Release** summarizing the views of the Executive Board as expressed during its July 5, 2017 consideration of the staff report that concluded the Article IV consultation with Brazil.
- The **Staff Report** prepared by a staff team of the IMF for the Executive Board's consideration on July 5, 2017, following discussions that ended on May 19, 2017, 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 June 20, 2017.
- An **Informational Annex** prepared by the IMF staff.
- A **Debt Sustainability Analysis** prepared by the staff of the IMF.
- A **Staff Statement** updating information on recent developments.
- A **Statement by the Executive Director** for Brazil.

The document listed below has been or will be separately released.

Selected Issues

The IMF's transparency policy allows for the deletion of market-sensitive information and premature disclosure of the authorities' policy intentions in published staff reports and other documents.

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INTERNATIONAL MONETARY FUND

COMMUNICATIONS DEPARTMENT

Press Release No. 17/279
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July 13, 2017

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700 19th Street, NW
Washington, D. C. 20431 USA

IMF Executive Board Concludes 2017 Article IV Consultation with Brazil

On July, 5, 2017, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation[1] with Brazil.

Brazil's deep recession appears close to an end. The recession, triggered by large macroeconomic imbalances and a loss of confidence, was exacerbated by declining terms of trade, tight financing conditions, and a political crisis. Buoyed by congressional and market support, the new government has pursued an ambitious reform agenda. A constitutional amendment that caps growth in federal noninterest spending in real terms has been passed and progress has been made on the discussion of social security and other structural reforms. Recent indicators suggest Brazil's economy is close to a turning point.

While the end of the recession appears to be in sight, a recent rise in political uncertainty has cast a shadow over the outlook. The government's ability to deliver on social security reform, a necessary step toward securing fiscal sustainability, has become more uncertain—and, with national elections scheduled for 2018, the window for legislative action is closing.

Fund staff expect a subdued recovery. Growth is projected to be 0.3 percent in 2017 and 1.3 percent in 2018, moving towards 2 percent in the medium term. Inflation is projected to undershoot its central target of 4.5 percent in 2017 and 2018. The forecast assumes that a sufficiently strong set of measures—most notably social security reform—are put in place to ensure fiscal sustainability. Political instability and spillovers from the corruption investigation are major sources of risk that could threaten the reform agenda and the recovery. The main policy risk is that the social security reform is severely diluted or delayed to the next government, prompting adverse market reaction in the near term and necessitating additional fiscal measures over time. The main external risks are a faster than expected tightening of global financial conditions and, with a lower likelihood, a significant slowdown in China.

Disinflation has continued, providing more room for monetary easing. After almost 2 years of being above the ceiling of the central bank's tolerance range of 6.5 percent, inflation has

[1] 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.

declined rapidly over the past year. The impact of large increases in regulated prices in 2015 has dissipated, while a widening output gap, an appreciating exchange rate, declining inflation expectations, and a favorable shock to food prices have combined to speed disinflation since late 2016. The central bank began an easing cycle in September 2016, bringing the monetary policy rate down by a cumulative 400 bps to 10.25 percent as of June 2017. The National Monetary Council has announced a gradual reduction in the inflation target to 4.25 percent in 2019 and 4.0 in 2020, which will bring Brazil closer into line with other inflation targeting countries.

The recession has been a main driver of external adjustment. Reflecting weak investment and improving terms of trade, the current account deficit narrowed to 1.3 percent of GDP in 2016 (from 3.3 percent of GDP in 2015). On average in 2016, the external position was broadly consistent with medium-term fundamentals and desirable policies. Brazil has continued to attract sizeable capital inflows.

The flexible exchange rate has been an important shock absorber. The central bank reduced the rollover rate of maturing FX swaps and auctioned reverse FX swaps, significantly reducing its net forward position to 1.4 percent of GDP from over 5 percent of GDP at end-2015. International reserves have remained a source of strength, standing at US$365 billion at end-2016, above the IMF's adequacy metric and other standard indicators.

The health of the banking sector has improved. Despite the recession, profits before taxes have surged due to high interest margins and lower funding costs. To limit increases in non-performing loans, banks have continued renegotiating the terms of loans and writing off delinquent loans. Capital ratios have increased on the back of a decline in private banks' risk-weighted assets and higher unrealized gains on fixed income securities. Liquidity has also improved as withdrawals of saving deposits stopped and banks' holdings of liquid assets increased. Overall external funding exposure and net open positions have remained low.

Fiscal outcomes have been disappointing and public debt ratios have risen sharply. Non-financial public sector debt rose from 72.5 percent of GDP to 78.3 percent between 2015 and 2016, with primary balances of -1.9 and -2.5 percent of GDP, and overall balances of -10.3 and -9.1 percent of GDP in those two years. The deficits in the primary balance have been largely the result of trend increases in mandatory spending and a sharp cyclical revenue downturn, while high borrowing costs and the contraction in output have delivered adverse debt dynamics.

The government aims to restore fiscal sustainability by gradually bringing primary balances toward surplus territory, with the support of the constitutional expenditure ceiling and social security reform. For 2017, the authorities aim to bring the primary deficit to -2.1 percent of GDP. They have introduced adjustment measures of 0.9 percent of GDP, including cuts in discretionary spending of 2/3 percent of GDP and a partial roll-back of payroll tax exemptions.

Executive Board Assessment[2]

Executive Directors welcomed that the Brazilian economy is showing signs of recovery following years of deep recession. However, Directors noted that the recent rise in political uncertainty poses risks to the outlook and the government's reform agenda. They emphasized that continued sound policies and ambitious structural reforms are needed to support macroeconomic stability, secure confidence, and anchor strong and durable growth.

Directors underscored that ensuring fiscal sustainability is a key priority. In this regard, they commended the authorities' ambitious consolidation and reform efforts aimed at securing the sustainability of the public finances and social security. Directors welcomed the focus on controlling expenditure growth, including through the implementation of a cap on non interest federal expenditure. However, they highlighted that further efforts are needed to achieve fiscal targets. In light of the challenges facing the economy, Directors generally supported the current pace of fiscal adjustment, but emphasized that the fiscal effort will need to be more intense as the recovery takes hold. A rolling medium term fiscal framework would be helpful to clarify and update the government's debt stabilization goals.

Directors highlighted the need to reform the social security schemes, including those for civil servants at all levels of government, in view of unfavorable demographic trends and large actuarial imbalances. They also noted the importance of this reform for the federal spending cap over time. Directors expressed concern over subnational finances, and encouraged the authorities to continue developing durable solutions in coordination with the states.

Directors agreed that monetary policy has been appropriately calibrated and recommended continuing monetary easing. Nevertheless, they encouraged continuous reassessment of the policy stance in view of the evolution of inflation and expectations and prospects for fiscal reforms. Directors welcomed the efforts to strengthen Brazil's inflation targeting framework through improved communications and steps to alleviate distortions in credit markets.

Directors underscored that the floating exchange rate system and reserve buffers are key sources of strength for Brazil and should be preserved. They commended the reduction in foreign exchange intervention and recommended that interventions be limited to addressing disorderly market conditions.

Directors observed that the financial sector has remained sound despite the severe stresses. To make the system more robust, they encouraged actions to further strengthen financial safety nets through enhanced monitoring and an improved crisis management framework. Directors underscored the need for continued vigilance and close monitoring of the health of the corporate sector and its impact on the banking system.

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[2] 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.

Directors stressed that ambitious structural reforms, including in the areas of tax policy, labor markets, and infrastructure are essential to raise long term growth. They also underscored the importance of trade reforms to enhance competitiveness and efficiency. Directors noted the ongoing efforts to combat corruption and stressed that continued strong action to improve governance, increase transparency and strengthen institutional frameworks will be key to securing strong, durable and inclusive growth.

Brazil: Selected Economic 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 (2013)	1.9
		Hospital beds per 1000 people (2012)	2.3
Population		Access to safe water (2015)	98.1
Total (million) (est., 2015)	204.5		
Annual rate of growth (percent, 2015)	0.8	Education	
Density (per sq. km.) (2015)	24.0	Adult illiteracy rate (2015)	7.4
Unemployment rate (latest, 2017)	13.7	Net enrollment rates, percent in:	
		Primary education (2014)	99
Population characteristics (2014)		Secondary education (2014)	84
Life expectancy at birth (years)	75		
Infant mortality (per thousand live births)	14	Poverty rate (in percent, 2014)	13.3
Income distribution (2016)		GDP, local currency (2016)	R$6,267 billion
By highest 10 percent of households	40.9	GDP, dollars (2016)	US$1,799 billion
By lowest 20 percent of households	3.6		
Gini coefficient (2015)	49.1	GDP per capita (est., 2016)	US$8,795

Main export products: airplanes, metallurgical products, soybeans, automobiles, electronic products, iron ore, coffee, and oil.

II. Economic Indicators

			Proj.					
	2015	2016	2017	2018	2019	2020	2021	2022
			(Percentage change)					
National accounts and prices								
GDP at current prices	3.8	4.4	7.8	6.1	6.8	7.1	7.1	7.1
GDP at constant prices	-3.8	-3.6	0.3	1.3	2.0	2.0	2.0	2.0
Consumption	-3.3	-4.7	-0.2	0.4	0.8	1.5	1.5	1.1
Investment	-23.8	-10.4	0.8	4.0	7.2	4.0	4.4	5.6
Consumer prices (IPCA, end of period)	10.7	6.3	4.0	4.0	4.5	4.5	4.5	4.5
			(In percent of GDP)					
Gross domestic investment	19.1	17.5	17.6	17.9	18.5	18.8	19.1	19.6
Private sector	17.3	15.8	16.0	16.3	17.0	17.4	17.7	18.3
Public sector	1.9	1.8	1.6	1.6	1.5	1.4	1.4	1.3
Gross national savings	15.8	16.2	16.0	16.2	16.8	17.0	17.2	17.6
Private sector	24.1	23.3	23.1	23.3	23.4	23.1	22.8	22.9
Public sector	-8.3	-7.1	-7.0	-7.1	-6.5	-6.1	-5.6	-5.3
Public sector finances								
Central government primary balance 1/	-2.0	-2.3	-2.0	-1.8	-1.3	-0.6	0.0	0.5
NFPS primary balance	-1.9	-2.5	-2.1	-1.8	-1.1	-0.4	0.2	0.8
NFPS cyclically adjusted primary balance	-1.8	-1.4	-1.0	-1.1	-0.8	-0.3	0.3	0.8
NFPS overall balance (including net policy lending)	-10.3	-7.5	-8.8	-10.2	-9.8	-9.8	-9.7	-9.7
Net public sector debt	35.6	46.2	51.4	55.9	58.9	61.0	62.4	63.3
General Government gross debt, Authorities' definition	65.5	69.9	...	...	...	...	…	…
NFPS gross debt	72.5	78.3	81.5	85.8	88.6	90.5	91.7	92.4
Of which: Foreign currency linked	4.5	3.8	3.5	3.4	3.4	3.3	3.3	3.3
			(Annual percentage change)					
Money and credit								
Base money 2/	8.4	8.1	7.8	6.1	6.8	7.1	7.1	7.1
Broad money 3/	9.7	12.4	11.6	8.7	10.0	13.8	14.4	14.5
Bank loans to the private sector	3.6	-2.9	5.7	7.4	11.0	12.4	12.9	12.2
			(In billions of U.S. dollars, unless otherwise specified)					
Balance of payments								
Trade balance	17.7	45.0	49.0	49.1	51.8	52.3	53.9	56.5
Exports	190.1	184.5	200.1	205.4	214.3	221.8	231.3	241.8
Imports	172.4	139.4	151.0	156.3	162.5	169.5	177.4	185.3
Current account	-59.4	-23.5	-32.4	-37.4	-38.1	-42.9	-47.1	-50.4
Capital account and financial account	55.6	16.7	32.4	37.4	38.1	42.9	47.1	50.4
Foreign direct investment (net)	61.2	71.1	59.0	53.6	50.5	49.7	49.8	50.5
Terms of trade (percentage change)	-11.0	3.0	-2.4	-3.8	-1.2	-1.5	-0.9	-0.8
Merchandise exports (in US$, annual percentage change)	-15.2	-3.0	8.5	2.7	7.1	8.0	4.3	4.5
Merchandise imports (in US$, annual percentage change)	-25.3	-19.1	8.3	3.5	7.6	8.4	4.7	4.4
Total external debt (in percent of GDP)	36.9	36.9	32.2	31.7	30.7	29.7	28.6	27.5
Memorandum items:								
Current account (in percent of GDP)	-3.3	-1.3	-1.5	-1.7	-1.7	-1.8	-1.9	-2.0
Gross official reserves	356.5	365.0	365.0	365.0	365.0	365.0	365.0	365.0
REER (annual average in percent; appreciation +) 4/	-15.8	6.7	13.6	...	...	...	...	...

Sources: Central Bank of Brazil; Ministry of Finance; IPEA; and Fund staff estimates.
1/ Includes the federal government, the central bank, and the social security system (INSS). Based on the 2017 draft budget, recent announcements by the authorities, and staff projections.
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/ Q1 2017 only.

INTERNATIONAL MONETARY FUND

BRAZIL

STAFF REPORT FOR THE 2017 ARTICLE IV CONSULTATION

June 20, 2017

KEY ISSUES

Context. Brazil's deep recession appears close to an end. But risks remain. The government that took office last year found an economy in recession and structural problems that threatened fiscal sustainability. The recession, triggered by large macroeconomic imbalances and a loss of confidence, was exacerbated by declining terms of trade, tight financing conditions, and a political crisis. Buoyed by congressional and market support, the government has pursued an ambitious reform agenda. A constitutional amendment that caps growth in federal noninterest spending in real terms has been passed and progress has been made on the discussion of social security and other structural reforms. Disinflation has gathered momentum, providing more room for monetary easing. While the end of the recession appears to be in sight, a recent rise in political uncertainty has cast a shadow over the outlook. The government's ability to deliver on social security reform, a necessary step toward securing fiscal sustainability, has become more uncertain—and, with national elections scheduled for 2018, the window for legislative action is closing.

Outlook and risks. A subdued recovery is expected. Growth is projected to be 0.3 percent in 2017 and 1.3 percent in 2018, moving towards 2 percent in the medium term. Inflation is projected to undershoot its central target of 4.5 percent in 2017 and 2018. The forecast assumes that a sufficiently strong set of measures—most notably social security reform—are put in place to ensure fiscal sustainability. Political instability and spillovers from the corruption investigation are major sources of risk that could threaten the reform agenda and the recovery. The main policy risk is that the social security reform is severely diluted or delayed to the next government, prompting adverse market reaction in the near term and necessitating additional fiscal measures over time. The main external risks are a significant slowdown in China and a faster than expected tightening of global financial conditions.

Policy recommendations. Continued focus on fiscal reforms is crucial to underpin macroeconomic stability. The authorities should aim to overperform on their near-term fiscal consolidation objectives and to increase their fiscal effort as the recovery takes hold. Monetary policy easing can continue in 2017 given the large output gap and moderate inflation expectations, conditional on the outlook for inflation remaining benign. Supply-side structural and regulatory reforms are needed to improve the business environment and boost medium-term growth. Financial safety nets should be strengthened through enhanced monitoring and an improved crisis management framework. The exchange rate should remain the main external adjustment variable. Corruption has proven costly for Brazil; improving governance, increasing transparency and strengthening institutional frameworks are key to secure strong, durable and inclusive growth.

Approved By
Krishna Srinivasan (WHD) and Vitaliy Kramarenko (SPR)

Discussions took place in Rio de Janeiro, São Paulo and Brasília during May 8–19. The team comprised A. Cuevas (Head), I. Karpowicz, T. Matheson and N. Biljanovska (all WHD), C. Mulas-Granados (FAD), R. Berkhout (LEG), I. Krznar (MCM), and K. Moriyama (SPR), assisted by F. Bornhorst (Resident Representative) and F. Barbosa (local Economist). The team met with representatives of business and labor, financial sector analysts, think-tanks, academics, and senior government and central bank officials. B. Saraiva (OED) participated in most the meetings. A. Werner (Director, WHD) and K. Srinivasan (Deputy Director, WHD) joined the concluding meetings, as did A. Tombini (Executive Director, OED).

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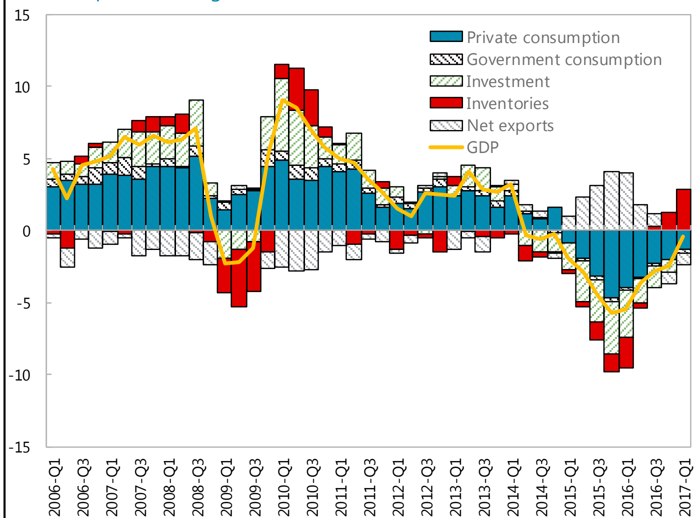
A TURNING POINT?

1. **Brazil has experienced a long and deep recession.** The recession has been marked by low levels of confidence and large declines in investment and private consumption. Since the end of 2014, real output has contracted by around 7 percent, around 3 million formal jobs have been lost, and the unemployment rate has more than doubled. The recession has had significant negative spillovers on Brazil's closest regional trading partners, most notably Argentina.

Real GDP Growth and Contributions
(Annual percent change)



Sources: IBGE and Fund staff estimates.

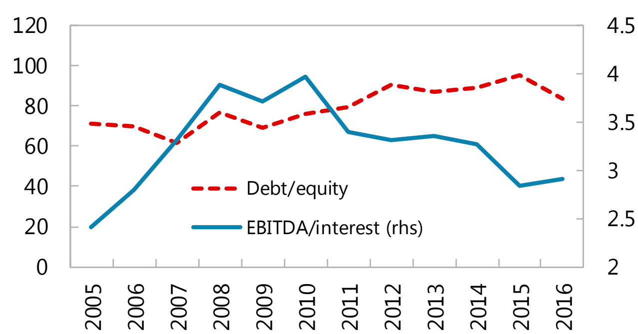
2. **Domestic factors largely explain the recession, but terms of trade changes and global demand have also played a role.** In particular:

- **Investment** has fallen by around 30 percent since the beginning of 2014. The fall has been marked by a sustained period of low competitiveness, rising costs (e.g. energy and unit labor costs), worsening terms of trade, declining profitability, and tightening financial conditions. The decline has also been exacerbated by a generalized deterioration in future growth prospects, higher levels of corporate leverage, and rising economic policy uncertainty (Selected Issues Paper).

- **Consumption** has also suffered a large contraction, amid a severe deterioration in labor market conditions, falling real income growth, and tightening financial conditions.

- **Net exports** broadly supported growth over 2015, reflecting a sharp demand-related fall in imports and strong export growth amid exchange rate depreciation and the delayed effects of stronger investment and capacity in the commodity export sector (e.g. mining). However, the impetus to growth from exports seen in 2015 has waned, with exports contracting by almost 5 percent in the year to December 2016 (a pickup in export volumes was reported in 2017-Q1, but it does not alter the overall picture).

Corporate Sector Indicators
(Percent)



Sources: Capital IQ and Fund staff estimates.

- **Additional factors** that have hampered growth relate to continuing uncertainty surrounding the political situation and the government's reform agenda, and the ongoing corruption probe (Box 1).

3. **The economy appears to be nearing a turning point.** After eight consecutive quarters of contraction, real GDP increased in 2017-Q1. The result was driven by net exports, largely a reflection of a positive supply shock to agricultural output; but domestic demand contracted again, making it difficult to call already the end of the recession. However, many of the factors that were hampering growth in the early phases of the recession (e.g. falling terms of trade, high inflation and tightening financial conditions) have normalized, and, in some cases, improved. Consumption should also get a modest boost from the release of funds in inactive mandatory savings accounts (FGTS).[1] Corporate leverage has started to decline, albeit from a high level. So the economy seems poised to resume modest growth in the second half of the year.

Box 1. Corruption Investigation and its Spillovers

The fight against corruption is reaching the upper echelons of the political class. The *Lava Jato* (car wash) investigation, which began in 2014, has revealed decades-long practices of corruption. A strong and independent judiciary has successfully pursued investigations and prosecutions, although some of its tactics have been controversial at times. Facilitated by the implementation of a new anti-corruption law and the introduction of plea-bargain agreements, and initially centered on oil giant Petrobras, the *Lava Jato* investigation and its offshoots expanded to all major construction firms, public works for the 2014 World Cup and the 2016 Olympics, the energy sector (dams and power plants), the meatpacking industry, defense contracts, pension funds, and BNDES, the development bank. In plea bargain arrangements with public prosecutors, business executives have implicated scores of politicians, many of whom enjoy parliamentary immunities. The Supreme Court has recently authorized investigations into one third of current cabinet members, one third of Senators, and one third of state Governors, as well as the President, leaders of Congress and of the main political parties. Several former presidents and presidential hopefuls for 2018 are also being investigated. The accusations have to be investigated before the individuals are charged and prosecuted.[1] As the investigations unfold, more business executives and politicians may end up implicated.

The investigations are spilling over into other countries in the region. One focus of the investigation is Odebrecht, until recently South America's largest construction conglomerate, with significant operations outside Brazil. The firm pleaded guilty and reached an agreement with prosecutors in Brazil, in the U.S. and Switzerland and agreed to pay a penalty of US$2½ billion. In the agreement, the firm implicated high-ranking current and former officials from 12 countries in the region in corruption in some 100 projects over the past 15 years. Investigations have started in several countries, and many projects involving the tainted companies, sometimes of macroeconomic importance, have been suspended or delayed.

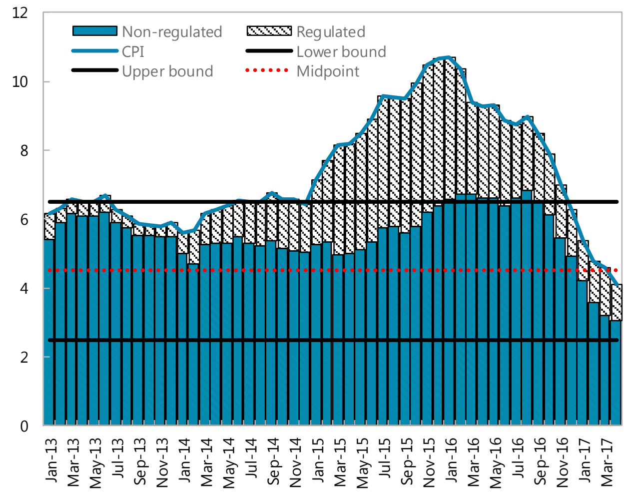
The economic fallout from the corruption probe is counterbalanced by gains in transparency and improved governance. The investigation has undoubtedly raised uncertainties as a side effect, and dampened activity in the oil and gas and construction sectors. However, in its wake new reforms and initiatives are taking place that should bring institutional benefits to Brazil. The investigations have revealed easily abused procurement rules and other deficiencies in systems that should prevent or detect corruption. Thus, firms, including SOEs, are strengthening their governance frameworks, and the government is reviewing public procurement rules, with new players (including foreign ones) increasingly bidding for public projects. Going forward, fiscal, judicial and other legal reforms can help reduce the scope for corrupt practices and money laundering.

[1] In the *Lava Jato* investigation 139 individuals have been sentenced in the first instance (as of May 2017), among whom there are only a handful of former politicians. The Supreme Court's cases against over one hundred politicians with immunities have not resulted in any sentences yet.

[1] The FGTS accounts are employer-funded mandatory savings that could be withdrawn by employees in case of dismissal, sickness, or for the purpose of financing the purchase of a home. Between March and July 2017, about 30 million people are eligible to withdraw funds worth 2/3 percent of GDP, money that was previously frozen.

4. Inflation has declined rapidly and the central bank is on an easing cycle. After almost 2 years of being above the ceiling of the central bank's tolerance range of 6.5 percent, inflation has declined rapidly over the past year. The impact of large increases in regulated prices in 2015 has dissipated, while a widening output gap, an appreciating exchange rate, declining inflation expectations, and a favorable shock to food prices have combined to speed disinflation since late 2016 (Box 2 and Figure 2). The central bank began an easing cycle in September 2016, bringing the monetary policy rate (SELIC) down by a cumulative 400 bps to 10.25 percent as of June 2017. The reference rate for BNDES' subsidized loans (known as "TJLP") was also reduced by 50 basis points to 7.0 percent in late March. Most private forecasters see the SELIC below 9 percent by year's end.

Headline Inflation and Contributions
(Annual percentage change)



Sources: IBGE and Fund staff estimates.

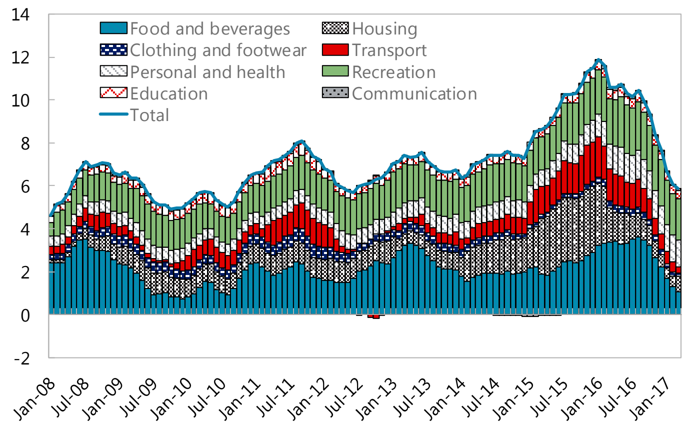
5. The external position was on average broadly consistent with medium-term fundamentals and desirable policies in 2016. The recession has been a main driver of external adjustment (Appendix II). Reflecting weak investment and improving terms of trade, the current account deficit narrowed to 1.3 percent of GDP in 2016 (from 3.3 percent of GDP in 2015). On average in 2016, the external position was broadly consistent with medium-term fundamentals and desirable policies per the External Balance Assessment (EBA). The appreciation of the real effective exchange rate (REER) during 2016 reflected largely a return of market confidence in view of the reform agenda and a more general risk-on mode, and an improvement in the terms of trade (in the first quarter of 2017 the REER was 14 percent stronger than its average in 2016, but part of this appreciation was reversed following the start of the most recent political turmoil). The flexible exchange rate has been an important shock absorber. The BCB reduced the rollover rate of maturing FX swaps and auctioned reverse FX swaps, significantly reducing its net forward position to 1.4 percent of GDP from over 5 percent of GDP at end-2015. International reserves remained a source of strength, standing at US$365 billion, equivalent to 166 percent of the ARA metric.

6. Brazil has continued to attract sizable capital flows but their composition has changed. Net direct investment fully financed the current deficit in 2016, partly supported by intercompany loans. Net portfolio debt liabilities, having accounted for more than 1 percent of GDP in previous years, turned to net outflows despite improving market sentiment toward the government's reform agenda, as evidenced by the evolution of market spreads. In fact, the share of government debt held by nonresidents declined steadily over the course of 2016 from 19 percent to 14 percent.

Box 2. Drivers of Disinflation

Inflation has declined markedly over the past year. After peaking at 10.7 percent in December 2015, annual IPCA inflation ended 2016 at 6.3 percent, within the target band. The large increase in regulated prices, that resulted from a much-needed adjustment in energy prices in 2015, had a particularly large impact on electricity and fuel prices in the housing and transport sectors, but also contributed to rising production costs in other sectors of the economy. The effect of these increases began to wane in early 2016, but inflation was slow to fall due to a sharp increase in food prices in early 2016 that resulted from adverse growing conditions for key crops (notably, black beans). The effect of food price shocks began to dissipate over the latter part of 2016 and inflation has experienced a large and broad-based decline.

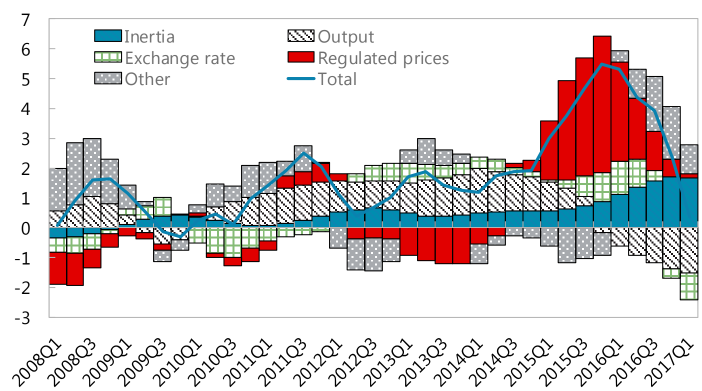
Headline Inflation and Contributions
(Percent year-over-year)



Source: Fund staff estimates.

What are the key macroeconomic drivers of the decline in inflation?[1] A decomposition of annual inflation into contributions from several key variables suggests that declining regulated-price inflation was a key contributor to the overall decline in inflation over the past year. However, more recently, the effects of weak demand and appreciation of the exchange rate have also been increasingly exerting downward pressure on inflation. These disinflationary effects have been offset somewhat by inflation inertia (resulting from price and wage indexation to past inflation) and other shocks, including food-price shocks in the early part of 2016.

Headline Inflation and Macroeconomic Contributions
(Percent year-over-year, deviation from center of tolerance range)



Source: Fund staff estimates.

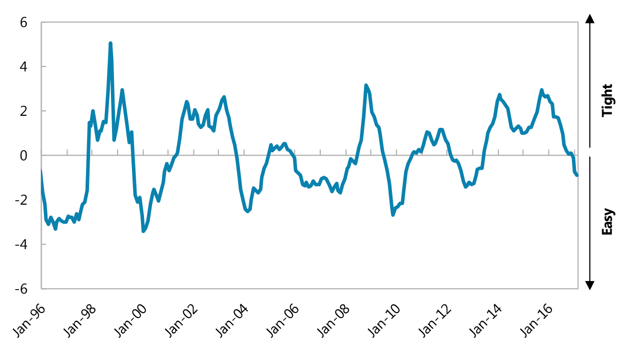
Disinflationary pressures are expected to continue in the near term. Demand is expected to remain weak for some time and will continue to exert downward pressure on inflation. Likewise, regulated-price inflation and food-price inflation are expected to remain subdued, consistent with relatively stable international energy prices and the exchange rate, and favorable weather conditions for agricultural production in late 2016.

[1] Based on OLS estimation of a simple Phillips curve: $\pi_t = 0.34\pi^4_{t-1} + 0.34y_t + 0.05Z_t + 0.37\pi^r_t + \epsilon_t$, where π_t is quarterly IPCA inflation (annualized), π^4_{t-1} is lagged annual inflation (inertia), y_t is the output gap (output), Z_t is annual growth in the real-effective exchange rate (exchange rate), and π^r_t is quarterly IPCA regulated-price inflation (annualized; a proxy for energy prices), and ϵ_t represents all other shocks. All inflation rates are expressed as deviations from the inflation target and the other variables are demeaned. The estimation sample is 1999Q4 to 2017Q1. All coefficients are statistically significant at the 1 percent level using HAC standard errors. The adjusted R-squared is 0.7.

7. Financial markets have been impacted by domestic risks. The authorities have had some success in pursuing their ambitious reform agenda over the past year and have enjoyed broad-based market support. The *real* apreciated by around 8 percent against the U.S. dollar over the year to December 2016, and by around 7 percent in real effective terms. The domestic government 10-year yield declined by around 400 basis points to 10 percent in the year to early May 2017. More recently, a sharp increase in uncertainty related to the political situation sparked doubts about the government's ability to deliver on its reform agenda and prompted a rapid repricing of risk. Over the course of one day (May 18), 5- and 10-year sovereign yields rose by around 150 basis points, and the stock market and exchange rate against the U.S. dollar lost almost 10 percent of their values. The stock exchange's automatic circuit breakers were triggered, and the authorities stepped in to mitigate market volatility. The Central Bank provided an exchange rate hedge through FX swaps, and the Treasury implemented a series of extraordinary buy and sell auctions to provide liquidity and pricing information to investors. Asset prices have since stabilized, albeit at lower levels than in early May, and uncertainty remains high.

8. The credit cycle downturn has deepened, but financial conditions have eased. Private sector credit, a lagging variable in the cycle, has continued to decelerate, reflecting both low demand and still tight underwriting standards. A factor affecting both supply and demand was the investigation of construction companies involved in the corruption scandal, which were traditionally large users of BNDES credit. However, demand and supply indicators of credit and new loans have picked up since late-2016, potentially signaling the end of the negative credit dynamics. Moreover, staff's financial conditions index, a leading indicator of the cycle, has been loosening for several quarters now.

Financial Conditions Index

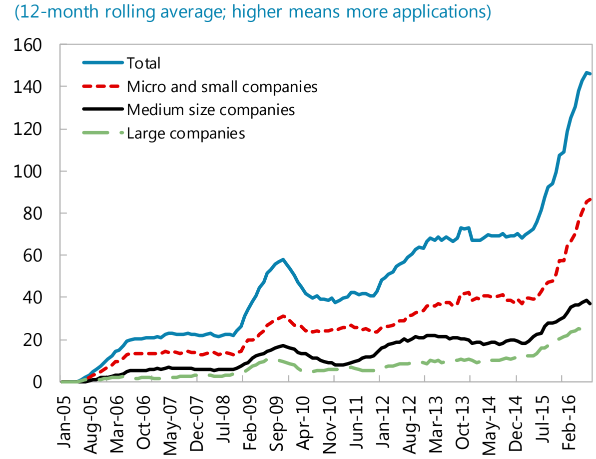


Source: Fund staff estimates.

9. The banking sector's health has strengthened. Profits before taxes surged due to high interest margins and lower funding costs. To limit increases in non-performing loans, banks have continued renegotiating the terms of loans and writing off delinquent loans. Capital ratios increased on the back of a decline in private banks' risk-weighted assets and higher unrealized gains on fixed income securities. However, capital ratios of public banks, much lower than private banks', continued declining because of higher Basel III deductions (Figure 5). Liquidity improved as withdrawals of saving deposits stopped and

Brazil: Bankruptcy Protection Applications Index

(12-month rolling average; higher means more applications)

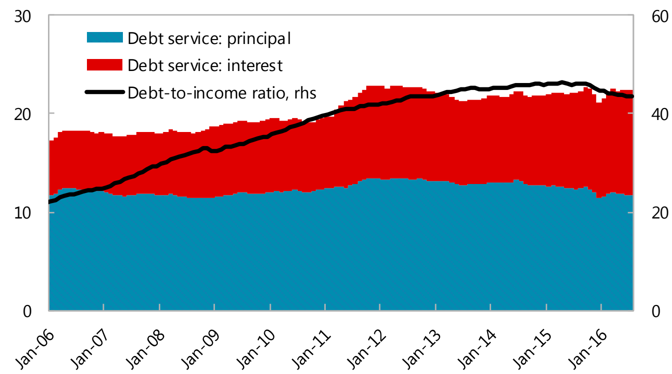


Source: Serasa.

banks' holdings of liquid assets increased. Overall external funding exposure and net open positions remained low.

10. Nonfinancial corporate and household balance sheets have begun to improve. Households' debt-to-disposable income ratio is edging down, mainly due to lower non-mortgage debt, while debt-service-to-income ratios have declined owing to accelerated principal repayments on outstanding loans. Corporate bankruptcy protection applications have begun to fall. Leverage, however, continues to be high in the corporate and household sectors, and warrants continued monitoring, including because of its adverse effect on the pace of the economic recovery. Petrobras has made progress on asset sales and improved its management practices, enhancing efficiency and lowering costs. The company's EBITDA margin is at its highest level in several years, thanks in part to a change in its domestic pricing policy towards ensuring at least a small premium over import parity prices. While debt maturing over 2017 and 2018 remains high at nearly US$20 billion, its debt amortization schedule has improved.

Brazil: Household Indebtedness
(Percent of disposable income)



Source: Banco Central do Brasil.

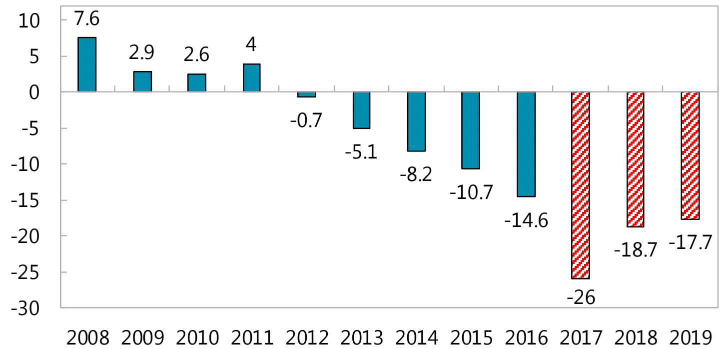
11. Public debt ratios have risen sharply. NFPS debt rose from 72.5 percent of GDP to 78.3 percent between 2015 and 2016, with primary balances of -1.9 and -2.5 percent of GDP, and overall balances of -10.3 and -9.1 percent of GDP in those two years. The deficits in the primary balance have been largely the result of trend increases in mandatory spending and a sharp cyclical revenue downturn, while high borrowing costs and the contraction in output have delivered adverse debt dynamics. Along the way, the composition of spending has worsened, with rising current outlays and stagnant investment. Improving fiscal balances remains essential to ensure fiscal sustainability (see the accompanying Debt Sustainability Analysis).

12. Some subnational governments' finances are highly stressed (Box 3). States' fiscal positions have deteriorated due to the combination of revenue shortfalls, especially marked in oil producing states such as Rio de Janeiro, and steep wage bill and pension spending increases in the last several years. While similar in nature, the severity of fiscal problems differs widely from state to state. The federal government has negotiated consolidation measures in exchange for debt rescheduling and loan guarantees with Rio de Janeiro and Rio Grande do Sul (two states facing serious difficulties), and the overall framework has received congressional approval.

Box 3. Rio de Janeiro and Rio Grande do Sul—The Tale of Two Financially Troubled States

Rio de Janeiro (RJ) and Rio Grande do Sul (RS) are two of the states showing the most extreme fiscal distress.

Rio de Janeiro: Overall Balance, 2008–19
(Constant R$ billion)



Source: Ministry of Finance.

Rio de Janeiro

The situation in RJ is dire. RJ has been affected by the combination of fast expenditure increases for many years, a sudden reduction in revenues arising from the recession, and the sharp contraction in royalty revenue as world oil prices fell. Today, RJ struggles to stay current with payments to its creditors, its employees, its pensioners, and its providers. By the end of 2016, RJ accumulated an estimated financing gap of R$26 billion in 2017 (3.7 percent of the state's GDP and 0.4 percent of Brazil's GDP).

More than one rescue package will likely be needed to stabilize RJ's finances. The 3-year rescue package agreed in January between RJ and the federal government (FG), includes measures to cover a fiscal gap of R$26 billion in 2017, including an increase of R$1.2 billion in revenues, cuts in discretionary spending of R$9 billion, and an increase in pension contributions worth R$3.2 billion. In addition, RJ will not have to service its debt to the FG (R$6.2 billion) in 2017, and the FG will guarantee a bank loan against future privatizations (R$3.4 billion). While this package will help RJ deal with its cash pressures in 2017, additional measures will be needed to finance large expected deficits in 2018 and 2019. Absent reforms to curb the structural growth of salaries and pensions, a large fiscal gap will remain and a new package will be needed in 2020.

Rio Grande do Sul

High spending on pensions and personnel have become structural problems in RS. Booming spending on social security is the main obstacle for the sustainability of public finances in RS. The ratio of retirees and other beneficiaries to active employees is already very high at 1.3; and the projected deficit of the pension system for 2017 is estimated at R$9 billion. The unfavorable trend has also affected the quality of public services, as teachers and public servants are rushing to retire early given the uncertainty over the pension reform.

RS launched austerity measures earlier than other states. Facing a R$25 billion deficit projected for 2017–19, the RS government launched a first package of adjustment measures early in 2015, followed by additional measures in 2016. Administrative spending was cut by 20 percent, 9 out of 29 ministries were closed, and 9 foundations were terminated. RS also approved a ceiling on government spending on wages, capped at 70 percent of revenue. In relation to pensions, a ceiling on the value of benefits that can be cumulated was introduced, and a new complementary system was created for civil servants joining from 2015 onwards, implying full capitalization above a certain salary threshold. Benefits from this reform, however, will only be felt 20 years from now.

Revenue measures have also been part of the adjustment process. The list includes an increase in the inheritance tax, a hike of the state consumption tax (ICMS), and increases in telecom, fuel, electricity and alcohol taxes. The contributions to the pension system paid by the employees were also increased from 13.25 to 14 percent and the local authorities stepped up efforts to collect one-off revenues, recalled fiscal incentives, and encouraged early repayment of tax debt.

Box 3. Rio de Janeiro and Rio Grande do Sul—The Tale of Two Financially Troubled States (Concluded)

A short-term rescue package could stabilize the ongoing fiscal crisis in RS but structural measures will be necessary for medium-term sustainability. To close the R$9 billion financing gap in 2017, the rescue package being negotiated between the FG and RS will involve a mix of financing and belt-tightening measures. This package will probably include an extension of the grace period on debt-service to the FG for another 3 years, generating about R$4 billion in (temporary) savings. The rest should come from loans with federal-guarantees against a future sale of assets, mainly SOEs in the energy sector (electricity, mining, water and gas). But structural fiscal reforms will be needed to ensure long-term sustainability. While the increase in the contribution rate was useful, it will not be sufficient to guarantee pension system sustainability. The minimum retirement age proposed for the FG level, if approved, should be extended to military and security personnel at state level to provide fuller relief. However, legislation to alter the structure of teachers' careers and introduce longer contribution periods before retirement is also necessary.

POLICY IS HEADING IN THE RIGHT DIRECTION

13. Various aspects of Brazil's policy framework have been strengthened or have improvements in prospect,[2] including:

- **Expenditure Cap.** In December 2016, Congress passed a constitutional amendment imposing a ceiling on federal noninterest spending; this ceiling will be indexed to the rate of consumer price inflation of the previous year (measured in June). The reform includes provisions that would trigger a series of corrective measures in case of breach of the rule. This rule will be in effect for 20 years, with an opportunity to modify the ceiling's indexation mechanism after the first 9 years.[3] This ceiling lays the basis for gradually exiting a period marked by primary fiscal deficits and very large increases in public debt. With this constitutional limit, noninterest expenditure will decline as a share of GDP in the medium term as long as nominal GDP growth exceeds consumer price inflation.

- **Fiscal Sustainability.** The government aims to restore fiscal sustainability by gradually bringing primary balances toward surplus territory, with the support of the constitutional expenditure ceiling and social security reform. For 2017, the authorities aim to bring the primary deficit to -2.1 percent of GDP. They have introduced adjustment measures of 0.9 percent of GDP, including cuts in discretionary spending of 2/3 percent of GDP and a partial roll-back of payroll tax exemptions. Other measures under consideration include selected privatization operations, such as the sale of Caixa's lottery and insurance businesses. For 2018, the primary balance target improves slightly to -1.8 percent of GDP.

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[2] See Appendix III on the take-up of 2016 Article IV consultation recommendations.

[3] A few items are excluded from this ceiling. Chief among these items are the transfers to subnational entities arising from the revenue-sharing system. Also in 2016 the Congress approved a legal instrument, the DRU, releasing the earmarking on 30 percent of federal taxes through 2023, which should help in meeting the spending ceiling.

- **Monetary Policy.** Communications from the central bank have become more transparent, putting more emphasis on the balance of risks and providing more guidance on the monetary policy stance. The tolerance range for inflation was narrowed for 2017 and 2018.

- **Credit Markets.** The role of subsidized credit is being reduced. In particular, the government has announced the gradual phase out of the TJLP, a subsidized interest rate fixed by the National Monetary Council, and its replacement with the TLP, a market-linked interest rate. The role of the BNDES is being adjusted in line with this new policy direction.

- **Labor Market.** A draft labor reform in Congress would give priority to firm/union agreements over legislation in selected aspects of labor relations, and increase the scope for part-time employment. A recently approved law allows an unrestricted outsourcing of labor, including that related to firms' core activities (Box 4).

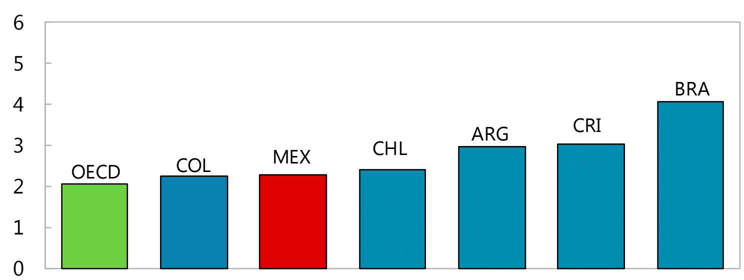
Box 4. Labor Regulation and the Proposed Reform

Labor reform discussions in Congress center on a proposed reform to labor relations. The draft law (6787/16) gives agreements reached between workers' representatives and employers precedence over labor legislation in about a dozen areas concerning working day and salary. It regulates the workers' representation at the firm level, while introducing flexibility with respect to industrywide legal regulations. The legislation would be made more flexible by allowing companies and employees to negotiate the weekly work schedule within certain limits, enabling workers to take annual leave in up to three installments, and broadening the modalities for part-time employment, among other issues. The new provisions could facilitate an increase of temporary work and may also help increase labor force participation. However, it is less clear what the ultimate effect on aggregate employment will be.

The reform also discourages excessive litigation. The backlog of pending cases before labor courts is very high by international standards, and lower courts' decisions are often unpredictable. The reform aims at reducing the judicialization of labor relations, *inter alia*, by regulating how much the losing party should pay for litigation costs. The reforms, however, do not reduce employment protection, which is high in Brazilian law, nor do they change the minimum wage indexation formula.

Employment Protection Legislation Index, 2013: Temporary Contracts

(Scale 0-6, from least to most restrictive)



Sources: OECD and EPL database.

The outsourcing framework is also being modified. Previously an area ruled only by jurisprudence, a new (recently enacted) law now defines the scope for outsourcing of activities. This law allows firms to outsource any activity, including core ones. The law does not require that outsourced jobs have the same benefits as those that remain on payroll, even if the jobs are equivalent.

- **Other Reforms**. Petrobras is continuing its turnaround based on a cutback of expansion plans, a selective divestment strategy, and a new pricing policy for domestic products guided by import parity. Reforms to improve regulation, the business environment, and to lower red tape have also been announced. The government is standardizing foreign trade procedures, simplifying tax refunds and payments of labor and tax obligations, and improving the positive credit registry. Improvements in the bankruptcy procedure (a new law) will empower creditors, incentivize extrajudicial recovery, and strengthen acquirers' rights (Selected Issues Paper). In addition to the expanded list of infrastructure projects, the government announced changes to concession rules and the role of regulatory agencies.[4] Under the infrastructure concessions program, four airport concessions were auctioned off to foreign bidders.

OUTLOOK AND RISKS

14. A subdued recovery is expected, although this baseline is subject to an elevated degree of uncertainty brought about by the difficult political situation. Real economic growth is expected to turn positive in 2017, helped by a recovery in the terms of trade, a generally supportive external financial environment for emerging markets, stronger agricultural production as a result of favorable weather conditions, a boost to consumer spending from households' withdrawals of FGTS accounts, and monetary policy easing.

- Staff project output growth of 0.3 percent in 2017 (with positive quarterly growth offsetting the negative carryover from 2016) and 1.3 percent in 2018. A more rapid recovery seems unlikely in the near term, given still high levels of government, corporate, and household leverage, significant excess capacity, high unemployment, and a resurgence of political uncertainty.

- Credit is expected to recover broadly in line with activity, albeit with a lag, and over the medium term to grow again as a ratio to GDP as financial deepening resumes. Banks are expected to maintain high profitability as their funding costs continue to fall, despite pressures on asset quality.

- Inflation is expected to undershoot the midpoint of the target band in 2017 and 2018, reflecting excess supply conditions and moderate food-price inflation. Unemployment is projected to peak in late 2017 as job creation lags growth. In this context, youth unemployment of about 25 percent is especially worrisome.

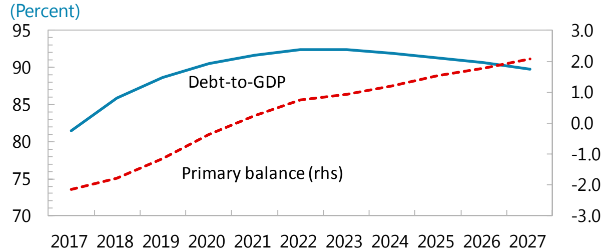
- The baseline assumes that the governments' proposed pension reform is delayed some months as a result of the political crisis, but is ultimately approved without major additional dilution, and the constitutional expenditure cap is observed.

- The current account deficit is expected to stabilize at around 2 percent of GDP as demand recovers. The resumption of growth in Brazil will have beneficial spillovers on the economies of its Mercosur partners.

[4] The period between bidding and auction was expanded to 100 days. The regulatory agencies will no longer elaborate calls for tenders and organize auctions, focusing instead on supervising the contracts.

15. Brazil has limited space for a growth-supportive fiscal expansion, as evidenced by the DSA. The level and trajectory of debt and gross financing needs raise significant risks. In the baseline scenario, involving implementation of reforms already underway, debt keeps rising to about 92½ percent of GDP in 2022/2023, and only starts declining in 2024.

Baseline with Expenditure Rule
(Percent)



Sources: Fund staff estimates.

16. Risks are dominated by political factors, including uncertainty on the continuity of the government and its policies (Appendix I).

- A major domestic risk relates to political instability and spillovers from the corruption investigations, as illustrated by the current turmoil, and renewed policy uncertainty in 2018 as general elections approach. If corruption investigations spread to the financial sector, for example, banks could face liquidity pressures (as illustrated by the experience of BTG Pactual in late 2015). This could spark a sharp tightening of financial conditions that could delay the recovery.

- A key domestic policy risk in the near term is a failure to enact social security reform, or considerable additional dilution of this reform in Congress, possibly resulting from new political developments. This failure would put the fiscal consolidation at risk and could prompt another round of sovereign downgrades. In the near term, markets would react negatively and confidence gains would be reversed, tipping the economy back into recession. Lack of reform would also raise the need for additional fiscal measures to finance growing expenditure pressures over time, ultimately resulting in a rising tax burden, with adverse implications for medium term growth.

Scenario: No Consolidation

	2017	2018	2019	2020	2021	2022
Growth	0.0	-1.0	-1.0	0.0	0.8	0.8
Inflation (CPI), %	5.0	6.0	5.6	5.4	5.2	5.1
Primary Balance, % GDP	-2.5	-2.1	-2.4	-2.3	-2.1	-2.0
Gross Debt, % GDP	84.7	90.8	98.3	105.4	111.8	118.6

- The key external risk emanates from a significant slowdown in China and persistent slow growth in major advanced economies. A slowdown in China could depress commodity prices and prompt a repricing of risk in global financial markets, with negative implications for Brazil. Similarly, persistent slow growth in major advanced economies would be a serious drag on prospects for Brazil. In addition, a shift in U.S. policies could lead to a further strengthening of the U.S. dollar and/or higher dollar interest rates, which could ultimately hamper the recovery in domestic expenditure. The various domestic downside risks could combine and feed on each other, especially if they were to coincide with the materialization of external risks.

- There are upside risks as well. Agricultural output in 2017 could prove stronger than expected; households could consume more of the proceeds from their FGTS accounts than currently envisaged; and domestic demand could be stronger if monetary easing spurs faster deleveraging by households and firms. But these upside factors are unlikely to be sustained if political uncertainty remains elevated.

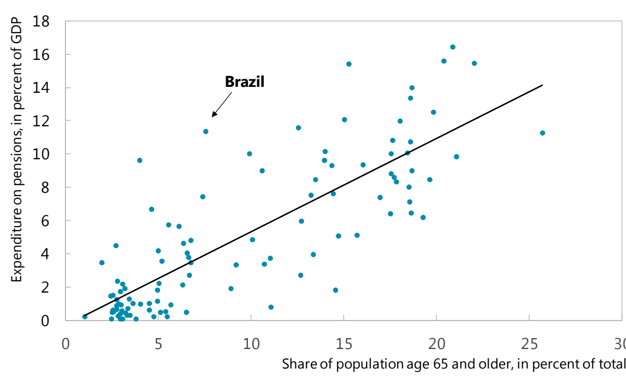
POLICY DISCUSSIONS

The authorities' policy efforts are appropriately focused on an ambitious strategy of reform in the fiscal sector, aimed at securing the sustainability of the public finances and social security. The pace of fiscal adjustment should, however, quicken when economic recovery strengthens on a sustainable basis, anchored by greater clarity on the measures that will help deliver the adjustment. Monetary policy can turn accommodative given the slack in the economy and the ongoing process of disinflation. Structural reforms are needed to support strong and inclusive growth over the medium term. Corruption has proven costly for Brazil; going forward, improving governance, increasing transparency and strengthening institutional frameworks will help secure strong, durable and inclusive growth.

A. Policies to Ensure Fiscal Sustainability

17. **The decision to address spending pressures is welcome, and is a key element of the medium term fiscal strategy.** The government aims to restore fiscal sustainability by controlling spending growth and gradually increasing primary balances over the next several years. (In fact, their framework has both a spending cap and primary balance objectives.) Staff projects the NFPS primary balance returning to surplus in 2021 (official fiscal targets see a primary surplus in 2020). Improving primary balances, in combination with a return to growth and a fall in real interest rates from the heights of recent years, would contribute to a gradual stabilization of the trajectory of public debt.

Pension Expenditure
(2014 or latest avalable estimate)



Sources: World Development Indicators and Fund Staff estimates based on a sample of about 100 countries.

18. **An ambitious social security reform bill is being discussed in Congress.** This reform is needed to ensure the long-term viability of the social security system. It would also be important in supporting compliance with the expenditure ceiling because social security spending exceeds 40 percent of federal government primary spending. The reform would also help tackle fiscal pressures in states,

given high pension spending at the subnational level.[5] The reform is crucial due to the system's large and rising cash and actuarial imbalances arising from increasing dependency and replacement ratios. The linchpin of the proposed reform is a higher mandatory retirement age (with some transition rules) and an effective reduction in replacement ratios. The government's initial reform proposal aimed to stabilize social security spending as a percent of GDP for the next decade at least, implying savings of some 2 percent of GDP a year by 2026 relative to a no-reform scenario. Moreover, by unifying the rules governing the public and private pension systems, it would reduce inequalities arising from the relatively large benefits granted by some of the schemes for government employees, who already command a premium on their salaries (Selected Issues Paper). The version of the reform negotiated in Congress retains the most important elements of the original proposal, and is estimated by the government to generate 75 percent of the savings intended in the original proposal over its first 10 years. Given the negotiated transition rules, the amounts saved would gradually rise over time; in 2022, for example, the reform would save 0.7 percent of GDP relative to no-reform projections. However, the approval of the reform has been delayed and remains at risk in the current political environment.

19. The government faces challenges meeting its fiscal targets in the near term. Expenditure containment measures will likely be needed in 2018 if, as widely expected, CPI inflation comes in well below 4 percent in June 2017 (this parameter defines the 2018 *expenditure ceiling;* see Table 3). Quick yielding measures for 2018 could include a hiring freeze and a reduction in financial and credit subsidies, in addition to the start of pension reform. Given continuing weakness in revenue (Box 5), efforts are also likely to be needed to meet *primary balance* targets in 2017 and 2018, which currently depend on deep cuts in discretionary spending and one-off revenues. Revenues could be mobilized through asset sales (already under consideration for 2017) and by rolling back tax breaks.

20. Medium-term consolidation will demand intense fiscal effort. Under current plans and policies, primary balances will improve relatively slowly and the public debt-to-GDP ratio would only begin to decline many years from now, posing significant risks, especially if the economic environment turns less favorable. This underscores the importance of speeding up fiscal consolidation, beyond what is currently planned, when growth strengthens on a sustainable basis; predicated on a firm return to growth in 2018, additional measures of the order of 1−2 percent of GDP introduced over time would make sure the debt-GDP ratio starts declining already in 2020 and peaks 9 points of GDP below the peak in the baseline projection. Moderate and well-chosen revenue measures would be useful to accelerate the fiscal adjustment, including the rollback of the remaining payroll tax exemptions. Other fiscal measures that should be considered by the current and any future government include:

- *Medium-term fiscal planning*. A rolling medium-term *fiscal* framework would be useful to clarify and update the governments' goals for debt stabilization.

[5] See the Selected Issues Paper for the 2016 Article IV Consultation.

- *Mandatory spending*. Although essential, social security reform will not be enough to meet the expenditure ceiling over the next several years (Table 3), as its full benefits will be felt over longer horizons. Additional measures should include a change in the minimum wage indexation formula, which is a key driver of social security and other benefit spending, and the revision of allowances for civil servants. Going forward, wage increases for civil servants above inflation should be avoided. A medium-term *budget* framework would support policy credibility through the identification of expenditure policies that could be rolled out over time to keep the budget consistent with the ceiling without the need for triggering the automatic corrective spending cuts foreseen in the constitution.

- *Subnational finances*. The new framework to provide temporary debt relief to states in crisis in exchange for their implementing a series of fiscal measures is a step in the right direction. However, in the worst-hit states, this framework will likely fall short of restoring sustainability. Hence, it will be necessary to continue to work toward pension reform, wage restraint, and ambitious deficit reduction objectives at the subnational level. Also, efforts to increase fiscal transparency in subnational governments, such as the use by all states of common accounting standards as currently planned, need to continue, while close attention is needed in monitoring municipal finances.

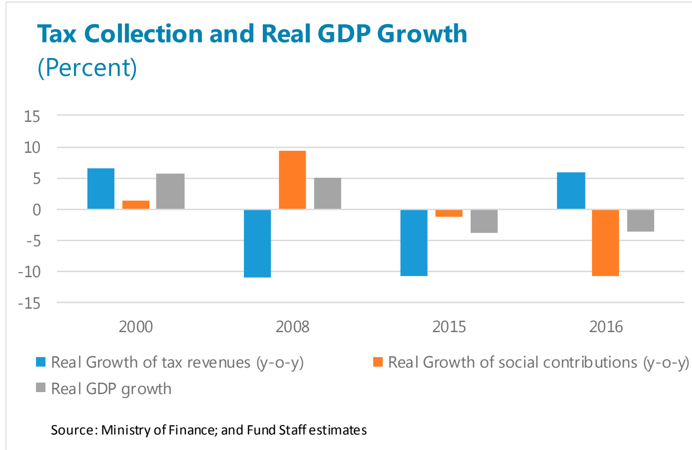
- *Other reforms*. The creation in 2016 of the Independent Fiscal Institution (IFI), attached to the Senate, is an important step to promote fiscal transparency and enhance the debate on fiscal policy in Congress and society. At all levels of government, the improvement of fiscal forecasts would strengthen the budget process. Even with the new DRU, large budget rigidities, including revenue earmarking and high mandatory spending, remain in place and need to be addressed with a sense of urgency.

Scenario: Recommended

	2017	2018	2019	2020	2021	2022
Growth, %	0.3	1.5	2.2	2.5	2.2	2.2
Inflation (CPI), %	4.0	4.0	4.5	4.5	4.5	4.5
Primary balance, % GDP						
Authorities' target	-2.1	-1.8	-0.8	0.3	…	…
IMF baseline	-2.1	-1.8	-1.1	-0.4	0.2	0.8
IMF recommended path	-1.9	-0.6	0.3	1.3	2.5	2.7
Required measures	0.2	1.2	1.4	1.7	2.3	1.9
Gross debt, % GDP	81.4	84.4	85.1	84.1	82.3	80.4
Gross financing needs, %GDP	14.0	16.0	15.6	17.0	20.4	19.6

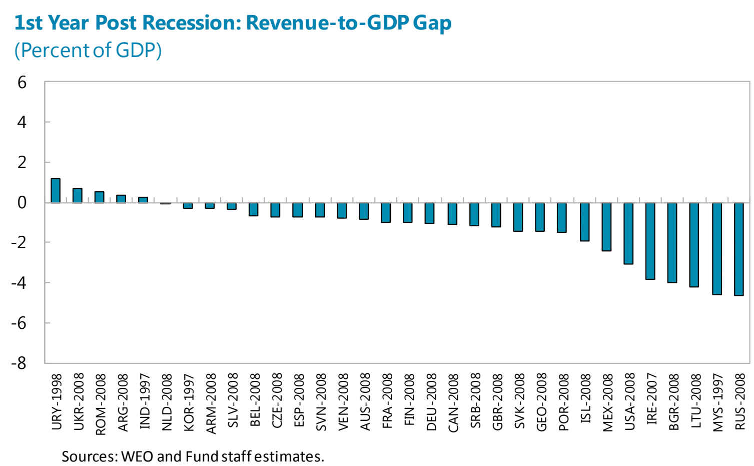
Box 5. Tax Revenues and the Economic Cycle

Tax revenues contracted more than GDP during the recent economic recession. Tax elasticities have fallen below 1 after the financial crisis according to some (Ribeiro, 2016). A possible explanation is a high dependence of tax revenues on wages and sales, which have shrunk disproportionally during the recession (Goldfajn, 2016). Compliance issues have contributed to tax revenue contraction beyond what can be explained by the decline in the GDP during the crisis (Brondolo, 2009). Will tax revenues return to their pre-crisis level when the economy rebounds, and how fast?



The experience of other countries provides evidence of incomplete recovery of tax revenue ratios in the first two years following a crisis. In a panel of 78 countries over 1997−2014, 32 episodes of cumulative real GDP contractions of at least 2 percent over two consecutive years associated with declining revenues-to-GDP were identified. The average cumulative GDP contraction in the sample was 5.3 percent over the crisis period, while the average decline in the tax revenue ratio was about 1.6 percentage points of GDP. In the first year of the recovery, tax revenue-to-GDP climbed back to the pre-crisis level in only a few countries. The average gap compared to the pre-crisis level of taxes amounted to 1.3 percentage points of GDP. In the second year after the crisis, the distance to the pre-crisis tax revenue ratios was smaller, although still negative in the large majority of cases (0.7 percentage points of GDP).

As Brazil enters the recovery phase, a cautious approach to revenue projections is warranted in the years ahead. While in a small number of countries tax revenue ratios have surpassed pre-crisis levels rapidly, country-specific circumstances and changes in tax policies and administration may have played a role. In most cases, incomplete and delayed recoveries in tax ratios may have stemmed from lags in collections due to tax credits accumulated during the downturn, structural changes in the economy affecting the tax base, and changes in the external environment.



Sources: Goldfajn, I., 2016, "Tax Revenues in Brazil Declining Faster than GDP," Itaú Op-ed, February 11, 2016; (ITAU) Ribeiro, L., 2016, "Nota Tecnica Sobre Arrecadacao e Atividade Economica," FGV-IBRE, Janeiro 2016 (IBRE); Brondolo, J., 2009, "Collecting Taxes During an Economic Crisis," IMF Staff Position Note, SPN/9/17 (IMF).

B. Policies to Consolidate Disinflation Gains and Credibility

21. The current pace of monetary easing is broadly appropriate. While there is significant uncertainty about the level of the "neutral" interest rate (Box 6), significant excess supply and below-target inflation expectations suggest an accommodative policy stance is warranted to mitigate risks of undershooting the central target for too long.[6] Calibrating the pace of reduction in policy rates in the present environment of heightened uncertainty is unusually challenging. The central bank should continue to reassess the pace and extent of the easing cycle considering the evolution of inflation and expectations, market signals, external conditions, and the prospects for the success of fiscal reforms.

22. There remains scope to improve the central bank's credibility. In the context of falling inflation, the possibility of lowering the inflation target for 2019 is being debated. This would bring the inflation target closer in line with targets observed internationally. Nevertheless, when considering this move, policymakers should take into account that adopting a substantially lower target could reduce the space for monetary easing in the period ahead. Notwithstanding any changes to the inflation target, there is still room to improve the inflation targeting framework. This includes the specification of a well-defined, medium-term target, strengthening the Central Bank's independence, and the publication and discussion of fully endogenous inflation and policy rate projections (Selected Issues Paper).

23. The exchange rate should remain the main external adjustment variable. Brazil's substantial international reserves are a source of strength. Intervention, including through foreign-exchange swaps, should remain limited to addressing disorderly market conditions, such as those observed in mid-May. Brazil's comfortable reserve holdings could in principle provide space to intervene, and much discussion has been devoted at various points in time to ideas such as selling reserves to buy back public debt. However, given the limited cost of holding reserves, and the small stock effects of operations of that type that can be undertaken without risking market scares, the authorities should resist again any future pressures to use reserves for ad-hoc purposes such as financing public investment or repaying public debt.

C. Policies to Strengthen the Financial System's Resilience

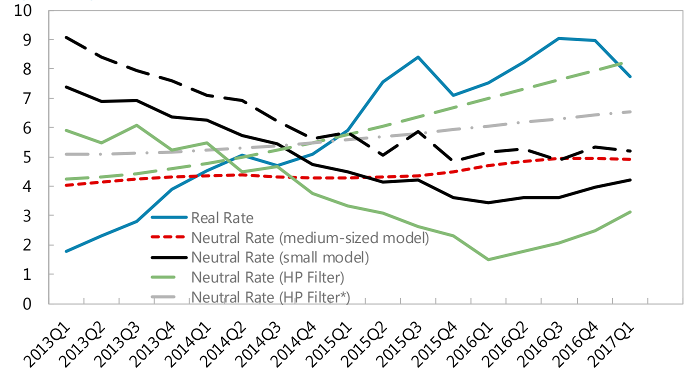
24. The banking sector has weathered the recession well, and ongoing efforts to bolster its resilience should continue. Banking sector soundness indicators improved in 2016 as shocks to funding dissipated, interest margins rose, and non-performing loans moderated. From a structural perspective, it would be important to conclude actions aimed at strengthening financial safety nets further by enhancing the central bank's ability to provide emergency liquidity assistance and implementing the new resolution regime for banks. These steps would strengthen the authorities' capacity to deal with liquidity and solvency shocks. As recommended in the previous Financial

[6] Market expectations from the central bank's June 2 *Focus* Survey were 3.9 percent in 2017 and 4.4 percent in 2018.

Box 6. The Neutral Real Interest Rate

The neutral real interest rate is always important but always uncertain. It is the real interest rate consistent with an economy's long-run equilibrium, when inflation is at target and the effects of all other cyclical shocks have past. As such, the neutral interest rate is of great importance when formulating monetary policy decisions, governing the policy stance in the short term and determining the appropriate level of interest rates over the long term. It is also an important determinant of government debt dynamics over the long term and thus fiscal policy decisions. Unfortunately, the neutral real interest rate is unobservable and notoriously difficult to estimate in real time. For example, estimates of the neutral real interest rate for Brazil based on a variety of time-series and economic models exhibit a large degree of dispersion, ranging from around 3 percent to around 9 percent. A medium-term equilibrium real rate around 5.5 percent was consistent with the sovereign yield curve observed during much of 2017-H1, right up to the mid-May rise in market volatility.

Real Interest Rate and Estimates of the Neutral Real Interest Rate 1/
(Percent)



Source: Fund estimates.
1/ The real rate is the Selic less 12-month ahead inflation expectations from the Focus survey. The medium-sized model is a semi-structural New Keynesian model. The small model is similar to Laubach and Williams (2003) (the median and 10th and 90th percentiles are displayed). HP filter is the trend real rate estimated using a standard HP filter. HP filter* is the trend real rate estimated with a larger-than-standard smoothing parameter (10,000).

Brazil's central bank has recently emphasized heightened uncertainty about the neutral interest rate. In recent communications, the central bank has noted that the magnitude and pace of the monetary easing cycle currently underway is conditional on estimates of the structural (neutral) interest rate and that greater progress on fiscal reform could increase the scope for monetary easing (Selected Issues Paper). Intuitively, improving the fiscal policy framework could contribute to a reduction in risk associated with Brazil and eventually lead to reduction in interest rates over time.

Given heightened uncertainty, the central bank should closely monitor and reassess its estimates of neutral real interest rates as the easing cycle progresses. Over time, underestimating/overestimating the level of neutral real interest rates will cause the policy stance to be tighter/looser than intended and eventually lead to unexpectedly low/high inflation and inflation expectations. Thus, to avoid policy reversals, careful monitoring of inflation developments is warranted.

Neutral Real Interest Rates Implied by Covered Interest Parity 1/
(Annual percent)

		U.S. Real Interest Rate		
		1	2	3
Expected Annual	1.5	3.5	4.5	5.5
Real Exchange Rate	2.0	4.0	5.0	6.0
Depreciation	2.5	4.5	5.5	6.5
	3.0	5.0	6.0	7.0

Source: Fund estimates.
1/ Staff's assessment is that Brazil's real-effective-exchange rate is overvalued by around 10-15 percent. Assuming this overvaluation is corrected gradually over a 5-year period and the U.S. real interest rate settles somewhere between 2-3 percent, Brazil's real neutral rate would be somewhere between 5-7 percent, according to covered interest parity. Note: A risk premium is added, based on the average spread between the overnight dollar rate in Brazil and the LIBOR.

Sector Assessment Program (FSAP), a committee with an explicit mandate for systemic risk monitoring should be established, and a mandate should be given to a separate entity to set up a crisis management framework. Banks that consistently fail the stress tests performed by the Central Bank should be required to raise additional capital or, if they are state-owned, they should be recapitalized or allowed to retain profits to boost their capital (this is not expected to be a significant source of fiscal risk).

25. Efforts to reduce distortions in credit markets are welcome. Replacing the TJLP with a market-determined rate, linked to government bond yields as currently scheduled, will contribute to phasing out credit subsidies and improving monetary policy transmission. Efficiencies will also be gained by revising the earmarking of saving deposits for mortgages and agriculture credit, as is under discussion. The Central Bank's plans to promote the reduction of banking sector spreads, including by simplifying reserve requirements, implementing a positive credit bureau, and establishing a centralized market for receivables are welcome. A reform of the bankruptcy framework is underway; its early conclusion would help expedite the bankruptcy process and reduce creditors' default losses, which should in turn facilitate the financing of capital investment.

D. Policies to Strengthen Medium-Term Growth

26. Convergence of per capita income between Brazil and advanced economies has stalled in recent years, largely reflecting Brazil's relatively weak productivity performance. Over the last 10 years, annual labor productivity growth in Brazil has averaged about 1 percent, considerably below the growth rates experienced by other countries at a similar stage of development.[7] Recent policy efforts will increase labor market flexibility, but even after the reforms the labor market would remain highly regulated relative to other emerging markets. The economy is relatively closed, with average tariff rates above those of peers and relatively high non-tariff barriers, including onerous domestic content requirements, which limits the productivity-enhancing effects of trade. Other constraints that hamper productivity and growth in Brazil include a highly complex tax system and inadequate infrastructure, particularly in the area of transport.

27. Structural reforms targeted at reducing the costs of doing business, enhancing efficiency, and fostering investment are essential to raise potential growth over the medium-term. The policies that can be pursued at present are conditioned by the need to respect tight fiscal constraints and to avoid interfering with the exit from recession and aggravating already high unemployment. The government's productivity agenda includes the revision of local content rules, trade facilitation, and steps to reduce red tape. Other key areas are:

- *Opening the economy.* Reducing tariffs, especially on capital goods, and eliminating non-tariff barriers to trade, including frequent resort to anti-dumping, would enhance efficiency and boost

[7] According to the World Bank, average labor productivity growth across all upper-middle-income countries was around 4.5 percent over the same period.

potential growth (see Selected Issues Paper). Likewise, pursuing free-trade negotiations would help increase competition and foster productivity gains.

- *Tax reform.* The authorities should move forward with plans to simplify the federal tax system, beginning with the PIS/COFINS, which has a complex base, and continue to work toward harmonizing federal and state tax regimes, with a view to reducing taxpayer compliance costs, which are very high in Brazil, and improving resource allocation and productivity (see Selected Issues Paper).

- *Labor market.* Ongoing reforms to increase labor market flexibility and reduce excess litigation in labor courts are welcome. The flexibility can reduce labor market informality among the poor; still, the potential impact on formal labor market duality needs to be watched. Adaptations in the tax code may be needed to limit adverse side effects on fiscal revenue.[8] Other reforms, pertaining, for example, to labor protection regulations, can be considered once the economy is on a stronger footing and should be accompanied by policies to support individuals going through unemployment.

- *Infrastructure bottlenecks.* The infrastructure concessions program is critical to alleviate supply-side constraints limiting medium term growth and boost competitiveness.[9] Ongoing efforts to make the program more attractive to investors while maintaining high standards of governance and program design are welcome. A successful concessions program will, additionally, have a positive effect on the pace of the recovery.

28. Improving governance, increasing transparency and strengthening institutional frameworks is needed to help secure strong, durable and inclusive growth in Brazil. Historically, corruption has been facilitated by a lack of transparency, notably regarding beneficial ownership of companies and public procurement, and weaknesses in interagency information sharing, international cooperation, and criminal justice. However, efforts to pursue significant corruption and money laundering cases have become more successful following recent legal reforms such the anti-corruption law and the introduction of plea bargains in 2013 (Box 1). Ongoing work to update the definition of politically-exposed persons (PEPs) should make it more difficult to hide illicit assets. The use of transparency measures such as the Transparency Portal to prevent corruption is also to be commended. Going forward, authorities are encouraged, *inter alia*, to:

- Continue pursuing significant corruption and money laundering cases, and work with the legislature to adopt relevant pending reforms to further strengthen the anti-corruption and anti-money laundering framework. This includes strengthening whistleblower mechanisms,

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[8] The outsourcing bill could result in an increase in the practice known as *pejotização*, in which individuals incorporate themselves as small businesses to sell their services to employers. Relative to a traditional employment relationship, this situation results in lower total social security and personal income tax payments because of the favorable rules for the taxation of small businesses.

[9] See IMF Country Report No. 15/122, Brazil, Selected Issues Paper for a detailed analysis of the state of infrastructure in Brazil.

provisional measures and confiscation, and the prevention of abuse of appeal provisions and statutes of limitations in legal proceedings.

- To make it more difficult to hide illicit assets, follow-up on existing ENCCLA (National Strategy Against Corruption and Money Laundering) action items regarding (i) interagency sharing of tax and banking information, including to prevent abuse of tax-repatriation provisions for money laundering, (ii) the effective implementation of beneficial ownership requirements, and (iii) the enactment of international cooperation tools to facilitate detection and repatriation of funds channeled abroad.

- Continue to populate the Transparency Portal, and similar publicly accessible websites such as *Compras Governamentais* ("Government Purchases") and the Brazilian open data portal, with data that assist to prevent and disclose corruption (including data related to public procurement, budgets and expenditures).

AUTHORITIES' VIEWS

29. **The authorities see evidence that economic growth has resumed.** They indicated that growth has turned positive in the first quarter of 2017, helped by strong agricultural production. The authorities generally agreed with staff that the weak labor market is likely to slow the recovery in private consumption, although increased access to FGTS will provide a one-off boost to private spending. They were optimistic about the prospects for investment, citing its behavior following previous recessions in Brazil and the ongoing monetary easing cycle. The Ministry of Finance projects growth of 0.5 percent in 2017 and 2.5 percent in 2018. In their view, passage of pension reform is likely and could provide significant upside risks to the recovery. Moreover, while recognizing the increase in uncertainty in recent weeks, they stressed their belief that the program of structural reforms was likely to be carried forward under the most probable scenario.

30. **The authorities emphasized that social security reform is a crucial step towards ensuring fiscal sustainability.** They explained that the negotiations in Congress had preserved the bulk of the savings anticipated in the initial formulation of the reform, and had enshrined principles that would underpin a more sustainable social security system, including a minimum retirement age. They also stressed that this reform would be an increasingly important factor in the effort to comply with the federal spending ceiling. Nevertheless, they agreed that further mandatory spending cuts, including the reform of military pensions, would be needed to ensure the ceiling is observed over the medium term. They noted that it would be premature to focus on identifying and enacting specific additional measures before the social security reform is approved. In fact, a large part of this work would have to be carried out by the next government, which would have the duty of issuing a multi-year fiscal plan for the 2019−22 period. That said, the authorities indicated that they are working on the design of a new medium-term fiscal framework.

31. **While noting that a faster fiscal consolidation would be desirable if the economy recovers strongly, the authorities acknowledged fiscal space is limited and that further**

measures may be necessary to observe their primary balance objectives in the near term. The authorities noted that the delay in the recovery had necessitated a downward adjustment of revenue projections for 2017 and 2018. In turn, this called for the identification of measures to ensure the 2017 primary balance target is attained, and for a revision of the 2018 target. They stressed that to generate savings cutting discretionary spending would not be enough. Thus, they were cutting back on new hiring, reducing some mandatory spending, for example, by preventing abuses in the sickness support program, and going through a review of spending programs to identify additional savings. While observing that some one-off revenues could be mobilized, they explained that it would be harder to increase recurrent revenues, given the already high tax ratio in Brazil. Recurrent revenue measures could be considered if needed to meet primary balance targets, and provided they did not introduce new distortions. Additionally, some savings in the interest bill (with no impact on the primary balance, but with beneficial effects on the trajectory of debt) would come from declining subsidies to BNDES as the TJLP is gradually phased out and replaced with the market-linked TLP. The authorities highlighted that the new fiscal recovery regime for the states would create incentives for those in financial trouble to undertake significant fiscal adjustment and increase transparency.

32. The Central Bank indicated that there was still room for the easing cycle to continue. They noted that disinflation, although led by favorable food price trends, is broad-based, and reflects significant excess capacity in the economy and subdued inflation expectations. In this context, monetary policy could adopt an expansionary stance, implying further cuts in the policy interest rate. They stressed, however, that there is some uncertainty attached to the estimation of the equilibrium real interest rate, which defines a neutral stance. They noted that the evolution of this rate depended on continued progress on fiscal reform, which would for that reason be an important determinant of the pace and extent of the easing cycle. Additionally, the authorities noted that they were working to improve the monetary policy framework, including gradually replacing the TJLP with the TLP, among other actions. The National Monetary Council will decide on the 2019 inflation target at the end of June.

33. The authorities agreed that the flexible exchange rate is a key shock absorber, and emphasized that interventions through FX swaps and FX repos have aimed at smoothing excess volatility during episodes of market stress. They added that interventions had not affected the direction of movements determined by the market. In that connection, they broadly agreed with staff's assessment of the external position and noted that the *real* appreciation observed through 2016 and early 2017 was consistent with improving fundamentals. They emphasized that high international reserves, together with their policy of reducing the stock of swaps during last year, placed them in a strong position to face new shocks, as evidenced by their ability to respond to turmoil in the exchange market in mid-May.

34. The authorities emphasized that the resilience of the banking system has been proven in the recession. Furthermore, new legislation is being drafted to strengthen further the effectiveness of the framework for monitoring and managing risks. The authorities expect that the new resolution framework, consistent with the FSB's key attributes of effective resolution regimes, will be enacted this year. Several other improvements in the framework are being implemented under the BC+ agenda.

35. The authorities acknowledged the need to improve the business environment and enhance competitiveness, and are confident that ongoing and planned actions can boost potential growth. They are of the view that the recently revamped infrastructure concession framework and the associated regulatory changes would facilitate private sector participation in priority investment projects. They also noted that domestic-content rules had already been relaxed in the oil and gas sector, and that additional reforms of similar rules were planned for BNDES' lending and government procurement. They saw merit in reducing tariffs and in pursuing new free-trade negotiations to help increase competition and efficiency. The authorities also plan to undertake a simplification of indirect federal taxes (PIS-COFINS), which are exceedingly complex, affecting compliance costs. Labor reforms (some of which are still before Congress) would reduce costly litigation and facilitate formalization of labor, and a new bankruptcy framework would support the financing of investment by enhancing creditor rights. While some of these initiatives are ongoing, some will require legal reforms that would need to be taken up after social security and labor reforms are concluded. Based on these reforms, the authorities hold a positive view on the medium-term prospects for growth.

36. The authorities agreed that transparency and anti-corruption measures are an important part of the effort to improve long-term prospects for Brazil. They noted their efforts to pursue significant corruption and money laundering cases, and the creation of the Transparency Portal, which would be useful in the prevention of corruption. They stressed their intention to continue to strengthen governance and transparency.

STAFF APPRAISAL

37. Brazil must forge ahead with its reform agenda in the context of an uncertain environment. Fiscal sustainability has not yet been secured, and Brazil has limited fiscal space for an expansionist policy. The government's policy efforts are appropriately focused on an ambitious strategy of consolidation and reform in the fiscal sector, aimed at securing the sustainability of the public finances and social security. However, the pace of fiscal adjustment under current plans is relatively moderate, allowing debt ratios to remain high for a prolonged period. This underscores the importance of speeding up fiscal consolidation, beyond what is currently planned, when growth strengthens on a sustainable basis.

38. Social security reform is key for fiscal as well as social reasons. This reform is essential to ensure that the core of Brazil's social protection system can remain viable in the long term. Also, social security reform is an important element in the strategy to restore fiscal sustainability, and more concretely, to meet the constitutional ceiling on expenditure. It is of vital importance that Congress approves this reform.

39. Additional expenditure and revenue measures should be considered by the current and any future government. Social security reform will not be enough to ensure that the expenditure limit is met over the medium term. The authorities are encouraged to introduce a rolling medium-term *fiscal* framework to further clarify the governments' goals for debt stabilization, as well as a medium-term *budget* framework, which would support policy credibility by identifying expenditure measures and policies to keep the budget consistent with the ceiling in coming years. Moderate and well-chosen revenue measures would also be useful to accelerate the fiscal adjustment.

40. The current pace of monetary easing is broadly appropriate. Significant excess supply and below-target inflation expectations suggest an accommodative policy stance is warranted. The pace and extent of the easing cycle should be reassessed considering the evolution of inflation and expectations, market signals, external conditions, and prospects for fiscal reforms.

41. Staff welcomes the use of the exchange rate as the first line of defense against shocks. Brazil's external position in 2016 was on average broadly consistent with medium-term fundamentals and desirable policies. Brazil's substantial international reserves are a source of strength. Intervention in foreign exchange markets should remain limited to episodes of disorderly market conditions, and reserve buffers should be preserved.

42. Efforts to bolster the resilience of the financial sector should continue. It is important to conclude actions aimed at strengthening financial safety nets further by enhancing the central bank's ability to provide emergency liquidity assistance and implementing the new resolution regime for banks. A committee with an explicit mandate for systemic risk monitoring should be set up. A mandate should also be given to a separate entity to set up a crisis management framework. Banks that consistently fail the stress tests performed by the Central Bank should be required to raise additional capital or, if they are state-owned, they should be recapitalized.

43. Structural reforms targeted at enhancing efficiency and fostering investment are essential to raise potential growth over the medium term. Staff encourages the authorities to follow through on their plans to strengthen the supply side of the economy to increase efficiency and productivity. Improving the allocation of scarce resources by the financial system through the reduction of subsidized credit and the reform of BNDES are also important elements in this drive. Without such measures, medium-term growth could disappoint.

44. Ongoing efforts to combat corruption are of the highest importance. Corrupt practices undermine economic and political institutions. Corruption has caused the country to go through a protracted period of elevated uncertainty, affecting economic activity and reducing the ability of consumers and firms to plan for the future. It is vital for Brazil to strengthen governance and further implement transparency, anti-corruption and AML measures.

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

Table 1. Brazil: Selected Economic Indicators, 2015–22

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 (2013)	1.9
		Hospital beds per 1000 people (2012)	2.3
Population		Access to safe water (2015)	98.1
Total (million) (est., 2015)	204.5		
Annual rate of growth (percent, 2015)	0.8	Education	
Density (per sq. km.) (2015)	24.0	Adult illiteracy rate (2015)	7.4
Unemployment rate (latest, 2017)	13.7	Net enrollment rates, percent in:	
		Primary education (2014)	99
Population characteristics (2014)		Secondary education (2014)	84
Life expectancy at birth (years)	75		
Infant mortality (per thousand live births)	14	Poverty rate (in percent, 2014)	13.3
Income distribution (2016)		GDP, local currency (2016)	R$6,267 billion
By highest 10 percent of households	40.9	GDP, dollars (2016)	US$1,799 billion
By lowest 20 percent of households	3.6		
Gini coefficient (2015)	49.1	GDP per capita (est., 2016)	US$8,795

Main export products: airplanes, metallurgical products, soybeans, automobiles, electronic products, iron ore, coffee, and oil.

II. Economic Indicators

			Proj.					
	2015	2016	2017	2018	2019	2020	2021	2022
			(Percentage change)					
National accounts and prices								
GDP at current prices	3.8	4.4	7.8	6.1	6.8	7.1	7.1	7.1
GDP at constant prices	-3.8	-3.6	0.3	1.3	2.0	2.0	2.0	2.0
Consumption	-3.3	-4.7	-0.2	0.4	0.8	1.5	1.5	1.1
Investment	-23.8	-10.4	0.8	4.0	7.2	4.0	4.4	5.6
Consumer prices (IPCA, end of period)	10.7	6.3	4.0	4.0	4.5	4.5	4.5	4.5
			(In percent of GDP)					
Gross domestic investment	19.1	17.5	17.6	17.9	18.5	18.8	19.1	19.6
Private sector	17.3	15.8	16.0	16.3	17.0	17.4	17.7	18.3
Public sector	1.9	1.8	1.6	1.6	1.5	1.4	1.4	1.3
Gross national savings	15.8	16.2	16.0	16.2	16.8	17.0	17.2	17.6
Private sector	24.1	23.3	23.1	23.3	23.4	23.1	22.8	22.9
Public sector	-8.3	-7.1	-7.0	-7.1	-6.5	-6.1	-5.6	-5.3
Public sector finances								
Central government primary balance 1/	-2.0	-2.3	-2.0	-1.8	-1.3	-0.6	0.0	0.5
NFPS primary balance	-1.9	-2.5	-2.1	-1.8	-1.1	-0.4	0.2	0.8
NFPS cyclically adjusted primary balance	-1.8	-1.4	-1.0	-1.1	-0.8	-0.3	0.3	0.8
NFPS overall balance (including net policy lending)	-10.3	-7.5	-8.8	-10.2	-9.8	-9.8	-9.7	-9.7
Net public sector debt	35.6	46.2	51.4	55.9	58.9	61.0	62.4	63.3
General Government gross debt, Authorities' definition	65.5	69.9	…	…	…	…	…	…
NFPS gross debt	72.5	78.3	81.5	85.8	88.6	90.5	91.7	92.4
Of which: Foreign currency linked	4.5	3.8	3.5	3.4	3.4	3.3	3.3	3.3
			(Annual percentage change)					
Money and credit								
Base money 2/	8.4	8.1	7.8	6.1	6.8	7.1	7.1	7.1
Broad money 3/	9.7	12.4	11.6	8.7	10.0	13.8	14.4	14.5
Bank loans to the private sector	3.6	-2.9	5.7	7.4	11.0	12.4	12.9	12.2
			(In billions of U.S. dollars, unless otherwise specified)					
Balance of payments								
Trade balance	17.7	45.0	49.0	49.1	51.8	52.3	53.9	56.5
Exports	190.1	184.5	200.1	205.4	214.3	221.8	231.3	241.8
Imports	172.4	139.4	151.0	156.3	162.5	169.5	177.4	185.3
Current account	-59.4	-23.5	-32.4	-37.4	-38.1	-42.9	-47.1	-50.4
Capital account and financial account	55.6	16.7	32.4	37.4	38.1	42.9	47.1	50.4
Foreign direct investment (net)	61.2	71.1	59.0	53.6	50.5	49.7	49.8	50.5
Terms of trade (percentage change)	-11.0	3.0	-2.4	-3.8	-1.2	-1.5	-0.9	-0.8
Merchandise exports (in US$, annual percentage change)	-15.2	-3.0	8.5	2.7	7.1	8.0	4.3	4.5
Merchandise imports (in US$, annual percentage change)	-25.3	-19.1	8.3	3.5	7.6	8.4	4.7	4.4
Total external debt (in percent of GDP)	36.9	36.9	32.2	31.7	30.7	29.7	28.6	27.5
Memorandum items:								
Current account (in percent of GDP)	-3.3	-1.3	-1.5	-1.7	-1.7	-1.8	-1.9	-2.0
Gross official reserves	356.5	365.0	365.0	365.0	365.0	365.0	365.0	365.0
REER (annual average in percent; appreciation +) 4/	-15.8	6.7	13.6	…	…	…	…	…

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

1/ Includes the federal government, the central bank, and the social security system (INSS). Based on the 2017 draft budget, recent annoucements by the authorities, and staff projections.

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/ Q1 2017 only.

Table 2. Brazil: Balance of Payments, 2015–22
(In billions of U.S. dollars, unless otherwise indicated)

			Proj.					
	2015	2016	2017	2018	2019	2020	2021	2022
Current Account	**-59.4**	**-23.5**	**-32.4**	**-37.4**	**-38.1**	**-42.9**	**-47.1**	**-50.4**
Trade balance	17.7	45.0	49.0	49.1	51.8	52.3	53.9	56.5
Exports (fob)	190.1	184.5	200.1	205.4	214.3	221.8	231.3	241.8
Imports (fob)	172.4	139.4	151.0	156.3	162.5	169.5	177.4	185.3
Income, net	-40.2	-38.1	-45.7	-47.8	-49.7	-52.3	-55.0	-58.0
Capital and Financial Account	**55.6**	**16.7**	**32.4**	**37.4**	**38.1**	**42.9**	**47.1**	**50.4**
Capital account	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Financial account 1/	55.2	16.5	32.1	37.1	37.8	42.7	46.9	50.1
Direct investment, net	61.2	71.1	59.0	53.6	50.5	49.7	49.8	50.5
Assets	13.5	7.8	9.3	10.7	12.0	13.3	14.4	15.5
Liabilities	74.7	78.9	68.3	64.4	62.6	63.1	64.2	66.0
Portfolio investment, net	22.3	-19.2	1.8	5.2	3.2	2.5	1.5	0.4
Financial Derivatives, net	-3.4	1.0	0.3	0.3	0.3	0.3	0.3	0.4
Other investment, net	-23.3	-27.2	-29.0	-22.0	-16.2	-9.9	-4.8	-1.1
Change in Reserve Assets, net	-1.6	-9.2	0.0	0.0	0.0	0.0	0.0	0.0
Errors and Omissions	**3.8**	**6.8**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Memorandum Items:								
Gross reserves (eop) 1/								
In billions of U.S. dollars	356.5	365.0	365.0	365.0	365.0	365.0	365.0	365.0
Net international reserves (eop)								
In billions of U.S. dollars	356.5	365.0	365.0	365.0	365.0	365.0	365.0	365.0
In percent of short-term debt (residual maturity)	242.0	265.5	266.1	262.5	258.6	258.6	252.2	250.2
Current account (in percent of GDP)	-3.3	-1.3	-1.5	-1.7	-1.7	-1.8	-1.9	-2.0
Trade balance (in percent of GDP)	1.0	2.5	2.3	2.3	2.3	2.2	2.2	2.2
Merchandise exports (in percent of GDP)	10.6	10.3	9.6	9.5	9.5	9.4	9.4	9.4
Merchandise imports (in percent of GDP)	9.6	7.8	7.2	7.3	7.2	7.2	7.2	7.2
Export volume (yoy change, in percent)	8.1	3.7	4.9	5.0	4.2	3.7	3.4	3.8
Import volume (yoy change, in percent)	-13.5	-8.2	3.6	2.5	2.6	3.3	3.2	3.2
Export price index (yoy change, in percent)	-21.6	-6.2	3.4	-2.2	0.1	-0.2	0.8	0.7
Import price index (yoy change, in percent)	-11.9	-8.9	5.9	1.6	1.3	1.3	1.8	1.5
Terms of trade (yoy change, in percent)	-11.0	3.0	-2.4	-3.8	-1.2	-1.5	-0.9	-0.8
Oil price (Brent blend; US$ per barrel)	50.8	42.8	51.9	52.0	51.5	51.7	52.5	53.7
Nominal exchange rate (R$/US$, annual average)	3.33	3.48	...	...	...	...	...	...
REER (annual average in percent; appreciation +)	-15.8	6.7	13.6	...	...	...	...	...
GDP in billions of U.S. dollars	1,801	1,799	2,091	2,155	2,254	2,359	2,466	2,579

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

1/ Historical numbers include valuation changes.

Table 3. Brazil: Main Fiscal Indicators, 2015–22

(In percent of GDP, unless otherwise indicated)

			Proj.					
	2015	2016	2017	2018	2019	2020	2021	2022
FEDERAL GOVERNMENT 1/								
Net nonfinancial revenue	**17.3**	**17.3**	**17.5**	**17.1**	**17.3**	**17.5**	**17.6**	**17.6**
Revenue administered by SRF	12.8	13.1	13.1	13.0	13.2	13.3	13.4	13.4
PIT	2.5	2.6	2.6	2.5	2.6	2.6	2.6	2.6
CIT	3.5	4.0	4.0	4.0	4.1	4.1	4.1	4.1
Indirect taxes	5.7	5.4	5.4	5.3	5.4	5.4	5.4	5.4
Trade taxes	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Other	0.4	0.6	0.6	0.6	0.6	0.7	0.7	0.7
Social security contributions	5.8	5.7	5.8	5.8	5.9	5.9	6.0	6.0
Other revenue	2.1	2.1	2.2	1.8	1.6	1.6	1.5	1.5
Transfers to subnational governments (-)	-3.4	-3.6	-3.5	-3.6	-3.5	-3.4	-3.3	-3.2
Total primary expenditure 2/	**19.3**	**19.6**	**19.5**	**18.9**	**18.5**	**18.0**	**17.6**	**17.2**
Current expenditures	18.4	18.6	18.6	18.7	18.7	18.7	18.8	18.8
Personnel	4.0	4.1	4.2	4.2	4.1	4.0	3.9	3.8
Pension benefits	7.3	8.1	8.5	8.7	8.9	9.2	9.5	9.7
Other	7.1	6.4	6.0	5.8	5.7	5.5	5.4	5.3
Capital expenditures	0.9	1.0	0.9	0.9	0.8	0.8	0.8	0.8
Unallocated spending cuts needed to meet spending cap	...	...	...	-0.7	-1.0	-1.5	-2.0	-2.4
Of which reform of civil pensions (RGPS)	...	...	...	-0.1	-0.3	-0.4	-0.5	-0.7
Primary balance	**-2.0**	**-2.3**	**-2.0**	**-1.8**	**-1.3**	**-0.6**	**0.0**	**0.5**
Borrowing requirement	8.6	7.5	7.2	8.7	8.2	8.1	8.0	7.9
STATES AND MUNICIPALITIES								
States								
Nonfinancial revenue	**10.5**	**10.3**	**10.2**	**10.2**	**10.2**	**10.2**	**10.1**	**10.0**
Own revenues	8.1	7.9	7.9	7.9	7.9	7.8	7.8	7.8
Indirect taxes	6.5	6.4	6.3	6.3	6.3	6.3	6.2	6.2
Other	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Transfers from the federal government	2.5	2.3	2.3	2.3	2.4	2.4	2.3	2.3
Total primary expenditure	**10.5**	**10.4**	**10.4**	**10.2**	**10.2**	**10.0**	**9.9**	**9.8**
Current expenditures	9.6	9.7	9.7	9.5	9.5	9.4	9.3	9.3
Personnel	4.9	4.8	4.9	5.1	5.2	5.1	5.0	4.9
Other	4.7	4.8	4.8	4.4	4.3	4.3	4.3	4.4
Capital expenditures and other	0.9	0.7	0.7	0.7	0.7	0.6	0.6	0.5
Primary balance of municipalities	**0.1**	**-0.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Primary balance of states and municipalities	**0.1**	**-0.2**	**-0.2**	**0.0**	**0.1**	**0.2**	**0.2**	**0.3**
Borrowing requirement	1.5	1.5	1.6	1.5	1.5	1.5	1.6	1.7
PUBLIC ENTERPRISES 3/								
Federal enterprises								
Nonfinancial revenue	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Expenditures	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Personnel	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Other current expenditures	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Capital expenditures	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
State and municipal enterprises								
Primary balance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Primary balance of state and municipal enterprises	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Borrowing requirement	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
NON FINANCIAL PUBLIC SECTOR (NFPS)								
Primary balance (NFPS)	**-1.9**	**-2.5**	**-2.1**	**-1.8**	**-1.1**	**-0.4**	**0.2**	**0.8**
Primary balance (Authorities' target)	...	-2.6	-2.1	-1.8	-0.8	0.3	...	...
Overall balance (Accrual)	-10.3	-9.1	-8.8	-10.2	-9.8	-9.8	-9.7	-9.7
Overall balance (Cash)	...	...	-6.2	-8.0	-7.7	-9.0	-10.8	-9.9
Structural primary balance 4/	-1.5	-1.4	-1.0	-1.2	-0.9	-0.4	0.1	0.0
Structural primary balance including policy lending	-1.5	0.2	-1.0	-1.2	-0.9	-0.4	0.1	0.0
Memorandum items								
Spending ceiling (million Brazilian reais) 5/	...	...	1,301,820	1,352,814	1,408,977	1,468,561	1,534,398	1,603,273
Loans to public financial institutions 6/	0.0	-1.6	0.0	0.0	0.0	0.0	0.0	0.0
NFPS net interest expenditure	8.4	6.6	6.7	8.4	8.7	9.4	10.0	10.5
Net public sector debt 7/	35.6	46.2	51.4	55.9	58.9	61.0	62.4	63.3
Gross NFPS debt	72.5	78.3	81.5	85.8	88.6	90.5	91.7	92.4
General government debt, Authorities' definition	65.5	69.9	...	...	...	...	...	...
Nominal GDP (millions of reais)	6,000,572	6,266,895	6,753,154	7,161,955	7,649,005	8,191,506	8,773,507	9,397,288

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

1/ Comprises the central administration and the social security system.

2/ Total primary expenditure is the sum of current (on trend) plus capital (on trend) expenditures, minus unallocated cuts to meet the ceiling.

3/ Excluding Petrobras and Eletrobras.

4/ Structural primary balance adjusts for output gap and one-off measures.

5/ The ceiling excludes from total primary expenditures of the federal government in constitutional fund for Brasilia DF, extraordinary credit,; electoral lawsuits, complement to Fundeb, and equity increases in public companies.

6/ Policy lending to BNDES and others.

7/ Includes assets, which mainly comprise international reserves, financial assets of public enterprises, and assets of the federal labor fund (FAT).

Table 4. Brazil: Depository Corporations and Monetary Aggregates, 2011–16

(In billions of reais, end-of-period)

	2011	2012	2013	2014	2015	2016
			I. Central Bank			
Net foreign assets	**651.6**	**753.7**	**830.4**	**954.9**	**1,381.5**	**1,179.8**
Net international reserves	659.7	762.5	840.7	965.8	1,392.2	1,179.0
Other foreign assets (net)	-8.1	-8.8	-10.3	-11.0	-10.8	0.9
Net domestic assets	**-63.9**	**-245.7**	**-255.8**	**-406.4**	**-787.0**	**-537.3**
Net claims on public sector	176.4	276.7	266.0	415.4	242.6	467.8
Net credit to other depository corporations	-288.6	-474.1	-479.0	-764.3	-882.9	-1,003.5
Other items (net)	-48.3	48.2	42.8	57.5	146.8	1.7
Base money	**587.7**	**508.0**	**574.6**	**548.5**	**594.4**	**642.5**
Currency issued	162.8	187.4	204.1	220.9	225.5	232.1
Liabilities to other depository corporations	424.9	320.0	369.0	325.7	368.4	409.2
Reserve deposits	51.5	45.9	45.5	42.7	29.8	38.1
Liabilities to other sectors	0.0	0.6	1.5	1.9	0.6	1.2
			II. Depository Corporations 1/			
Net foreign assets	**486.3**	**551.3**	**667.2**	**730.7**	**1,089.3**	**968.2**
Net international reserves	659.7	762.5	840.7	965.8	1,392.2	1,179.0
Other foreign assets (net)	-173.4	-211.2	-173.5	-235.2	-302.9	-210.8
Net domestic assets	**2,581.6**	**3,004.5**	**3,205.5**	**3,666.1**	**3,733.8**	**4,452.5**
Net claims on public sector	1,210.1	1,368.2	1,345.6	1,488.8	1,628.1	2,310.1
Credit to other financial corporations	342.7	383.7	431.6	496.1	526.0	526.7
Credit to private sector	2,541.7	3,010.2	3,424.5	3,815.8	4,007.0	3,897.6
Of which: loans to private sector	1,895.7	2,195.5	2,530.7	2,807.8	2,909.0	2,824.4
Other items (net)	1,582.8	1,861.5	2,128.6	2,311.7	2,685.4	2,515.7
Capital	631.2	814.7	817.7	857.9	855.3	762.0
Other liabilities excluded from broad money	951.6	1,046.8	1,310.9	1,453.9	1,830.2	1,753.8
Broad money (M2) 2/	**3,067.9**	**3,555.8**	**3,872.7**	**4,396.7**	**4,823.2**	**5,420.6**
Currency in circulation	131.4	149.6	163.9	178.3	185.3	192.0
Demand deposits	159.8	182.3	189.8	183.9	160.9	169.8
Quasi-money liabilities	2,776.7	3,223.9	3,519.0	4,034.6	4,477.0	5,058.9
			(Ratio)			
Multiplier (M2/base money)	5.2	7.0	6.7	8.0	8.1	8.4
			(In percent of GDP)			
Base money	13.4	10.6	10.8	9.5	9.9	10.3
Broad money (M2)	70.1	73.9	72.6	76.1	80.4	86.5
M3 3/	69.2	73.1	71.7	74.7	79.3	84.3
M4 4/	81.1	85.2	82.6	86.4	92.6	98.0
Financial sector credit to the private sector	58.1	62.5	64.2	66.0	66.8	62.2
Of which: bank loans to private sector	43.3	45.6	47.5	48.6	48.5	45.1
Memorandum item:						
GDP (in billions of national currency)	4,376	4,815	5,332	5,779	6,001	6,267

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 nonfinanical 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, 2014–22

				Proj.					
	2014	2015	2016	2017	2018	2019	2020	2021	2022
MACROECONOMIC FRAMEWORK	(In percent of GDP, unless otherwise specified)								
GDP growth at constant prices (in percent)	0.5	-3.8	-3.6	0.3	1.3	2.0	2.0	2.0	2.0
Consumer prices (IPCA, end of period, in percent)	6.4	10.7	6.3	4.0	4.0	4.5	4.5	4.5	4.5
Gross domestic investment	21.0	19.1	17.5	17.6	17.9	18.5	18.8	19.1	19.6
Private sector	18.7	17.3	15.8	16.0	16.3	17.0	17.4	17.7	18.3
Public sector	2.4	1.9	1.8	1.6	1.6	1.5	1.4	1.4	1.3
Gross domestic savings	16.8	15.8	16.2	16.0	16.2	16.8	17.0	17.2	17.6
Private sector	19.6	24.1	23.3	23.1	23.3	23.4	23.1	22.8	22.9
Public sector	-2.8	-8.3	-7.1	-7.0	-7.1	-6.5	-6.1	-5.6	-5.3
External current account balance	-4.2	-3.3	-1.3	-1.5	-1.7	-1.7	-1.8	-1.9	-2.0
Central government primary balance	0.2	-2.0	-2.3	-2.0	-2.6	-2.5	-2.5	-2.6	-1.9
Consolidated non-financial public sector									
Primary balance	0.0	-1.9	-2.5	-2.1	-1.8	-1.1	-0.4	0.2	0.8
Overall balance	-5.4	-10.3	-9.1	-8.8	-10.2	-9.8	-9.8	-9.7	-9.7
Public sector net debt 1/	32.6	35.6	46.2	51.4	55.9	58.9	61.0	62.4	63.3
General Government gross debt, authorities' definition	56.3	65.5	...	...	...	...	...	...	...
NFPS gross debt 2/	62.3	72.5	78.3	81.5	85.8	88.6	90.5	91.7	92.4
EXTERNAL DEBT 3/ 4/	(In billions of U.S. dollars)								
Total external debt	**712.7**	**665.1**	**663.6**	**672.7**	**682.9**	**693.1**	**700.4**	**705.9**	**709.9**
Medium- and long-term	654.9	614.0	615.4	625.7	636.5	647.0	654.6	660.3	664.6
Nonfinancial public sector	231.9	192.9	181.8	177.3	175.0	173.9	172.9	171.8	170.8
Public sector banks	70.7	68.7	64.7	63.1	62.3	61.9	61.5	61.2	60.8
Private sector	410.1	403.6	417.1	432.3	445.6	457.3	466.0	472.8	478.3
Short-term	57.8	51.1	48.2	47.0	46.4	46.1	45.8	45.6	45.3
Medium- and long-term external debt service	**88.3**	**115.8**	**115.1**	**106.9**	**107.8**	**110.5**	**113.2**	**115.8**	**117.8**
Amortization	70.7	97.1	96.2	89.3	90.1	92.6	95.0	97.4	99.2
Interest	17.6	18.7	18.9	17.7	17.6	17.9	18.2	18.4	18.6
	(In percent of GDP)								
Total external debt	**29.0**	**36.9**	**36.9**	**32.2**	**31.7**	**30.7**	**29.7**	**28.6**	**27.5**
Medium- and long-term	26.7	34.1	34.2	29.9	29.5	28.7	27.8	26.8	25.8
Nonfinancial public sector	9.4	10.7	10.1	8.5	8.1	7.7	7.3	7.0	6.6
Public sector banks	2.9	3.8	3.6	3.0	2.9	2.7	2.6	2.5	2.4
Private sector	16.7	22.4	23.2	20.7	20.7	20.3	19.8	19.2	18.5
Short-term	2.4	2.8	2.7	2.2	2.2	2.0	1.9	1.8	1.8
	(In percent of gross international reserves)								
Medium- and long-term external debt service	**24.3**	**32.5**	**31.5**	**29.3**	**29.5**	**30.3**	**31.0**	**31.7**	**32.3**
Amortization	19.5	27.2	26.3	24.5	24.7	25.4	26.0	26.7	27.2
Interest	4.8	5.2	5.2	4.8	4.8	4.9	5.0	5.0	5.1
Short-term debt	15.9	14.3	13.2	12.9	12.7	12.6	12.6	12.5	12.4
MEMORANDUM ITEMS:									
Gross reserves (eop) 4/									
In billions of U.S. dollars	363.6	356.5	365.0	365.0	365.0	365.0	365.0	365.0	365.0
In percent of external short-term debt (maturity basis)	629.2	697.0	757.3	776.4	786.7	791.5	796.3	801.0	805.7
In months of prospective GNFS imports	191.2	193.3	182.5	177.7	170.4	164.6	157.8	151.0	...
Short-term debt in percent of total external debt	8.1	7.7	7.3	7.0	6.8	6.7	6.5	6.5	6.4
Intercompany debt (in billions of U.S. dollars)	207.8	205.7	230.6	250.4	266.1	278.9	288.6	296.5	303.0
In percent of GDP	8.5	11.4	12.8	12.0	12.3	12.4	12.2	12.0	11.7
GDP (billion US$)	2,456	1,801	1,799	2,091	2,155	2,254	2,359	2,466	2,579

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/ Includes intercompany debt.

4/ Historical numbers include valuation changes.

Table 6. Brazil: External Vulnerability Indicators, 2011–17

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

	2011	2012	2013	2014	2015	2016	Proj. 2017
Trade							
Exports of GNFS (12-month percent change, US$)	26.1	-3.9	-0.5	-5.6	-15.2	-2.7	8.5
Imports of GNFS (12-month percent change, US$)	24.0	0.6	7.1	-2.1	-23.7	-16.4	9.7
Terms of trade (12-month percent change)	7.8	-5.8	-2.0	-3.4	-11.0	3.0	-2.4
Current account							
Current account	-77.0	-74.2	-74.8	-104.2	-59.4	-23.5	-32.4
In percent of GDP	-2.9	-3.0	-3.0	-4.2	-3.3	-1.3	-1.5
Capital and financial account	79.5	74.2	73.0	100.8	55.6	16.7	32.4
Capital Account	0.3	0.2	0.3	0.2	0.5	0.3	0.3
Financial Account	79.2	74.0	72.7	100.6	55.2	16.5	32.1
Portfolio investment (net)	41.2	15.8	32.8	38.7	22.3	-19.2	1.8
Foreign direct investment (net)	85.1	81.4	54.2	70.9	61.2	71.1	59.0
Of which: intercompany loans (net)	31.5	22.1	39.7	38.3	18.9	25.1	20.0
Short-term external liabilities of commercial banks	34.3	29.2	29.3	49.4	42.7	40.3	39.3
External debt							
Total external debt 1/	516.0	570.8	621.4	712.7	665.1	663.6	672.7
In percent of gross reserves	146.6	153.0	173.2	196.0	186.6	181.8	184.3
Amortization of external MLT debt (in percent of GNFS exports)	13.7	20.3	24.7	31.6	51.1	52.1	44.6
External interest payments (in percent of GNFS exports)	6.1	7.4	7.3	7.8	9.8	10.3	8.8
Reserves							
Gross reserves	352.0	373.1	358.8	363.6	356.5	365.0	365.0
In months of prospective GNFS imports	13.9	13.8	13.5	17.9	21.1	19.7	18.9
In percent of broad money (M2)	21.5	21.4	21.7	22.0	28.9	21.9	19.8
In percent of short-term external debt (maturity basis)	394.0	403.8	346.8	234.7	242.0	265.5	266.1
In percent of IMF metric	156.1	158.8	159.4	155.4	192.1	165.9	156.5
Exchange rate							
Exchange rate (R$/US$, period average)	1.67	1.95	2.16	2.35	3.33	3.48	3.23
REER (annual average in percent; appreciation +) 2/	3.5	-10.0	-5.6	-1.0	-15.8	6.7	13.6

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

1/ Includes intercompany loans.

2/ Q1 2017 only.

Table 7. Brazil: Financial Soundness Indicators, 2011–16

(In percent, unless otherwise indicated)

	2011	2012	2013	2014	2015	2016
			Total banking system			
Capital Adequacy						
Regulatory capital to risk-weighted assets	16.3	16.4	16.1	16.7	16.4	17.2
Regulatory Tier 1 capital to risk-weighted assets	12.9	11.9	12.6	13.0	12.7	13.7
Capital to assets	10.1	10.1	9.3	9.0	8.5	9.3
Gross asset position in financial derivatives to capital	7.4	7.8	9.6	11.8	29.6	22.8
Gross liability position in financial derivatives to capital	8.0	9.3	10.9	13.8	35.6	21.8
Asset Quality						
Nonperforming loans to total gross loans	3.5	3.4	2.9	2.9	3.3	3.9
Provisions to Nonperforming loans	151.6	148.7	161.2	155.8	154.4	152.2
Earnings and Profitability						
Return on assets	1.7	1.4	1.4	1.3	1.5	1.1
Return on equity	16.1	12.9	13.0	13.1	15.4	11.3
Liquidity						
Liquidity assets to short-term liabilities	178.6	191.8	158.0	202.2	190.0	236.3
Liquidity assets to total assets	11.7	14.9	10.9	12.0	11.6	14.1
Net open position in foreign exchange to capital	0.2	-0.6	0.4	0.3	0.5	0.9
External funding to total funding	9.2	9.3	8.5	10.3	13.0	10.3
			Public banks			
Capital Adequacy						
Regulatory capital to risk-weighted assets	14.3	14.5	14.9	16.2	15.5	16.3
Regulatory Tier 1 capital to risk-weighted assets	9.8	9.4	11.3	11.8	11.0	11.5
Capital to assets	6.7	6.3	5.6	5.1	4.7	4.9
Gross asset position in financial derivatives to capital	0.8	1.0	1.7	3.1	8.2	2.6
Gross liability position in financial derivatives to capital	2.1	2.1	3.0	2.5	3.2	3.0
Asset Quality						
Nonperforming loans to total gross loans	1.9	1.8	1.9	2.0	2.5	3.3
Provisions to Nonperforming loans	214.2	203.3	181.1	164.0	157.8	146.6
Earnings and Profitability						
Return on assets	1.7	1.5	1.5	1.1	1.0	0.6
Return on equity	21.0	18.7	18.1	13.8	14.4	9.0
Liquidity						
Liquidity assets to short-term liabilities	201.1	282.1	214.1	209.6	196.0	282.0
Liquidity assets to total assets	12.9	14.2	10.5	10.2	9.7	13.2
Net open position in foreign exchange to capital	4.3	0.0	1.4	2.2	-1.2	4.4
External funding to total funding	3.2	4.4	4.3	5.2	7.5	5.4
			Private banks (domestic and foreign)			
Capital Adequacy						
Regulatory capital to risk-weighted assets	17.3	17.4	16.8	16.9	16.8	17.7
Regulatory Tier 1 capital to risk-weighted assets	14.3	13.2	13.3	13.7	13.6	15.0
Capital to assets	11.9	12.5	11.8	11.6	10.9	12.4
Gross asset position in financial derivatives to capital	9.4	9.9	12.2	14.4	35.8	28.6
Gross liability position in financial derivatives to capital	9.8	11.6	13.5	17.3	44.9	27.2
Asset Quality						
Nonperforming loans to total gross loans	4.6	4.9	3.8	3.7	4.2	4.6
Provisions to Nonperforming loans	133.4	131.6	151.7	151.0	152.2	156.5
Earnings and Profitability						
Return on assets	1.7	1.3	1.3	1.5	1.8	1.4
Return on equity	14.4	10.8	10.8	12.8	15.8	12.2
Liquidity						
Liquidity assets to short-term liabilities	166.8	162.4	135.3	198.5	187.2	214.3
Liquidity assets to total assets	11.1	15.4	11.2	13.3	12.9	14.8
Net open position in foreign exchange to capital	-1.1	-0.8	0.1	-0.3	1.0	-0.1
External funding to total funding	12.6	12.5	11.8	14.4	17.7	14.4

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

Table 8. Brazil: External Debt Sustainability Framework, 2012–22

(In percent of GDP, unless otherwise indicated)

	2012	2013	2014	2015	2016	Projection 2017	2018	2019	2020	2021	2022	Debt-stabilizing non-interest current account 6/
1 **Baseline: External debt**	23.2	25.1	29.0	36.9	36.9	32.2	31.7	30.7	29.7	28.6	27.5	**-2.4**
2 Change in external debt	3.4	2.0	3.9	7.9	0.0	-4.7	-0.5	-0.9	-1.1	-1.1	-1.1	
3 Identified external debt-creating flows (4+8+9)	1.0	1.4	2.1	8.4	-0.5	-1.0	-0.8	-0.7	-0.6	-0.5	-0.5	
4 Current account deficit, excluding interest payments	2.3	2.3	3.5	2.3	0.3	0.6	0.9	0.8	1.0	1.1	1.2	
5 Deficit in balance of goods and services	0.9	1.9	2.2	1.1	-0.8	-0.7	-0.5	-0.5	-0.4	-0.3	-0.3	
6 Exports	11.4	11.3	10.8	12.4	12.1	11.3	11.3	11.2	11.1	11.1	11.1	
7 Imports	12.3	13.2	13.0	13.5	11.3	10.7	10.8	10.7	10.7	10.8	10.8	
8 Net non-debt creating capital inflows (negative)	-2.6	-1.1	-1.8	-2.9	-3.1	-2.3	-2.1	-1.8	-1.8	-1.8	-1.8	
9 Automatic debt dynamics 1/	1.3	0.2	0.4	9.0	2.4	0.7	0.4	0.2	0.2	0.2	0.2	
10 Contribution from nominal interest rate	0.7	0.7	0.7	1.0	1.1	0.8	0.8	0.8	0.8	0.7	0.7	
11 Contribution from real GDP growth	-0.4	-0.7	-0.1	1.5	1.3	-0.1	-0.4	-0.6	-0.6	-0.6	-0.5	
12 Contribution from price and exchange rate changes 2/	1.0	0.2	-0.2	6.5	...	...	...	...	...	...	...	
13 Residual, incl. change in gross foreign assets (2-3) 3/	2.5	0.5	1.8	-0.5	0.5	-3.7	0.3	-0.2	-0.4	-0.6	-0.6	
External debt-to-exports ratio (in percent)	203.1	222.3	269.9	297.1	304.8	284.4	281.3	273.7	267.2	258.2	248.5	
Gross external financing need (in billions of US dollars) 4/	163.6	167.2	207.7	214.3	170.8	168.4	173.1	175.6	182.5	188.7	193.4	
in percent of GDP	6.6	6.8	8.5	11.9	9.5	8.1	8.0	7.8	7.7	7.7	7.5	
Scenario with key variables at their historical averages 5/					36.9	36.9	36.4	35.6	34.5	33.3	32.0	**-3.1**
Key Macroeconomic Assumptions Underlying Baseline												
Real GDP growth (in percent)	1.9	3.0	0.5	-3.8	-3.6	0.3	1.3	2.0	2.0	2.0	2.0	
GDP deflator in US dollars (change in percent)	-7.5	-2.6	-1.1	-23.7	3.5	15.8	1.8	2.6	2.6	2.5	2.5	
Nominal external interest rate (in percent)	3.5	3.1	2.8	2.6	2.8	2.7	2.6	2.6	2.6	2.6	2.6	
Growth of exports (US dollar terms, in percent)	-3.9	-0.5	-5.6	-15.2	-2.7	8.6	2.6	4.3	3.5	4.3	4.5	
Growth of imports (US dollar terms, in percent)	0.6	7.1	-2.1	-23.7	-16.4	9.7	4.1	4.0	4.6	5.0	4.8	
Current account balance, excluding interest payments	-2.3	-2.3	-3.5	-2.3	-0.3	-0.6	-0.9	-0.8	-1.0	-1.1	-1.2	
Net non-debt creating capital inflows	2.6	1.1	1.8	2.9	3.1	2.3	2.1	1.8	1.8	1.8	1.8	
B. Bound Tests												
B1. Nominal interest rate is at historical average plus one standard deviation						32.4	32.2	31.5	30.7	29.8	28.9	**-2.2**
B2. Real GDP growth is at historical average minus one standard deviations						32.8	32.9	32.5	31.9	31.2	30.5	**-2.1**
B3. Non-interest current account is at historical average minus one standard deviations						32.9	33.1	32.8	32.4	32.0	31.5	**-2.5**
B4. Combination of B1-B3 using 1/2 standard deviation shocks						33.0	33.2	33.0	32.7	32.2	31.7	**-2.2**
B5. One time 30 percent real depreciation in 2006						50.8	50.0	48.5	46.8	45.1	43.3	**-4.1**

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.

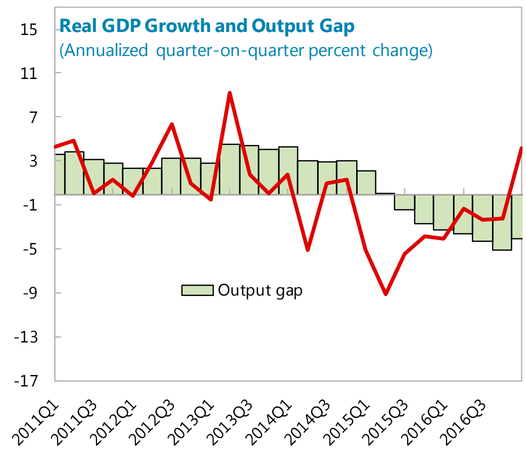
4/ Defined as current account deficit, plus amortization on medium- and long-term debt, plus short-term debt at end of previous period.

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.

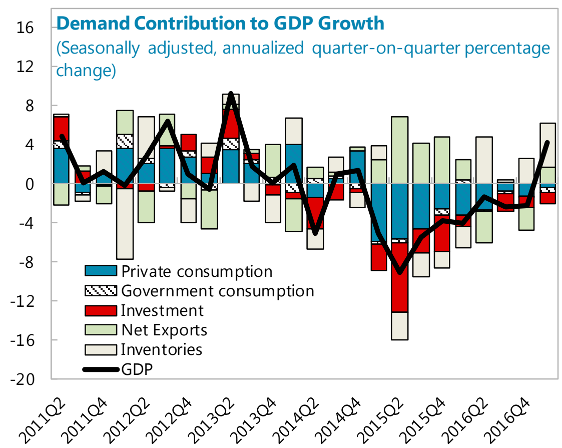
6/ Long-run, constant balance that stabilizes the debt ratio assuming that key variables (real GDP growth, nominal interest rate, dollar deflator growth, and non-debt inflows in percent of GDP) remain at their levels of the last projection year.

Figure 1. Brazil: Real Sector Developments

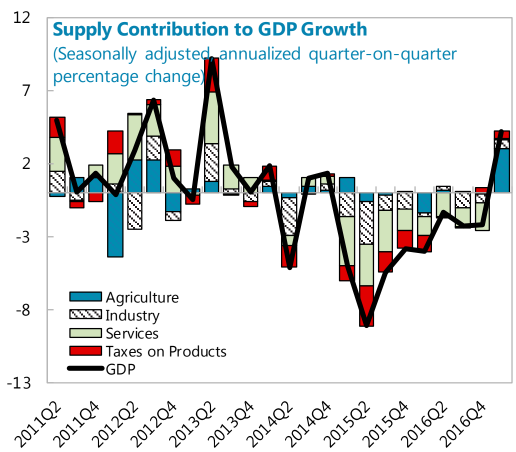
After 8 consecutive quarters of contraction, activity expanded in 2017Q1.



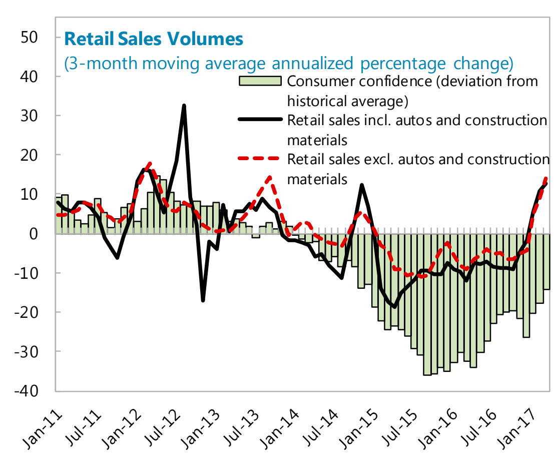
Investment and consumption have continued contracting, while the boost from net exports waned in 2016.



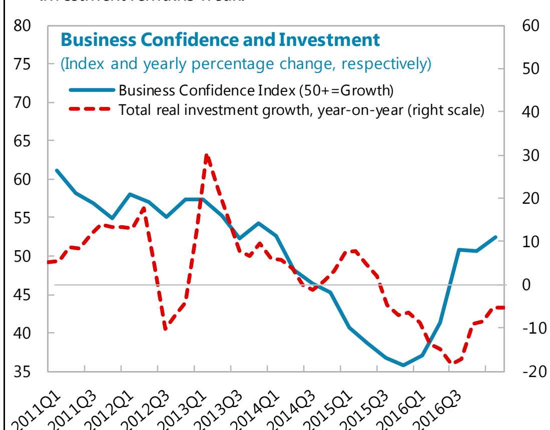
Contraction has been broad-based across industries.



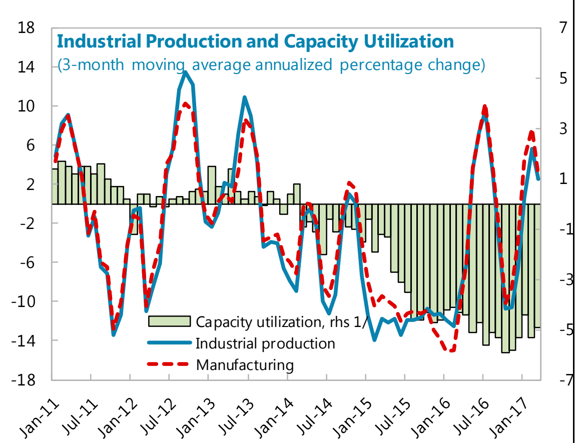
Retail sales have improved in early 2017, but consumers' confidence remains low.



Business confidence has continued to improve, but investment remains weak.



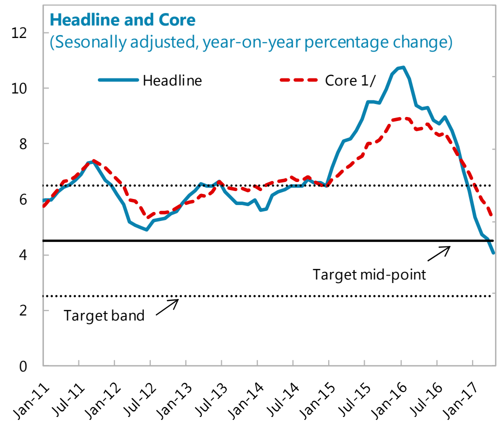
Capacity utilization remains well below historical averages but industrial production has picked up more recently.



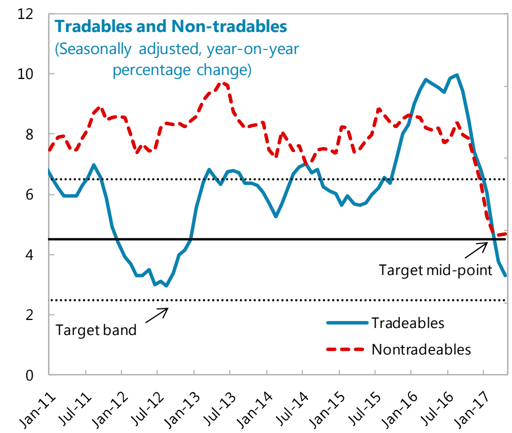
Sources: Haver analytics; IBGE; and Fund staff estimates.
1/ Difference between the current rate and the 10-year average in percentage points.

Figure 2. Brazil: Inflation Developments

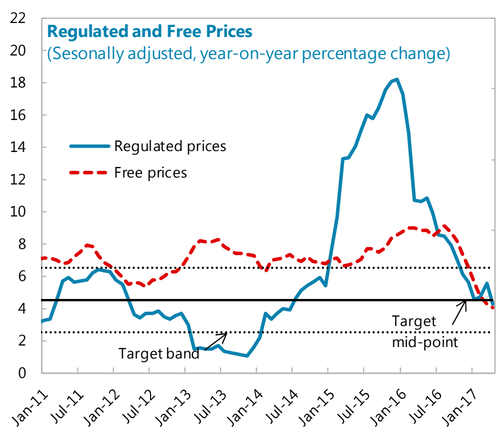
Inflation has declined rapidly and is close to the mid point of the target band.



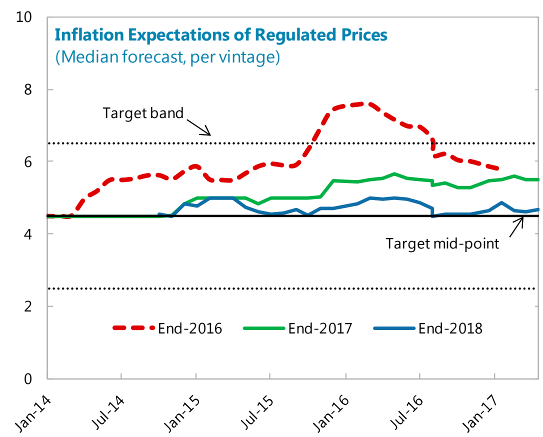
The decline in inflation has been broad-based across sectors, with both tradable and non-tradable inflation falling sharply.



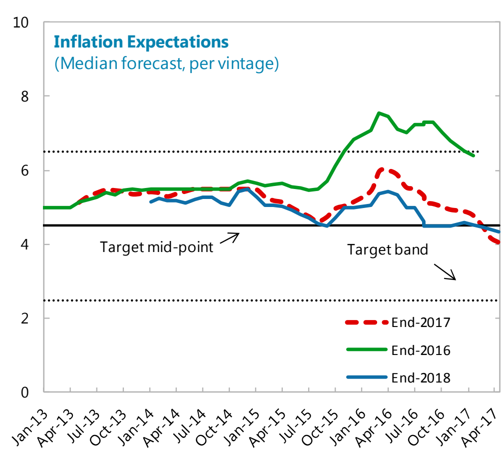
The effects of sharp regulated-price adjustments have waned and free-price inflation has declined.



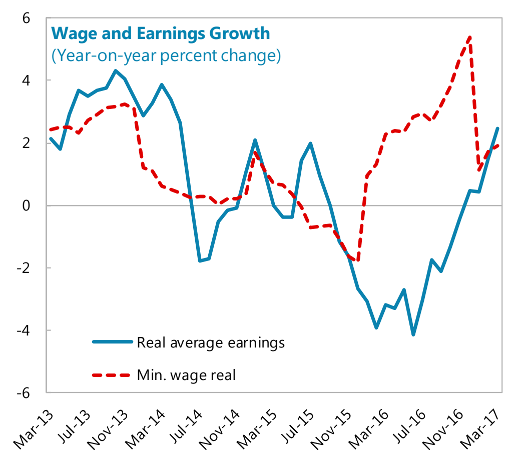
Expectations for regulated-price inflation remain high for 2017 but are close to target midpoint for 2018.



Inflation expectations have converged to close to the target over the relevant horizon…



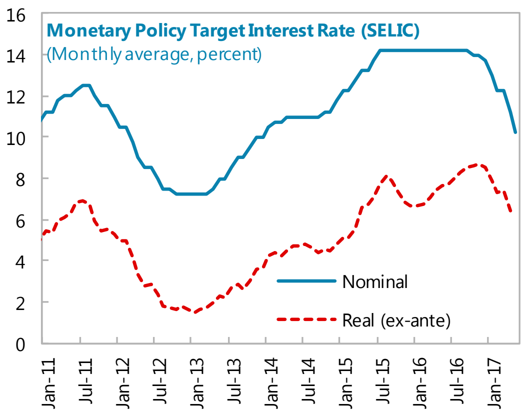
…and real wages have begun to pick up as the effect of the inflation spike disapates.



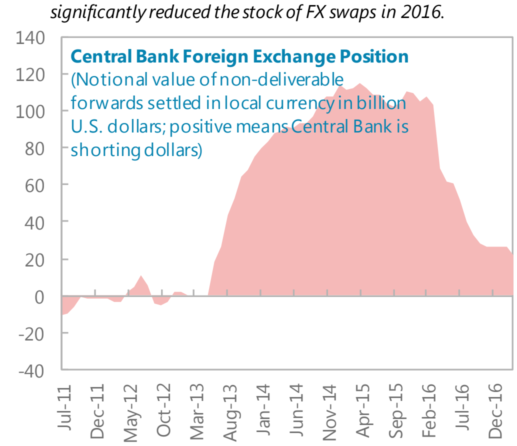
Sources: Haver Analytics, IBGE, and Fund Staff calculations.
1/ Extended Consumer Price Index, Double Weighted (IPCA-DP).

Figure 3. Brazil: Macroeconomic Policies

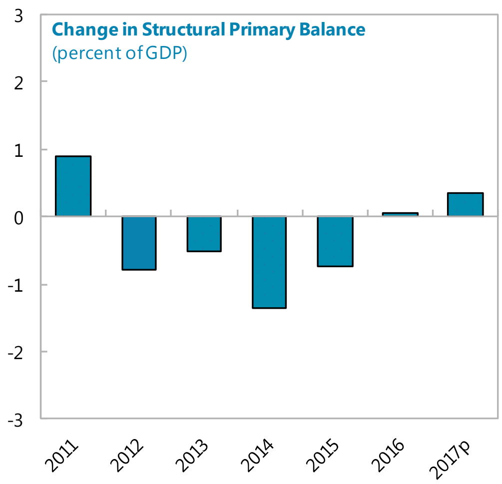
Since October 2016 the policy rate has been lowered by 400 basis points.



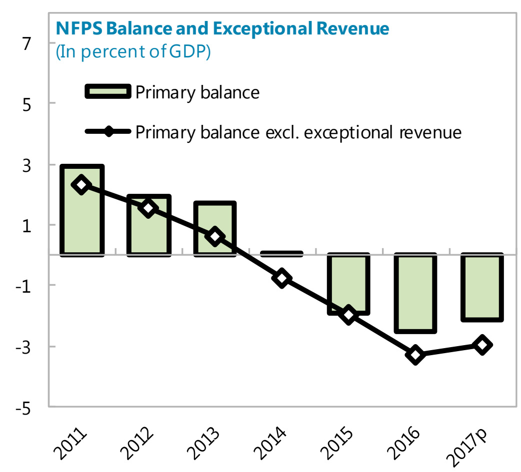
As demand for dollar hedge declined, the central bank has significantly reduced the stock of FX swaps in 2016.



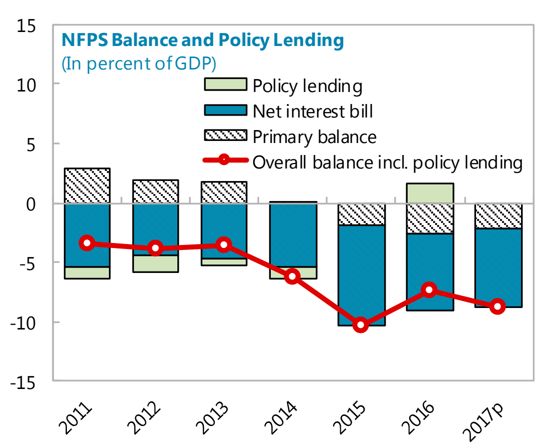
The fiscal stance (excluding policy lending) was broadly neutral in 2016…



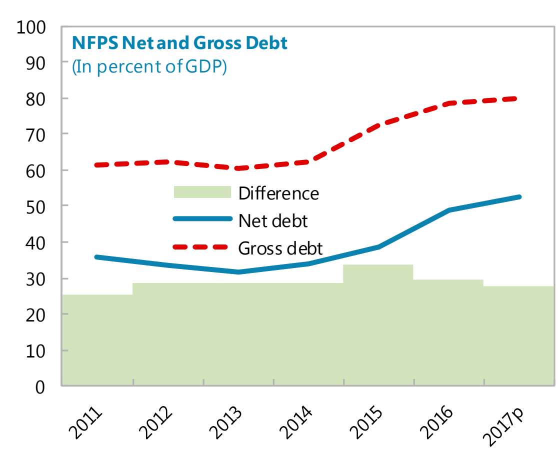
… while primary deficit continued to widen and rely on exceptional revenue.



The overall fiscal balance remains negative due to primary deficit and interest bill.



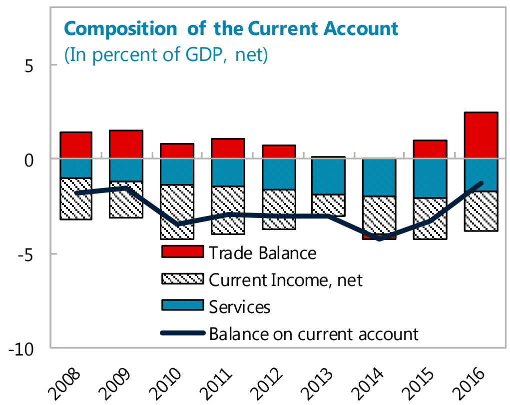
Gross debt has increased to near 80 percent of GDP.



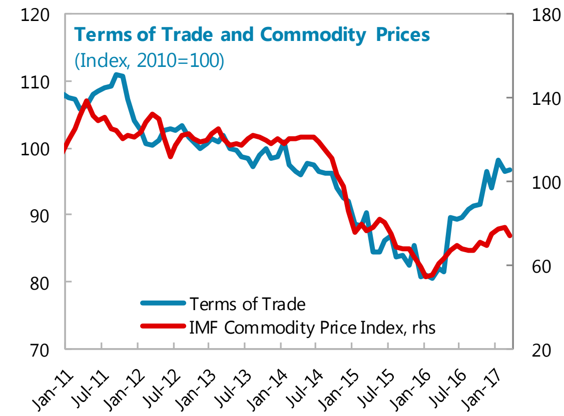
Sources: Central Bank of Brazil, IBGE, Haver Analytics, and Fund staff calculations.

Figure 4. Brazil: External Sector Developments

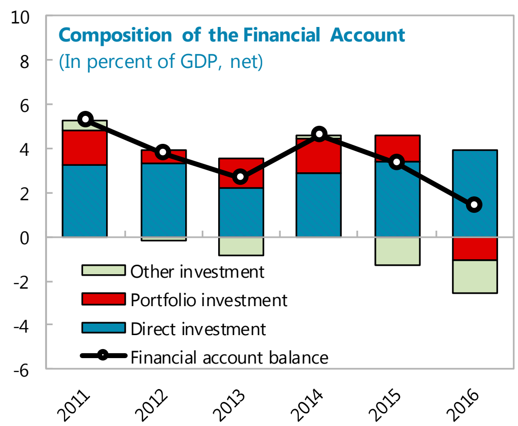
The external current account continued to improve in 2016 supported by a trade surplus, reflecting weak domestic absorption…



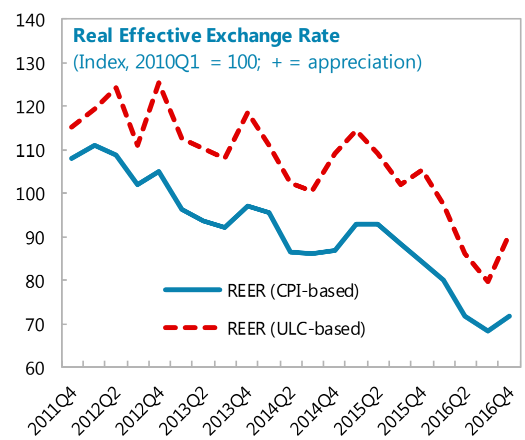
…and favourable terms of trade.



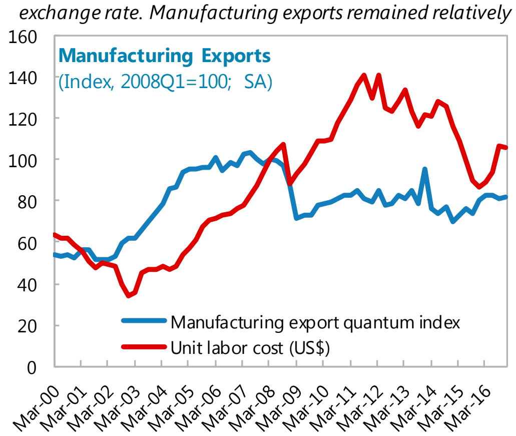
Net capital inflows declined in 2016 amid contracting portfolio and other investment inflows.



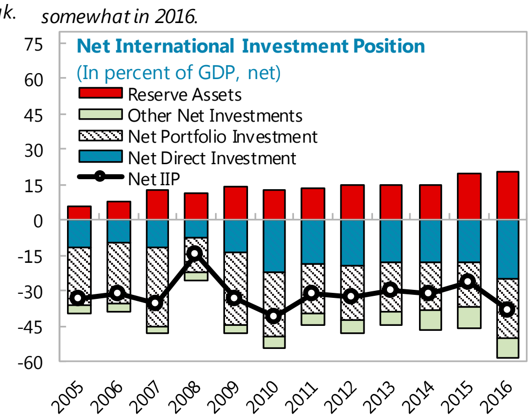
The real effective exchange rate apreciated in 2016…



…amid high unit labor costs and an appreciating nominal exchange rate. Manufacturing exports remained relatively weak.



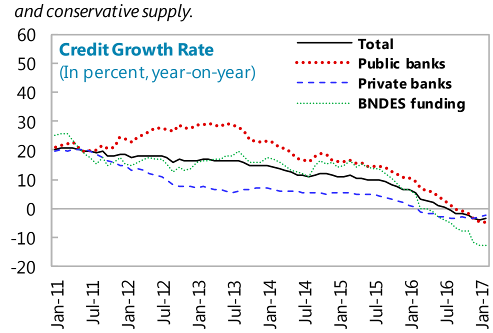
The International Investment Position deteriorated somewhat in 2016.



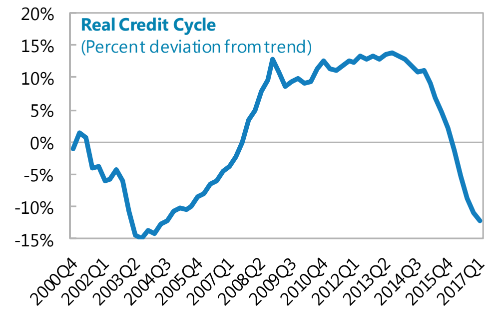
Sources: Central Bank of Brazil; Haver Analytics; and Fund staff calculations.

Figure 5. Brazil: Financial Sector Developments

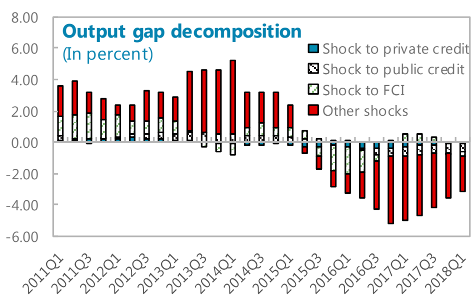
Credit growth decelerated, reflecting both weak loan demand and conservative supply.



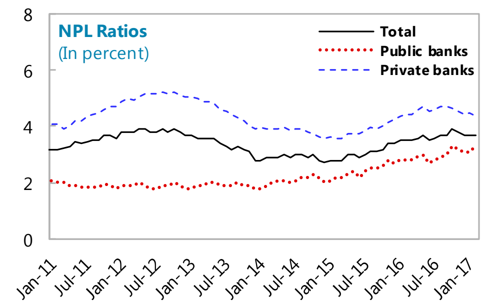
The downturn phase of the credit cycle deepened in 2016...



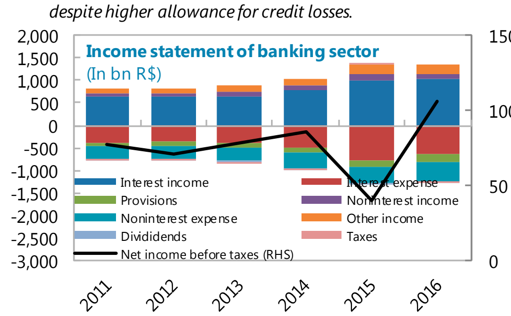
...posing risks to recovery.



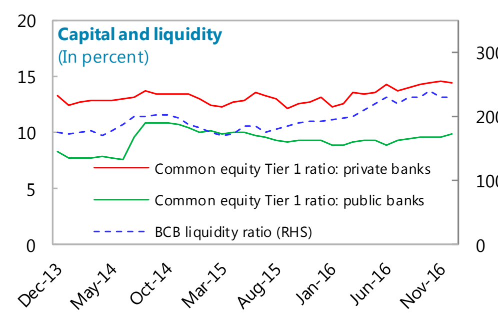
Nonperforming loans have been stable in 2016 reflecting high write-offs and renegotiation of loans.



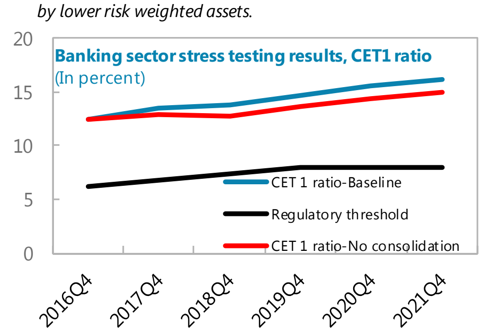
Profits before taxes increased due to lower funding costs and despite higher allowance for credit losses.



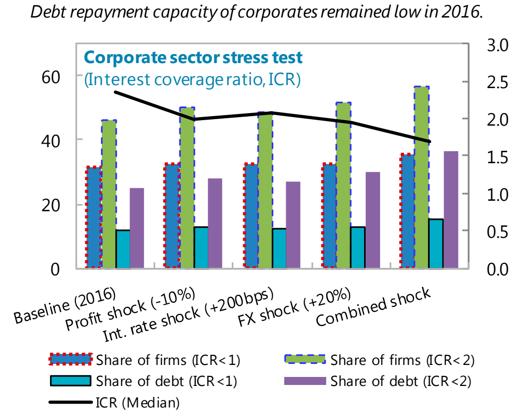
Capital and liquidity remain above the regulatory minima but capital ratio of public banks are below those of private banks.



Banks could withstand growth and risk premia shocks under delayed and no consolidation as lower profits would be offset by lower risk weighted assets.



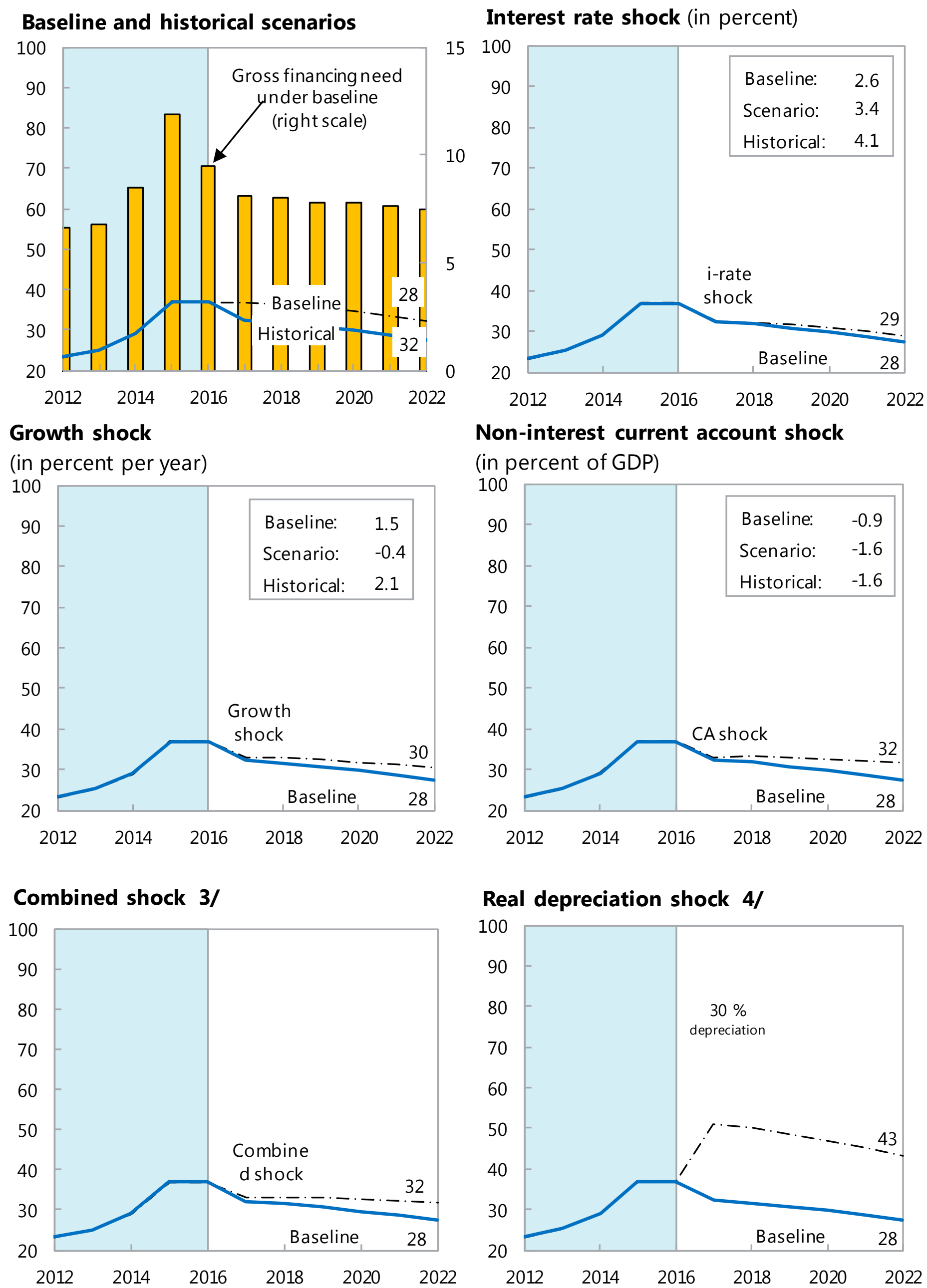
Debt repayment capacity of corporates remained low in 2016.



Sources: Central Bank of Brazil, KMV, and Fund staff calculations.

Figure 6. Brazil: External Debt Sustainability Bound Test, 1/ 2/

(In percent of GDP, unless otherwise indicated)



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 current account balance.
4/ One-time real depreciation of 30 percent occurs in 2017.

Appendix I. Risk Assessment Matrix

Risk Assessment Matrix[1]

Domestic Risks

Nature/Source of Threat	Likelihood	Expected Impact on Economy	Policy Responses
Failing to pass an adequate social security and other reform necessary to maintain the cap over the medium term	**H**	**H.** Fiscal balances would continue to disappoint and fail to stabilize debt. Further loss of confidence would lower investment and growth. Market adverse reaction would include currency depreciation and increased sovereign yields, and inflationary pressures would resume. Corporates could be vulnerable to capital flow reversals, exchange rate depreciation and higher funding costs. The strains would worsen if banking system soundness deteriorated owing to an increase in NPLs and funding costs and losses on government bonds' holdings.	Deploy alternative measures on the fiscal side to shore up credibility in the fiscal framework and to ensure debt stabilizes over time. May need to stop or even reverse monetary policy easing, depending on the change in inflation expectations. Strengthen efforts to boost competitiveness and productivity.
Broadening of the corruption scandal	**H**	**H.** Prolonged uncertainty would continue to hamper investment, confidence and growth. A further rise in unemployment increases the threat of social unrest. Higher funding costs and higher unrealized losses on fixed income securities cause larger bank losses and capital shortfalls, tightening of financial conditions and further decline in credit.	Ensure macroeconomic policy resilience. This involves: (1) Strengthening efforts to achieve medium-term debt sustainability; (2) Monetary policy should remain focused on keeping inflation expectations anchored; (3) Exchange rate intervention only under disorderly market conditions; and (4) Enact structural reforms to combat corruption and money laundering.
Slower return to positive growth	**L**	**M.** Delayed pick up in employment leading to a deterioration of households' balance sheet and income resulting in a rise in delinquencies on consumer loans, loan losses and contraction of credit. Lower corporate profits may expose some highly leveraged corporates. Increased financial vulnerabilities among banks with portfolio concentrated in households and corporate loans. Potential knock on effects on public finances.	Monitor for signs of emerging domestic financial and corporate vulnerabilities and strengthen safety nets. Step up active labor market policies and flexibilize contracts to facilitate employment. Press on with structural reforms to boost growth.
		External Risks	
Significant further strengthening of the US dollar and/or higher rates. As investors reassess policy fundamentals, as term premia decompress, or if there is a more rapid Fed normalization, leveraged firms, lower-rated sovereigns and those with un-hedged dollar exposures could come under stress. Could also result in capital account pressures for some economies.	**H**	**M**. Increasing Brazil's risk premiums, pressures on the real and reversal of capital flows. Increasing yields in domestic bond markets and higher funding costs for corporates and banks. In particular corporates lacking FX hedging could be exposed.	Monetary easing may have to be reversed. Recourse to FX intervention only in disorderly market conditions. Provide FX liquidity and support individual banks if dollar shortages appear. May also need to tighten fiscal policy to further strengthen policy credibility and avoid sell-offs of Brazilian domestic bonds. Capital flow management measures (CFMs) on outflows may be appropriate on a temporary basis in crisis circumstances. If implemented, CFMs should be part of a broad policy package designed to address the fundamental causes of the crisis, and should not substitute for policy adjustment.
Significant China slowdown and its spillovers: Key near-term risks are disruptive drying up of liquidity for weaker borrowers in the interbank market and increasing pressure on the Renminbi, which could lead to overcorrection. Weak domestic demand further suppresses commodity prices, roils global financial markets, and reduces global growth (Likelihood: low in short-term, medium thereafter).	**L/M**	**M**. Worsening current account deficit and weaker growth. Highly indebted corporates could see their profits decline. A sharp decline in commodity prices would have a direct impact on the exporting sector and investment.	Use the exchange rate as first shock absorbers. No room for fiscal policy stimulus to smooth the shock, but further monetary easing would be appropriate. Press on with structural reforms to boost potential growth.

[1] The Risk Assessment Matrix (RAM) shows events that could materially alter the baseline path (the scenario most likely to materialize in the view of IMF staff). The relative likelihood is the staff's subjective assessment of the risks surrounding the baseline ("low" is meant to indicate a probability below 10 percent, "medium" a probability between 10 and 30 percent, and "high" a probability between 30 and 50 percent). The RAM reflects staff views on the source of risks and overall level of concern as of the time of discussions with the authorities. Non-mutually exclusive risks may interact and materialize jointly. "Short term" and "medium term" are meant to indicate that the risk could materialize within 1 year and 3 years, respectively.

Appendix II. Brazil: External Sector Assessment 2016

<table>
<tr><th></th><th>Brazil: External Sector Assessment 2016</th><th>Overall Assessment</th></tr>
<tr><td>Foreign asset and liability position and trajectory</td><td>Background. Brazil's NIIP deteriorated to -39 percent of GDP at end-Q4 2016 reflecting in part valuation effects (on BRL denominated liabilities) related to the sharp appreciation of the BRL during 2016.[1] The NIIP hovered around -30 percent of GDP throughout 2011-15. The NIIP is projected to gradually strengthen over the medium term to around -30 percent of GDP reflecting stable CA deficits (around 1−2 percent). While FDI accounts for about half of all liabilities, the rise in external debt since the global financial crisis (to about 37 percent of GDP and 300 percent of exports) is a source of risk.

Assessment. While Brazil's NIIP is comparable to that of its peers, the shift in composition of liabilities toward FX external debt over the last several years is a concern. Short-term gross external financing needs, however, are moderate at 8 percent of GDP annually over the medium-term.</td><td rowspan="4">Overall Assessment
Brazil's external position in 2016 was, on average, broadly consistent with medium-term fundamentals and desirable policies.
The appreciation of the REER during 2016 reflects both improved ToT and the positive market response to the new government's reform agenda. The current account deficit will likely gradually widen starting in 2017 as demand recovers after the end of a deep recession during 2015–16.

Potential Policy Responses
Efforts to raise national savings are needed to provide room for a sustainable expansion in investment. Fiscal consolidation, including from the new federal spending cap and social security reform, should contribute to boosting net public savings. Structural reforms to reduce the cost of doing business would also help strengthen competitiveness and attract more FDI rather than debt financing. Foreign exchange intervention, including through the use of derivatives, can be appropriate to alleviate disorderly market conditions in the foreign exchange market.</td></tr>
<tr><td>Current account</td><td>Background. The current account (CA) deficit narrowed further in 2016 owing in part to the continued drop in domestic demand, especially investment, and some improvement in ToT.[2] The CA deficit is down from 4.2 percent of GDP in 2014 to 1.3 percent in 2016 despite a stable cyclically-adjusted fiscal stance. The CA deficit is expected to increase slightly in 2017, and gradually widen to about 2 percent of GDP in the medium as demand recovers. However, declines in ToT and a sharp slowdown in trading partner growth remain a downside risk.[3, 4]

Assessment. Staff assesses the CA norm consistent with fundamentals and desirable policies in 2016 to range from -0.5 to -2.5 percent of GDP, primarily based on the external sustainability approach and considering structural breaks in the supply side of the economy. With a cyclically-adjusted CA balance of -2.1 percent, the 2016 CA gap ranged between -1.5 and 0.5 percent of GDP.[5]</td></tr>
<tr><td>Real exchange rate</td><td>Background. The REER (INS) on average appreciated by 7 percent during 2016, after weakening by 16 percent during 2015. The appreciation in 2016 reflects improvements in ToT and the positive response of markets to the new government's reform agenda. The annual average ULC-based REER also appreciated by some 5 percent during the first three quarters in 2016 relative to 2015. As of May 2017, the REER has appreciated an additional 10 percent relative to the average for 2016, although the currency remains volatile due to lingering political uncertainties.

Assessment. Staff's assessment is that the real was on average broadly consistent with the level implied by fundamentals and desirable policy settings in 2016, with a REER gap in the [-5, 15] percent range.[5]</td></tr>
<tr><td>Capital and financial accounts: flows and policy measures</td><td>Background. Brazil continues to attract sizable capital flows, but their composition changed recently. Equity liability flows remained strong while debt liabilities showed outflows. Net DI fully financed the CA deficit (DI liabilities totaled 4 percent of GDP), partly supported by intercompany loans counted in DI liabilities.6 Net portfolio debt liabilities, having exceeded 1 percent of GDP in previous years, turned to net outflows despite shrinking sovereign spreads and the positive reaction of markets to the new government's reform agenda (in particular, nonresident holdings of sovereign debt have been gradually declining). Interest differentials, still large despite recent monetary easing, should help to attract inflows. Still, rigidities in the Brazilian economy, if not properly addressed, may weaken investors' interest.

Assessment. The composition of flows has a favorable risk profile; outflows on the liability side may pose some concerns, but this is tempered by a more stable outlook for credit risk.</td></tr>
</table>

FX intervention and reserves level	**Background**. Brazil has a floating exchange rate. Since mid-2011, reserves have remained broadly stable. The preannounced intervention program the central bank initiated in 2013 ended in March 2015. Intervention in 2015 continued to rely on the use of FX swaps and repos, but was symmetric over the course of the year and generally more limited compared to previous years.[7] In 2016, as the currency strengthened, the BCB reduced the rollover rate of maturing FX swaps and started auctioning reverse FX swaps, significantly reducing its net forward position to 1.4 percent of GDP at end-2016 from over 5 percent of GDP at end-2015. Brazil's gross reserves remained broadly constant in 2016, at US$365 billion, some 20 percent of GDP and 260 percent of short term debt at remaining maturity. **Assessment**. The flexible exchange rate has been an important shock absorber. Reserves are adequate relative to various criteria including the IMF's composite reserve adequacy metric (about 166 percent). While Brazil's reserve holdings in principle provide some space to intervene, the authorities should aim to retain strong buffers and a net creditor FX position, with intervention limited to alleviating disorderly market conditions.
Technical background notes	[1] The real appreciated by about 20 percent vis-à-vis the U.S. dollar from end 2015 to end 2016. [2] Import volumes fell by 8 percent in 2016 adding to a 14 percent decline in 2015. Export volumes rose by 4 percent in 2016, after increasing by 8 percent in 2015. [3] Brazil currently runs a small oil deficit; in the short run, falling oil prices thus strengthen the CA, other things equal, while they depress the outlook for oil production in the medium term. Also, the development of Brazil's off-shore oil potential is no longer projected to contribute significantly to export growth in the medium term, as exploration and development plans to expand production over the medium term have been drastically cut back. [4] A significant slowdown in China, which remains Brazil's most important export destination (19 percent) is a key external risk. [5] Estimates suggest a CA norm between -2.6 percent (EBA CA approach) and -1.2 percent (NIIP-stabilizing approach). Staff's assessment of the CA norm ranges from -0.5 to -2.5 percent (from where a REER gap can be derived using an elasticity of 0.1). This reflects, primarily, the need to maintain a CA balance that stabilizes the NIIP position and contain related vulnerabilities. The impact of large investment cuts in Petrobras, reflecting lower oil price projections over the medium term, and elevated uncertainty related to fiscal policy and political developments add uncertainty to the assessment. EBA REER methodologies do not provide support for a gap in either direction—indicating a 11 percent undervaluation (index) and 8.5 percent overvaluation (level). [6] The strong decline in proceeds from overseas borrowing by foreign incorporated subsidiaries of Brazilian parent companies—chiefly Petrobras—illustrates that the risk profile of these flows is more similar to that of portfolio debt flows than to other types of DI liabilities. [7] For details of the Brazilian FX swap and FX repo, see Saborowski and Nedeljkovic (2017) "The Relative Effectiveness of Spot and Derivatives Based Intervention: The Case of Brazil," IMF Working Paper No. 17/11.

Appendix III. Implementation of 2016 Article IV Recommendations

IMF Recommendations	*Rationale*	*Implementation status*
Monetary and Financial Sector Policies		
Keep Selic on hold until expectations settle to the mid-point of the target band.	Contribute to disinflation and BCB credibility.	Inflation has declined rapidly and expectations have converged to the target. The central bank has cut its policy rate in the last five meetings by a cumulative 400 bps (to 10.25 percent) noting increasing evidence of disinflationary pressures and progress with fiscal reforms.
Enhance the BCB autonomy and improve communication.	Strengthen the IT framework.	Improved communications and started publishing notes from meetings between Copom members and market participants to enhance transparency.
Enhance stress testing techniques.	Strengthen financial stability oversight.	In progress.
Strengthen procedures for use of the deposit insurance fund, enhance the central bank's emergency liquidity assistance, and modernize the resolution regime.	Bolster banking sector resilience.	The new resolution law for the banking sector was sent to Congress.
Give mandate for macro-prudential oversight to a committee comprising all financial regulators, the deposit Guarantee Fund, and the Ministry.	Strengthen transparency and accountability and improve risk management.	No progress.
Given mandate to a separate entity to set up a coordination framework to support timely and effective decision-making in a crisis situation, and periodically test the capacity of the authorities to respond to crisis scenarios.	Strengthen safety net.	No progress.
Review credit earmarking rules and other distortions.	Ensure that national savings go to their most productive uses.	Announced reform of TJLP, and re-orient the strategy of the BNDES.
Strengthen private insolvency frameworks, with the aim of expediting the bankruptcy process and reducing default losses incurred by creditors.	Minimize risks from private sector leverage.	The new bankruptcy law for non-financial companies in under review.
Fiscal Policy		
Frontload the fiscal adjustment as growth firms up.	Faster fiscal consolidation	Too soon to evaluate.
Reform social security.	Ensure fiscal sustainability and fairness.	Reform proposal in Congress.
End revenue earmarking.	Efficient use of resources and faster consolidation.	Approved the revenue earmarking provision in October 2016 allowing the govt to use 30 percent of Federal revenues from taxes and contributions freely, up from 20 percent.
Contain payroll growth.	Ensure fiscal sustainability.	No new measures but freeze on hiring implemented.
Reform social security and control wage bill growth in states.	Ensure subnational fiscal sustainability.	Some states have increased social security contributions.
Severe the automatic link between benefit payments and the minimum wage and/or limit minimum wage increases to cost of living adjustments.	Ensure fiscal sustainability.	No progress.
External Sector Policy		
Use intervention for disorderly market conditions.	Use exchange rate as a first buffer against shocks.	Interventions were limites to episodes of market disorder.
Preserve reserve buffers.	Maintain resilience to external shocks.	Reserve buffers were preserved.
Continue gradually reducing the net notional value of FX swaps.	Minimize fiscal costs of exchange rate policy.	The stock of FX swaps was reduced to US$28 billion.
Structural Policies		
Simplify the federal PIS/COFINS and the State Tax on the Circulation of Goods and Services (ICMS).	Tax efficiency and business burden.	A tax reform proposal under discussion envisages changes to PIS.
Reduce tariffs and nontariff-barriers, revise domestic content requirements, and pursue free-trade negotiations outside Mercosur.	Open the economy, increase competition and efficiency.	Reformed domestic content rules for the oil and gas sectors; trade facilitaation underway.
Pursue labor reforms.	Facilitate productive employment and lower informality.	Labor law submitted to congress but further reforms needed.
Publish a full balance sheet for general government.	Make fiscal statistics more comprehensive to improve analysis and formulation of fiscal policy.	In progress. This is a medium-term reform.
Adopt standard accounting practices for states and monitor and enforcement fiscal rules timely.	Increase fiscal transparency in states.	This is a medium-term reform. The team working on this was selected.
Make data on public procurement open by default, implement the recent legislation on conflict of interest, and strengthen whistleblowing mechanisms. Eliminate regulations that provide opportunities for bribes. Improve access to and sharing of banking and fiscal information, and prevent the abuse of appeal provisions and statutes of limitations in legal proceedings, in line with Supreme Court jurisprudence. Strengthen provisional measures and confiscation, effectively pursue a larger number of significant corruption, money laundering and illicit enrichment cases, and enhance the AML/CFT supervision of banks' obligations regarding politically exposed persons.	Strengthen the AML framework.	The number of corruption and anti-money laundering cases has increased, work is underway to improve the definition of politically-exposed-persons, and the transparency portal is being populated with relevant information, including on public procurement. But, a number of anti-corruption measures are still pending approval in Parliament and measures to increase access to and sharing of banking and tax information by and with competent authorities have not yet materialized.

INTERNATIONAL MONETARY FUND

BRAZIL

June 20, 2017

STAFF REPORT FOR THE 2017 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

Prepared By

The Western Hemisphere Department
(In consultation with other departments)

CONTENTS

FUND RELATIONS

(As of June 7, 2017)

Membership Status: Joined January 14, 1946; Article VIII

General Resources Account:

	SDR Million	Percent Quota
Quota	11,042.00	100.00
Fund holdings of currency (Exchange Rate)	10,166.59	92.07
Reserve Tranche Position	875.50	7.93
Lending to the Fund		
New Arrangement to Borrow	756.63	

SDR Department:

	SDR Million	Percent of Allocation
Net cumulative allocation	2,887.08	100.00
Holdings	2,599.03	90.02

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
Of which: 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
Of which: 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
Of which: 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):

	Forthcoming				
	2017	**2018**	**2019**	**2020**	**2021**
Principal	0.00	0.00	0.00	0.00	0.00
Charges/interest	0.79	1.67	1.67	1.67	1.67
Total	**0.79**	**1.67**	**1.67**	**1.67**	**1.67**

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 accepted the obligations of Article VIII, Sections 2(a), 3, and 4, effective November 30, 1999.

The tax on financial transactions (Imposto sobre Operações Financeiras, IOF) of 6.38 percent on exchange transactions carried out by credit card, debit card, and traveler's checks (including cash withdrawals) companies in order to fulfill their payment obligations for purchases of goods and services abroad by their customers gives rise to multiple currency practices (MCP) subject to Fund jurisdiction under Article VIII, Sections 2(a) and 3. In January 2008, the IOF for these exchange transactions was raised to 2.38 percent and then further increased to 6.38 percent in March 2011. The scope of operations was expanded to other foreign exchange transactions than with credit cards in December 2013.

Last Article IV Consultation

The last Article IV consultation with Brazil was concluded by the Executive Board on October 31, 2016. 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

The Fiscal Affairs Department (FAD) is supporting the Ministry of Finance in its efforts to strengthen medium term fiscal planning and improve transparency. A March 2017 mission on "Public Financial Management Reforms to Support the Implementation of the Expenditure Rule" followed up on the March 2016 mission on "Developing a more Resilient Fiscal Framework". FAD also carried out a Fiscal Transparency Evaluation (FTE) of the Federal Government, published in May 2017, and advised on the reform of PIS/COFINS in March 2017. FAD continues to support the State of São Paulo in implementing a cost accounting system for the public sector. FAD also supported the Inter-American Development Bank in carrying out a subnational FTE for the state of São Paulo, which was published in May 2017. The Statistics Department (STA) supported the National Statistical Institute (IBGE) with a report on "The Recording of Social Protection Arrangements in the National Accounts and Government Finance Statistics" in February 2017.

Resident Representative The Fund maintains a resident representative office in Brasilia. The Resident Representative is Mr. Fabian Bornhorst, who assumed the post in April 2014.

RELATIONS WITH THE WORLD BANK[1]

The World Bank Group has been a valued partner for Brazil, providing integrated and often multi-sector development solutions tailored to its needs. The Bank has also benefited greatly from Brazil's unique demands, which required the WBG to adapt and learn and provided a broad range of lessons on development for the Global Community in areas ranging from poverty reduction to social inclusion and environmental management.

A new CPF 2018–23 is under preparation and will be presented to the Board of Directors on the 4th quarter of FY 17. The new CPF is being built on, and deepened, the last FY 2012–15 Country Strategy, which had as a main objective to make a catalytic contribution to Brazil's efforts to eradicate poverty and to become a more prosperous and inclusive country by focusing on four strategic objectives: (i) increasing the efficiency of public and private investment; (ii) enhancing service provision to poorer segments of the population; (iii) reducing regional economic disparities; and (iv) improving sustainable natural resource management and climate resilience.

As part of the preparation of the new country strategy the World Bank recently completed a Systematic Country Diagnostics. The SCD identifies five main challenges facing Brazil: (i) lack of fiscal space and a large transfer of resources to the non-poor (particularly pensions); (ii) weaknesses of public sector governance and institutional fragmentation which hamper effective long-term policy design, planning and implementation; (iii) segmentation of financial markets, lack of long term credit and high interest rates; (iv) insufficient competition and poor business environment; and (v) weaknesses in the management of Brazil's natural resources and insufficient resilience against climate risks.

IBRD lending program was US$550 million for FY 15, and US$758 million for FY 16. The strategy for the FY 17 is to start rebuilding the lending pipeline for FY 18. While FY 17 revised expected lending is only US$73.5 million, based on the last rounds of high-level dialogue in early 2017, the Federal Government is now ready to commit to a US$3.0 billion IBRD lending envelope for FY 18–19. The Brazil program continues to maintain a complex portfolio bringing together financial, knowledge, and convening services and sharing our work globally. The WBG impact in Brazil 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. The Bank Group deploys 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

[1] Prepared by the World Bank.

from government, the private sector and other development partners, to maximize development impacts.

IFC's investment portfolio in Brazil now stands at US$4.07 billion, including US$1.46 billion from syndications. In FY 17, IFC has committed US$584 million to date, of which US$329 million is in mobilization. Overall key sectors include Financial Markets, Health, Education, Agribusiness and Infrastructure. Looking forward, IFC will continue to take a disciplined, selective approach to adapt to the current environment, focusing on protecting portfolio companies, supporting the relief of distressed assets and keeping markets open for expansion and investment. The long-term strategy aims to continue supporting the country to address the challenges of financial inclusion, urbanization, competitiveness and sustainable management of natural resources through investments focused on the infrastructure, telecom, health, education, agribusiness and financial institutions sectors. IFC will particularly look to expand capital markets and mobilization of private capital for infrastructure finance. In addition to its investment projects, IFC has provided Brazil's fast-growing private sector with various advisory services, including for PPP projects (airports, roads, health, education), through a partnership with BNDES, the Brazilian development bank.

MIGA processed in FY 15 its first exposure transaction in Brazil since FY 09. While MIGA has had no exposure in Brazil in recent years, it views Brazil as a target market, where it can support the Government's agenda of meeting the country's massive infrastructure requirements, through the provision of guarantees of Non-Honoring Financial Obligations (NHSFO) in respect of financial payment obligations of the sovereign, sub-sovereign and state-owned enterprises. These products provide credit enhancement to borrowers to enable them to (i) reduce their funding costs, (ii) increase their access to long-term financing, and (iii) diversify their financing sources. A case in point is the São Paulo Sustainable Transport Project. MIGA's NHSFO guarantee, which was approved by the Executive Directors in April 2014 and by the Brazilian Senate on September 2, 2014, mobilized long-term commercial bank financing on competitive terms, by guaranteeing the State of Sao Paulo's financial obligations under such bank financing. Brazil will also be the first IBRD beneficiary of the Bank Group's effort to take advantage of synergies across the balance sheets of World Bank Group entities. Brazil will gain about $100 million in additional IBRD lending headroom through an exchange of existing IBRD exposure to Brazil, where MIGA has the capacity to assume higher exposure, for MIGA exposure to Panama, a country where IBRD has available capacity.

Brazil: World Bank – IMF Country Level Work Program under JMAP

	Expected Approval/Delivery Date
A. Investment Project Financing	
1. Fortaleza Sustainable Urban Development Project	4/28/2017
B. Advisory Services and Analytics	
1. Mobility in Cities Study	12/9/2016
2. Dissemination CE Teachers Feedback IE	1/31/2017
3. Rio de Janeiro Education Studies	3/15/2017
4. Infrastructure Regulatory Frameworks	3/31/2017
5. Analysis of INDC Land Use Targets	3/31/2017
6. Energy Efficiency Recommendations for CESAN	4/28/2017
7. Governance and Modernization in Paraiba	4/30/2017
8. Knowledge Products on Social Assistance	5/8/2017
9. Conferences, Workshops and Other Events	5/10/2017
10. Brazil WWP Learning Initiative (SoD Hub)	5/25/2017
11. Infrastructure Efficiency for Growth	5/26/2017
12. Brazil Financial Sector Credit Allocation	5/30/2017
13. Brazil Subnational Governance Monitoring	5/31/2017
14. Expenditure Review of Education	5/31/2017
15. Exploring Forest Bonds	5/31/2017
16. Typology of Cities	5/31/2017
17. Post-COP21 Environmental Research Agenda	5/31/2017
18. Agriculture Drought Preparedness ENSO	6/12/2017
19. Violence Prevention in Brazil	6/14/2017
20. Assessment of the Bank's Engagement	6/14/2017
21. Brazil Governance in Infrastructure	6/15/2017
22. Brazil Expenditure Review	6/30/2017
23. Participat. Governance Citizen Security	6/30/2017
24. Review of Costs of Violence	6/30/2017
25. Municipal Diagnostics of C&V	6/30/2017
26. Briefs to Inform City Strategies	6/30/2017
27. Capacity Building Based on Interventions	6/30/2017

RELATIONS WITH THE INTER-AMERICAN DEVELOPMENT BANK[1]

The current IDB Group Country Strategy with Brazil was approved on March 30, 2016.[2] The strategy covers the 2016–18 period and is comprised of three main intervention areas: (1) increasing productivity and competitiveness; (2) reducing inequity and improving public services; (3) strengthening institutions at the three levels of government. Crosscutting issues include gender, diversity, integration, and climate change.

The loan portfolio approved within the Country Strategy 2012–14 totaled eighty-four operations equivalent to US$8.35 billion. Sixty-eight of these were sovereign guarantee (SG) operations for a total of US$7.4 billion, while sixteen were non-sovereign guarantee (NSG) operations for a total of US$950.7 million. Sixty-two of the SG operations were with Brazilian states, state-owned enterprises, and municipal governments. In terms of the regional focus, 45 percent of SG operations corresponded to projects in the North and Northeast regions.

The IDB is a large provider of technical assistance and knowledge transfer to public institutions. During the strategy period, forty-five technical-cooperation operations were approved for a total of US$40.9 million, focusing on social and productive inclusion, environmental and rural management, and climate change.

In 2015, the IDB Group approved seven loans amounting to US$382.5 million. These included one SG operation for US$56 million and eight NSG operations for a total of US$377.7 million. Approvals for technical cooperation grants reached US$11.7 million.

In 2016, the IDB Group approved thirty-five loans amounting to US$1,369 million. Seven of these were SG operations for a total of US$1,197 million, while twenty-eight were NSG operations for a total of US$172 million. Most of the SG resources are directed towards sustainable energy projects as part of a larger credit line focused on fostering productivity in the medium and long term. Approvals for technical cooperation grants reached US$10.5 million.

Projected approvals for 2017 amount to US$2,184 million. SG operations are expected to reach US$1,194.3 million, while NSG would total US$989.7 million. Estimated technical cooperation grants amount to US$85 million.

Brazil is one of the largest IDB Group borrowers. The current active portfolio consists of 100 loans to the public sector (US$11,738 million) and 21 to the private sector (US$738.2 million). As of March 2017, Brazil's outstanding public debt with the IDB amounted to US$13,789 million, with US$6,974.7 million yet to be disbursed.

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[1] Prepared by the Inter-American Development Bank.

[2] The IDB group is comprised of three institutions: the Inter-American Development Bank (IDB), the Inter-American Investment Corporation (IIC), and the Multilateral Investment Fund (MIF).

Brazil: Loans Approved by the Inter-American Development Bank in 2016
(In millions of US$)

Strategic areas	Subnational Gov.	Central Gov.	Private Sector	Total
Increase productivity and competitiveness	25	750	172	**947**
Reduce inequity and improve public services	369	0	0	**369**
Strengthen institutions at the three levels of government	53	0	0	**53**
Total value of loans	**447**	**750**	**172**	**1369**
Total number of loans	*6*	*1*	*28*	*35*

STATISTICAL ISSUES

(As of June 7, 2017)

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: Since 2015, the national accounts estimates follow the guidelines of the *2008 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). It is also participating in the G-20 Data Gaps Initiative regarding recommendation 15, which calls for developing a strategy to promote the compilation and dissemination of the balance sheet approach, flow of funds, and sectoral data on a quarterly and annual basis.
Price Statistics: Since July 1999, the price index reference for monetary policy 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 and two municipalities. Both the Getúlio Vargas Foundation (FGV) and the IBGE compile producer price indices, IPA and IPP respectively, since 2010.
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.

<table>
<tr><th colspan="2">I. Assessment of Data Adequacy for Surveillance (Concluded)</th></tr>
<tr><td colspan="2">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 18 encouraged FSIs, with data beginning in Q1 2005. Plans are under way to compile the rest of the encouraged FSIs.</td></tr>
<tr><td colspan="2">External Sector Statistics: Brazil disseminates monthly balance of payments and quarterly international investment position data on a sixth edition of the Balance of Payments and International Investment Position Manual (BPM6) basis. The BCB is supplementing the registry of the foreign exchange system with surveys on transportation, insurance, and other services. The BCB also collects position data on foreign assets held by Brazilian residents and direct investment liabilities of Brazil. The BCB monthly disseminates data on International Reserves and Foreign Currency Liquidity. Brazil also participates in the Coordinated Direct Investment Survey (CDIS) and the Coordinated Portfolio Investment Survey (CPIS), and reports quarterly external debt data to the World Bank's Quarterly External Debt Statistics (QEDS) database.</td></tr>
<tr><th colspan="2">II. Data Standards and Quality</th></tr>
<tr><td>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.</td><td>No data ROSC is publicly available.</td></tr>
</table>

Brazil: Table of Common Indicators Required for Surveillance

(As of June 7, 2017)

	Date of Latest Observation	Date Received	Frequency of Data[7]	Frequency of Reporting[7]	Frequency of Publication[7]
Exchange Rates	5/07/17	6/07/17	D	D	D
International Reserve Assets and Reserve Liabilities of the Monetary Authorities[1]	5/07/17	6/07/17	D	D	D
Reserve/Base Money	Apr. 17	5/31/17	M	M	M
Broad Money	Apr. 17	5/31/17	M	M	M
Central Bank Balance Sheet	Apr. 17	5/31/17	M	M	M
Consolidated Balance Sheet of the Banking System	Q4 2016	3/31/17	Q	Q	Q
Interest Rates[2]	6/07/17	6/07/17	D	D	D
Consumer Price Index	Apr. 17	5/10/17	M	M	M
Revenue, Expenditure, Balance and Composition of Financing[3] – General Government[4]	Apr. 17	5/30/17	M	M	M
Revenue, Expenditure, Balance and Composition of Financing[3]– Central Government	Apr. 17	5/30/17	M	M	M
Stocks of Central Government and Central Government-Guaranteed Debt[5]	Apr. 17	5/30/17	M	M	M
External Current Account Balance	Apr. 17	5/22/17	M	M	M
Exports and Imports of Goods and Services	Apr. 17	5/22/17	M	M	M
GDP/GNP	Q1 2017	6/1/17	Q	Q	Q
Gross External Debt	Apr. 17	5/22/17	M	M	M
International Investment Position[6]	Q4 2016	5/22/17	Q	Q	Q

[1] 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.

[2] Both market-based and officially-determined, including discount rates, money market rates, rates on treasury bills, notes and bonds.

[3] Foreign, domestic bank, and domestic nonbank financing.

[4] The general government consists of the central government (budgetary funds, extra budgetary funds, and social security funds) and state and local governments.

[5] Including currency and maturity composition.

[6] Includes external gross financial asset and liability positions vis-à-vis nonresidents.

[7] Daily (D); weekly (W); monthly (M); quarterly (Q); annually (A); irregular (I); and not available (NA).

INTERNATIONAL MONETARY FUND

BRAZIL

June 20, 2017

STAFF REPORT FOR THE 2017 ARTICLE IV CONSULTATION—DEBT SUSTAINABILITY ANALYSIS[1]

Approved By
K. Srinivasan (WHD) and V. Kramarenko (SPR)

Prepared by the Staff of the International Monetary Fund

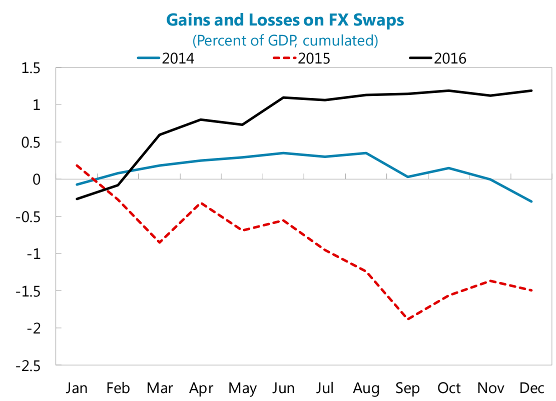
Debt sustainability risks remain large. Reflecting an additional year of economic contraction and slow progress with fiscal consolidation, gross debt of the nonfinancial public sector (NFPS) increased by 5.8 percentage points of GDP in 2016, reaching 78.3 percent of GDP. Net debt of the public sector rose by 11 percentage points of GDP. The debt maturity profile of the debt stock and composition has changed at the margin since the last Debt Sustainability Analysis (DSA), and foreign holdings of government securities have declined (Box 1). If fully implemented, fiscal consolidation based on the government's legislated and proposed reforms would restore the sustainability of debt in the baseline scenario. However, debt ratios would stabilize after the end of the 5-year projection period, with gross debt reaching 92.4 percent of GDP in 2022. Primary surpluses of about 1½ percent of GDP (excluding interest revenue) would be needed to keep gross debt from growing as a ratio to GDP beyond the projection horizon. The trajectory of gross debt is highly sensitive to fiscal performance, owing to the adverse dynamics determined by modest GDP growth and high borrowing costs. A delay in implementing fiscal reforms would jeopardize debt sustainability.

[1] The analysis of public debt sustainability is based on the framework developed for market access countries. See *Staff Guidance Note for Public Debt Sustainability Analysis in Market Access Countries*, IMF, May 2013.

BACKGROUND

1. Definitions and coverage. Brazil's gross debt statistics cover the NFPS, defined to exclude Petrobras and Eletrobras, and consolidate the Sovereign Wealth Fund. In line with the *GFSM 2014* manual, the NFPS debt includes all Treasury securities on the Central Bank's (BCB) balance sheet, including those not used under repurchase agreements. At end-2016, gross debt amounted to 78.3 percent of GDP.[2] As reported by the government, net debt statistics correspond to the public sector, defined to include the BCB. The consolidated public sector has a large stock of assets, amounting to 35.1 percent of GDP in 2016, which include 19.2 percent of GDP in international reserves. Non-financial public sector assets amounted to 29.6 percent of GDP. Brazil's debt is reported at nominal value.[3]

2. Debt profile. Federal government (FG) domestic tradable securities account for 91 percent of total NFPS gross debt, of which less than 2/3 is held by the public and the rest is held by the BCB.[4] Nearly 17 percent of domestic tradable securities will mature in 2017. Zero-coupon bonds with original maturities over one year constitute slightly more than half of FG domestic tradable securities held by the public. Foreign currency denominated tradeable securities accounted for only 5 percent of the total in 2016, representing 4 percent of GDP. Gross financing needs have tended to be high, above 15 percent of GDP; however, a large fraction of the federal government debt (about 33 percent of total) is held by the BCB, which follows a policy of automatic rollover of its holdings of government securities.



3. Developments. At end-2016, Brazil's NFPS gross debt amounted to 78.3 percent of GDP, 5.8 percentage points higher than a year before. Public sector net debt amounted to 46.2 percent of GDP. A large primary deficit of 2.5 percent of GDP and net interest payments of 6.5 percent of GDP contributed to much of the increase in the gross debt. Net interest payments were lower than the value recorded in 2015 (8.4 percent of GDP), when the BCB recorded large losses on FX swaps.[5] In December 2016, the national development bank (BNDES) repaid R$100 billion in outstanding government securities to the Treasury, which resulted in the proportional decline in NFPS assets of 1.6 percent of GDP and a corresponding fall in the stock of NFPS gross debt of the same amount. The Treasury reconstituted the BCB's stock of securities used for monetary policy by issuing bonds amounting to 2.7 percent of GDP (at end-2016, the BCB held 24.3 percent of GDP of FG securities, of which

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[2] In contrast, the national definition of gross debt includes the stock of Treasury securities used for monetary policy purposes by the BCB (those pledged as security in reverse repo operations), but excludes the rest of the government securities held by the BCB. Thus, per the national definition, gross debt of the general government amounted to 69.9 percent of GDP at end-2016.

[3] The nominal value is calculated as the PDV of future interest and principal payments at the security's contractual interest rate(s), and generally differs from face value.

[4] The BCB uses about ¾ of its holdings as security in liquidity-draining operations with the banking system.

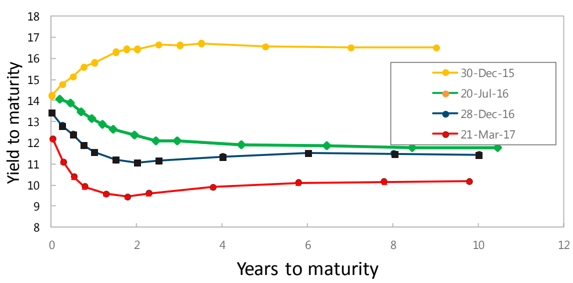
[5] See 2016 Debt Sustainability Analysis, Box 1.

16.7 percent of GDP were in use as collateral in OMOs). The contingent liability risk from Petrobras has been reduced as the company made progress on asset sales and improved management practices affecting cost efficiency and price premiums. The company's EBITDA margin is at its highest level in several years because of the pricing policy, which targets a premium over import parity. Debt maturing in 2017 and 2018 remains high at over US$20 billion, but the debt amortization schedule has improved.

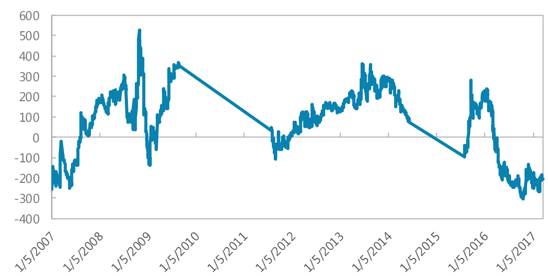
Box 1. Brazil: Changes in the Profile of FG Securities

Debt profile. Reflecting improved risk-perception, the yield curve on government bonds shifted downward, remained below 2015 values during 2016, and was below the Selic for most of the year.[1] The decline in the marginal cost of borrowing affected the implicit interest on total debt visibly, which fell from nearly 14 percent at end-2015 to below 13 percent at end-2016.

Brazil: Sovereign Bond Yields
(Percent)

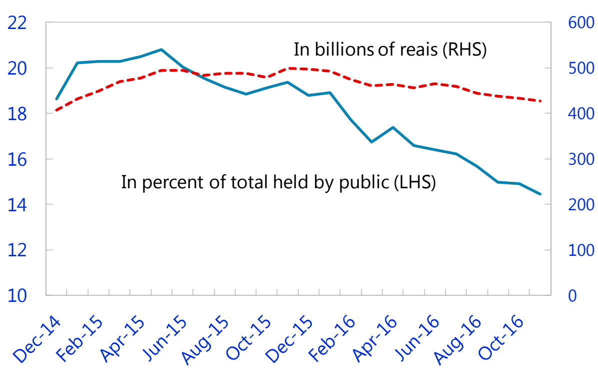


Brazil: 5-year Bond Premium over SELIC
(bps)

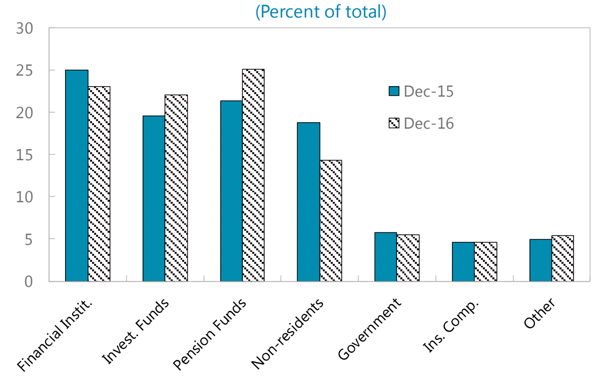


Non-residents' holdings of domestic federal government securities shrank in nominal terms by R$70 billion over the year, falling to 14 percent of total debt held by the public. Institutional investors' (investment and pension funds) share of holdings increased to fill the gap.

Non-resident Holdings of Domestic FG Securities



Holders of Domestic Tradeable Securities
(Percent of total)



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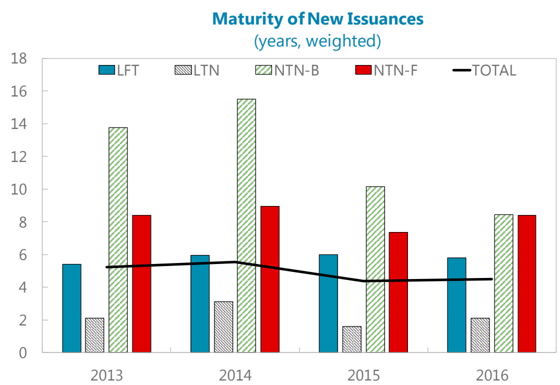
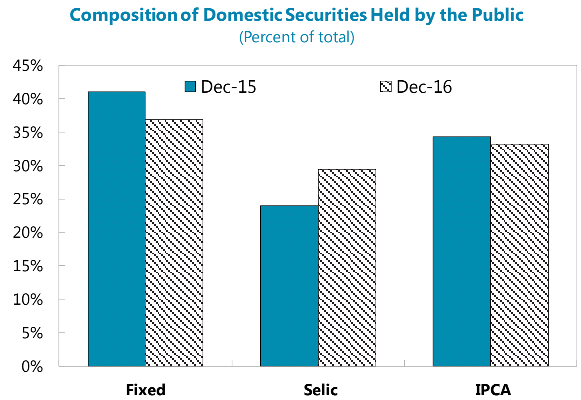
[1] Interest charged on new issuances declined further in early 2017 and is currently about 600 bps below the end-2015 level.

Box 1. Brazil: Changes in the Profile of FG Securities (Concluded)

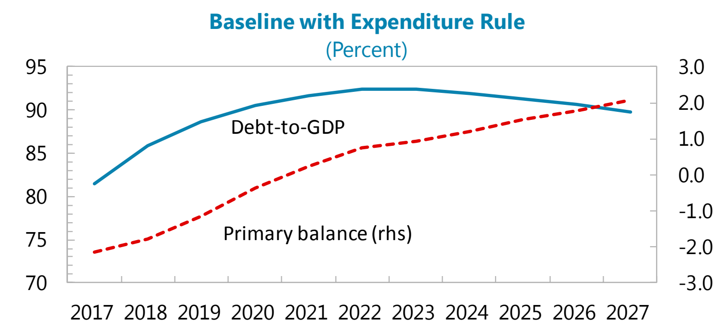
The average maturity of new placements remained at its 2015 level, somewhat lower than that observed in previous years. The share of SELIC-linked debt in the total increased, against a decline in inflation-linked and fixed-rate securities.





BASELINE SCENARIO

4. **Macroeconomic assumptions.** The projections assume real GDP growth of 0.3 percent in 2017, and a gradual return to potential growth of 2 percent by 2019. The fiscal adjustment brings the primary balance to 0.8 percent of GDP by 2022, which implies an improvement of about 3 percentage points of GDP during 2017–22. This is significant, but short of what would be needed to stabilize gross debt by 2022. Nominal interest rates on new borrowing are around 10–10½ percent over 2017–22, bringing the effective interest rate to about 10 percent on average.[6] The baseline scenario assumes limited structural reforms and a modest world output recovery. Gross debt remains on an upward path, reaching 92.4 percent of GDP by 2022. Under the assumption that the primary balance path remains consistent with an unchanged expenditure cap until 2027 (when a revision first becomes possible), debt peaks in 2023 and starts falling in 2024. The timing the debt peak is sensitive to variations in the assumptions governing debt dynamics, especially the real interest rate and the rate of potential growth in the medium term. In 2022, the

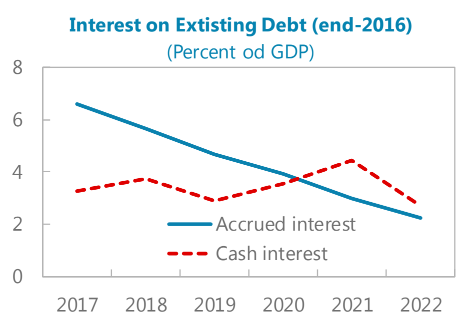


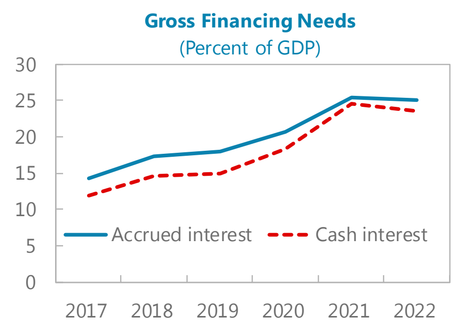
Sources: IMF staff estimates.

[6] Interest rates on new borrowing are derived by applying the expectation theory to the Brazilian yield curve as of April 2017.

primary balance required to stabilize debt in the baseline scenario is 1.4 percent of GDP (excluding interest revenue).[7]

5. Heat map. The heat map in Figure 1 suggests that the stock of debt and the gross financing needs are high. Gross financing needs remain above the high-risk threshold of 15 percent of GDP on average. This indicator, however, overstates the need for fresh market financing for two reasons. First, the gross financing needs indicator overstates actual rollover risk because of the policy of continuous rollover maintained by the BCB, which holds a significant amount of FG bonds. Gross financing needs would amount to about 13 percent of GDP on average over the medium-term excluding rollover of BCB held bonds, below the threshold level for high risk. Second, the interest on existing FG securities reported in the authorities' overall fiscal balance (and used in the DSA) corresponds to accrued interest, in line with the reporting of debt at nominal value. Hence, the resulting "gross financing needs" indicator overstates the actual impact of government borrowing on markets, by between 1 and 3 percent of GDP in the next few years relative to what would be obtained using interest on a cash basis.





6. Past forecast errors. There is no evidence of a systematic projection bias in the baseline assumptions that would undermine the assessment of sustainability and the projected fiscal adjustment is in line with other countries' experiences. Recent forecast errors for GDP growth are larger than those of other surveillance countries reflecting the fact that Brazil experienced its largest recession in a century starting in late 2014.

7. Realism of projections. Brazil's projected fiscal adjustment (an improvement of about 1½ percentage points in the cyclically-adjusted primary balance/GDP over the medium term) is in line with other countries' experiences, with a 3-year adjustment in cyclically-adjusted primary balance at the 46 percentile among all surveillance countries.[8] Moreover, the projected path for fiscal balances is based on the expenditure rule, which is a constitutional norm supported by provisions for automatic corrective measures in case of breach.

[7] The debt stabilizing primary balance shown on the right-most column of the table on "Contributions to changes in public debt" in the Baseline Scenario (2.3 percent of GDP) corresponds to a concept of the primary balance that includes interest revenue. The definition of the primary balance as a non-interest concept is customary in Brazil and corresponds to 1.4 percent of GDP quoted in the main text.

[8] The fiscal multipliers and persistence were estimated in the 2015 Article IV Selected Issues Paper at 0.3–0.5 percent.

SHOCKS AND STRESS TESTS

8. Growth shock. The impact on the debt-to-GDP ratio of the 1 standard deviation shock (3.8 percent) to real GDP growth is large. Over 2018–19, real GDP contracts by a cumulative 4 percent while inflation declines by 230 bps in each year. The primary balance worsens before recovering in 2020; interest rates increase by 55 bps for each percentage point decline in output growth. In this scenario, gross debt increases to 112 percent of GDP by 2022 while gross financing needs peak at 31 percent of GDP.

9. Primary balance and real interest rate shocks. In the primary balance shock, consolidation is delayed by one year. In the interest rate shock, borrowing costs increase by 200 bps in the first projection year and remain the same over the medium term. The impact of these shocks on debt and gross financing needs is modest, pushing up debt-to-GDP by 3 and by 4 percentage points above the baseline in 2022, respectively.

10. Combined macro-fiscal shock and contingent liabilities shocks. The macro-fiscal shock combines the growth and interest rates shock and a primary balance shock as in the standard examples above, together with the real exchange rate shock consistent with the maximum movement of the real exchange rate over the past 10 years. The contingent liability shock simulates a loss of 10 percent of banking system assets, in line with the experience with past banking crises in other countries. The latter results in a primary deficit of 7 percent of GDP in 2018 and a 1 standard deviation shock to GDP growth in 2018 and 2019. The effect of these shocks on debt ratios and gross financing needs reflects the sensitivity of debt ratios to growth, which has the largest impact on the debt path. Debt-to-GDP reaches about 112−17 percent by 2022 in the most acute of these shock scenarios.

11. No consolidation. A custom-made scenario assumes that the government's reform agenda slips, deferring consolidation efforts and abandoning the expenditure cap after 2019. The currency depreciates by 5 percent in 2017 and again in 2018 and 2019, and remains at this level throughout the projection period. Spreads on domestic securities pick up by 300 bps by 2019, and remain elevated thereafter. The growth recovery is delayed further and the pick-up is considerable weaker. Debt reaches 119 percent of GDP by 2022 and continues growing thereafter.

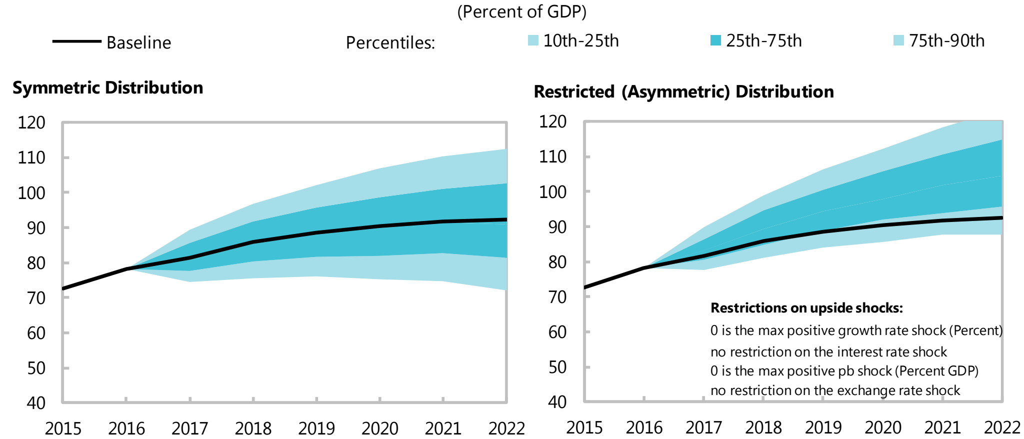
Figure 1. Brazil: Public Debt Sustainability Analysis (DSA)—Risk Assessment

Heat Map

Debt level 1/	Real GDP Growth Shock	Primary Balance Shock	Real Interest Rate Shock	Exchange Rate Shock	Contingent Liability shock
Gross financing needs 2/	Real GDP Growth Shock	Primary Balance Shock	Real Interest Rate Shock	Exchange Rate Shock	Contingent Liability Shock
Debt profile 3/	Market Perception	External Financing Requirements	Change in the Share of Short-Term Debt	Public Debt Held by Non-Residents	Foreign Currency Debt

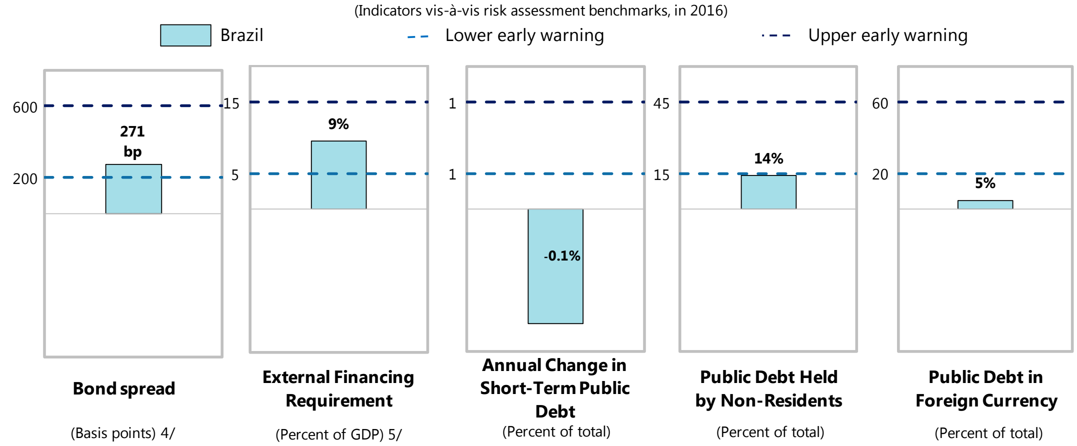
Evolution of Predictive Densities of Gross Nominal Public Debt

(Percent of GDP)



Debt Profile Vulnerabilities

(Indicators vis-à-vis risk assessment benchmarks, in 2016)



Source: IMF staff.

1/ The cell is highlighted in green if debt burden benchmark of 70% is not exceeded under the specific shock or baseline, yellow if exceeded under specific shock but not baseline, red if benchmark is exceeded under baseline, white if stress test is not relevant.

2/ The cell is highlighted in green if gross financing needs benchmark of 15% is not exceeded under the specific shock or baseline, yellow if exceeded under specific shock but not baseline, red if benchmark is exceeded under baseline, white if stress test is not relevant.

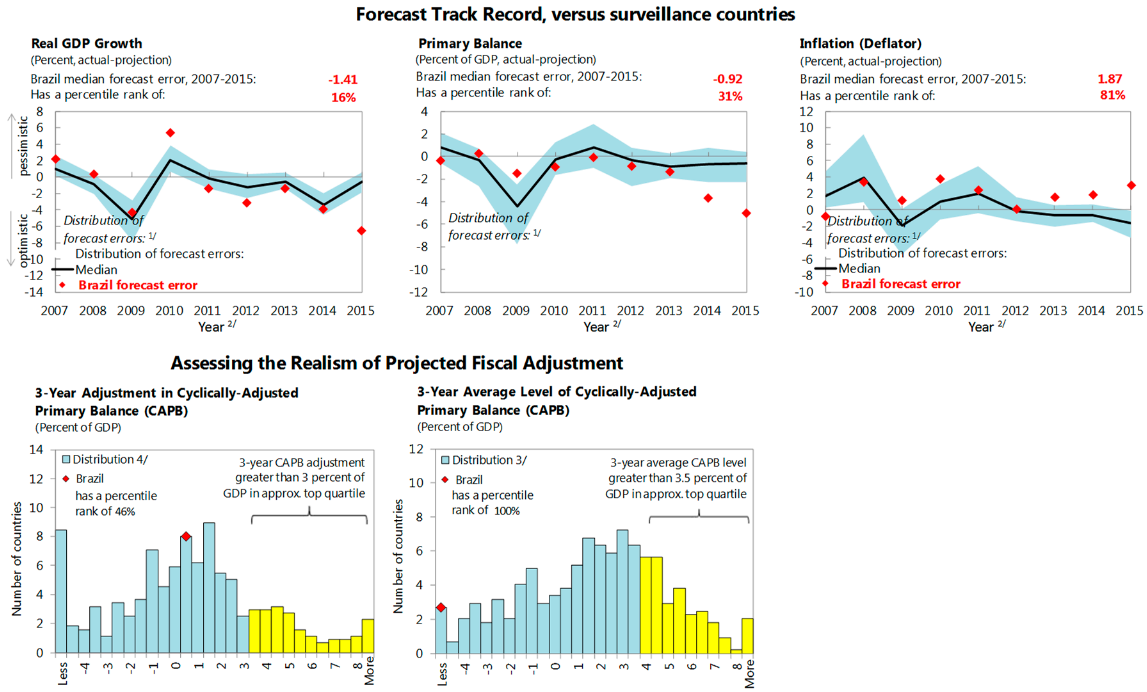
3/ The cell is highlighted in green if country value is less than the lower risk-assessment benchmark, red if country value exceeds the upper risk-assessment benchmark, yellow if country value is between the lower and upper risk-assessment benchmarks. If data are unavailable or indicator is not relevant, cell is white.

200 and 600 basis points for bond spreads; 5 and 15 percent of GDP for external financing requirement; 0.5 and 1 percent for change in the share of short-term debt; 15 and 45 percent for the public debt held by non-residents; and 20 and 60 percent for the share of foreign-currency denominated debt.

4/ Long-term bond spread over U.S. bonds, an average over the last 3 months, 03-Mar-17 through 01-Jun-17.

5/ External financing requirement is defined as the sum of current account deficit, amortization of medium and long-term total external debt, and short-term total external debt at the end of previous period.

Figure 2. Brazil: Public DSA—Realism of Baseline Assumptions



Source : IMF Staff.

1/ Plotted distribution includes surveillance countries, percentile rank refers to all countries.

2/ Projections made in the spring WEO vintage of the preceding year.

3/ Data cover annual observations from 1990 to 2011 for advanced and emerging economies with debt greater than 60 percent of GDP. Percent of sample on vertical axis.

Figure 3. Brazil: Public DSA—Baseline Scenario

(Percent of GDP unless otherwise indicated)

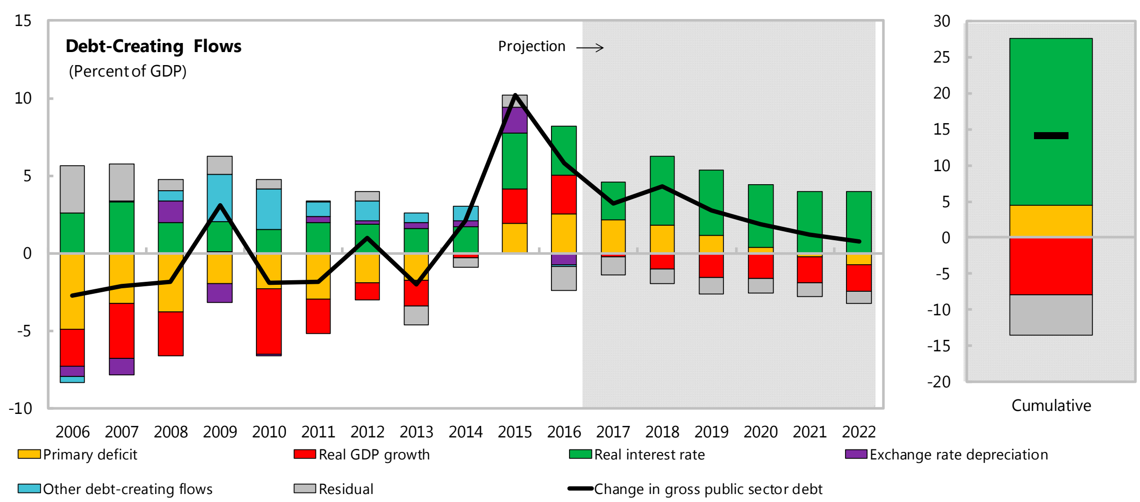
Debt, Economic and Market Indicators 1/

	Actual		Projections								
	2008-13 [2/]	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Nominal gross public debt	62.3	62.3	72.5	78.3	81.5	85.8	88.6	90.5	91.7	92.4	
Public gross financing needs	14.9	15.9	19.0	20.6	14.3	17.2	18.0	20.7	25.3	25.1	
Real GDP growth (in percent)	2.8	0.5	-3.8	-3.6	0.3	1.3	2.0	2.0	2.0	2.0	
Inflation (GDP deflator, in percent)	7.9	7.9	8.0	8.3	7.4	4.7	4.7	5.0	5.0	5.0	
Nominal GDP growth (in percent)	10.9	8.4	3.8	4.4	7.8	6.1	6.8	7.1	7.1	7.1	
Effective interest rate (in percent) 4/	11.3	11.0	13.7	12.6	10.8	10.5	10.1	10.0	9.8	9.7	

As of June 01, 2017		
Sovereign Spreads		
EMBIG (bp) 3/		284
5Y CDS (bp)		217
Ratings	Foreign	Local
Moody's	Baa2	Ba2
S&Ps	BBB-	BB
Fitch	BBB	BB

Contribution to Changes in Public Debt

	Actual		Projections									
	2008-13	2014	2015	2016	2017	2018	2019	2020	2021	2022	Cumulative	Debt-Stabilizing Balance 10/
Identified debt-creating flows	0.0	2.7	9.4	7.4	4.3	5.2	3.8	2.8	2.1	1.5	19.7	2.2
Primary deficit	-1.8	0.0	1.9	2.5	2.1	1.8	1.1	0.4	-0.2	-0.8	4.4	
Primary (noninterest) revenue and grants	33.1	31.8	28.1	28.0	28.3	27.8	28.0	28.1	28.2	28.3	168.6	Without interest
Primary (noninterest) expenditure	31.3	31.8	30.1	30.5	30.4	29.6	29.1	28.5	28.0	27.5	173.1	1.4
Automatic debt dynamics 5/	0.2	1.8	7.5	4.9	2.2	3.4	2.7	2.4	2.3	2.2	15.3	
Interest rate/growth differential 6/	0.2	1.4	5.9	5.7	2.2	3.4	2.7	2.4	2.3	2.2	15.3	
Of which: real interest rate	1.8	1.7	3.6	3.2	2.4	4.5	4.2	4.1	4.0	4.0	23.2	
Of which: real GDP growth	-1.6	-0.3	2.3	2.5	-0.3	-1.0	-1.6	-1.6	-1.7	-1.7	-7.9	
Exchange rate depreciation 7/	0.0	0.4	1.6	-0.7	...	...	...	...	...	...	...	
Other identified debt-creating flows	1.6	1.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Privatization	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Contingent liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Other flows	1.6	1.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Residual, including asset changes 8/	0.1	-0.6	0.8	-1.6	-1.1	-0.9	-1.0	-0.9	-0.8	-0.7	-5.6	
o/w "Interest revenue" 9/	-1.2	0.0	0.2	-2.2	-1.2	-1.0	-1.1	-1.0	-0.9	-0.8	-6.0	



Source: IMF staff.

1/ Public sector is defined as non-financial public sector.

2/ Based on available data.

3/ Long-term bond spread over U.S. bonds.

4/ Defined as interest payments divided by debt stock (excluding guarantees) at the end of previous year.

5/ Derived as [(r - π(1+g) - g + ae(1+r)]/(1+g+π+gπ)) times previous period debt ratio, with r = interest rate; π = 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).

6/ The real interest rate contribution is derived from the numerator in footnote 5 as r - π (1+g) and the real growth contribution as -g.

7/ The exchange rate contribution is derived from the numerator in footnote 5 as ae(1+r).

8/ Includes asset changes and interest revenues (if any). For projections, includes exchange rate changes during the projection period.

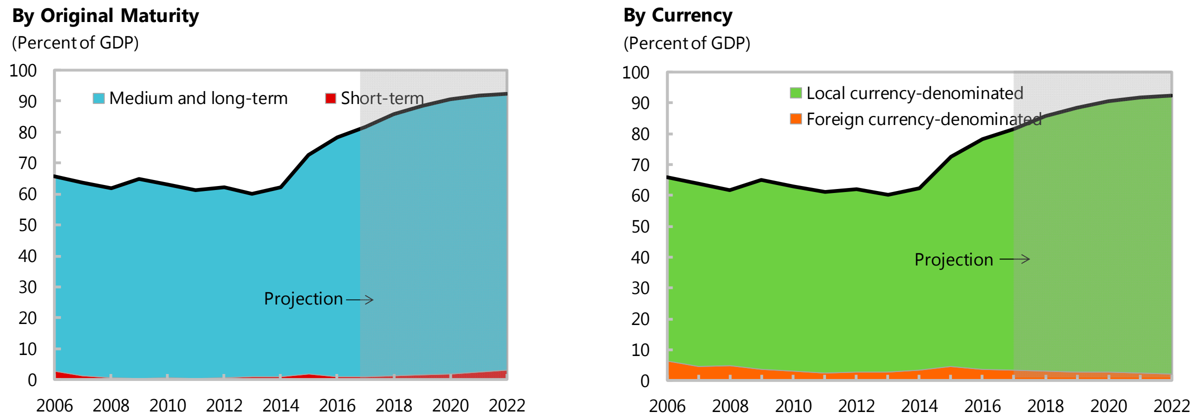
9/ "Interest revenue" is a reconciliation series calculated as a difference between the gross interest of the NFPS and the net interest of the PS. This concept is used to maintain consistency between the fiscal accounts, in which the net interest used to compute the overall balance includes also the net interst bill of the BCB, and gross interest of the NFPS in the DSA.

10/ 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.

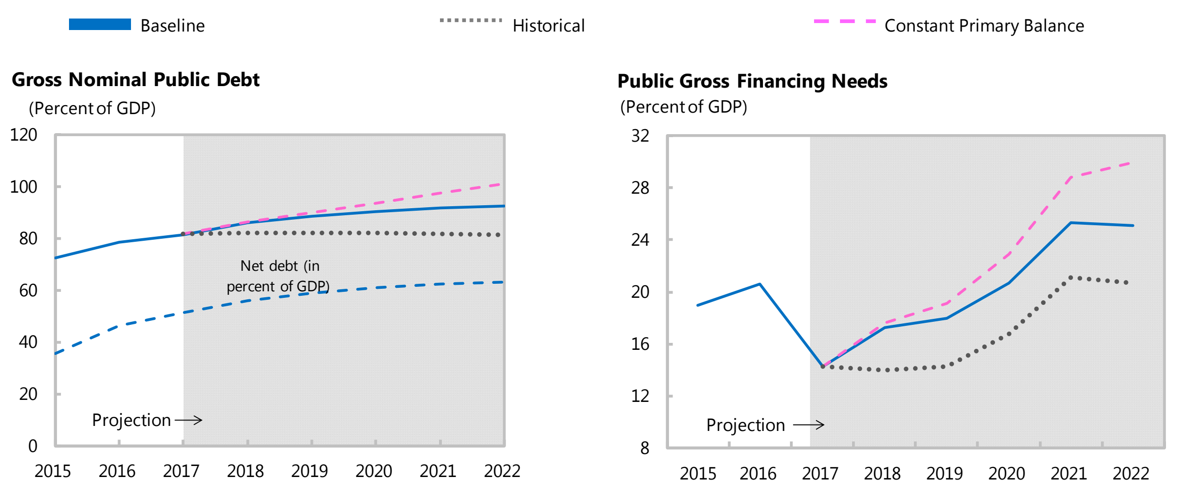
Up to 2022, the primary balance is a non-interest balance, with interest income showing in the residual. From 2023 onwards interest income counts toward the required primary balance.

Figure 4. Brazil: Public DSA—Composition of Public Debt and Alternative Scenarios

Composition of Public Debt



Alternative Scenarios



Underlying Assumptions

(Percent)

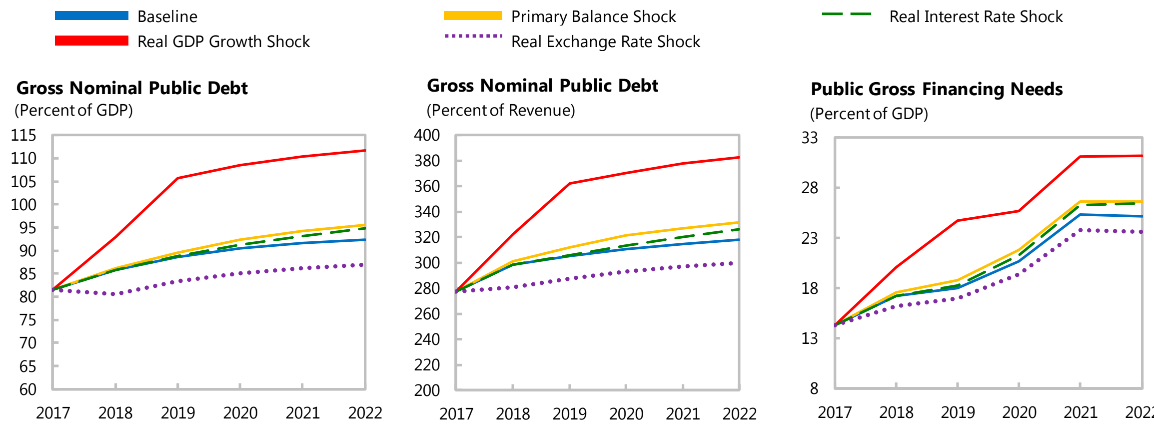
Baseline Scenario	2017	2018	2019	2020	2021	2022
Real GDP growth	0.3	1.3	2.0	2.0	2.0	2.0
Inflation	7.4	4.7	4.7	5.0	5.0	5.0
Primary Balance	-2.1	-1.8	-1.1	-0.4	0.2	0.8
Effective interest rate	10.8	10.5	10.1	10.0	9.8	9.7
Constant Primary Balance Scenario						
Real GDP growth	0.3	1.3	2.0	2.0	2.0	2.0
Inflation	7.4	4.7	4.7	5.0	5.0	5.0
Primary Balance	-2.1	-2.1	-2.1	-2.1	-2.1	-2.1
Effective interest rate	10.8	10.5	10.1	10.0	9.8	9.7

Historical Scenario	2017	2018	2019	2020	2021	2022
Real GDP growth	0.3	2.1	2.1	2.1	2.1	2.1
Inflation	7.4	4.7	4.7	5.0	5.0	5.0
Primary Balance	-2.1	1.3	1.3	1.3	1.3	1.3
Effective interest rate	10.8	10.5	10.0	9.9	9.6	9.4

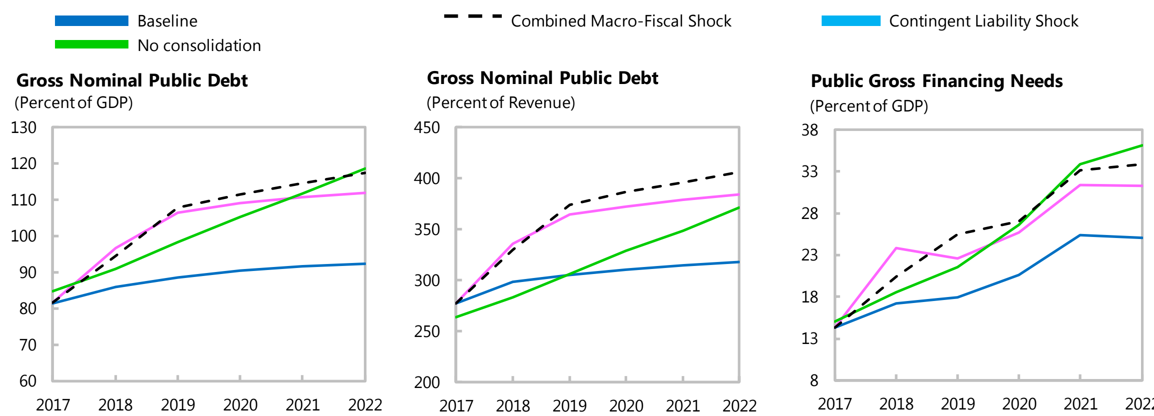
Source: IMF staff.

Figure 5. Brazil: Public DSA—Stress Tests

Macro-Fiscal Stress Tests



Additional Stress Tests



Underlying Assumptions

(in percent)

	2017	2018	2019	2020	2021	2022
Primary Balance Shock						
Real GDP growth	0.3	1.3	2.0	2.0	2.0	2.0
Inflation	7.4	4.7	4.7	5.0	5.0	5.0
Primary balance	-2.1	-2.1	-1.8	-1.1	-0.4	0.2
Effective interest rate	10.8	10.5	10.1	10.1	9.9	9.8
Real Interest Rate Shock						
Real GDP growth	0.3	1.3	2.0	2.0	2.0	2.0
Inflation	7.4	4.7	4.7	5.0	5.0	5.0
Primary balance	-2.1	-1.8	-1.1	-0.4	0.2	0.8
Effective interest rate	10.8	10.5	10.5	10.6	10.6	10.7
Combined Shock						
Real GDP growth	0.3	-2.5	-1.9	2.0	2.0	2.0
Inflation	7.4	2.4	2.4	5.0	5.0	5.0
Primary balance	-2.1	-3.8	-5.2	-1.1	-0.4	0.2
Effective interest rate	10.8	10.6	10.4	10.6	10.6	10.7
No consolidation						
Real GDP growth	0.0	-1.0	-1.0	0.0	0.8	0.8
Inflation	5.0	6.0	5.6	5.4	5.2	5.1
Primary balance	-2.5	-2.1	-2.4	-2.3	-2.1	-2.0
Effective interest rate	10.8	10.7	11.0	11.3	11.3	11.3

	2017	2018	2019	2020	2021	2022
Real GDP Growth Shock						
Real GDP growth	0.3	-2.5	-1.9	2.0	2.0	2.0
Inflation	7.4	2.4	2.4	5.0	5.0	5.0
Primary balance	-2.1	-3.7	-4.9	-0.4	0.2	0.8
Effective interest rate	10.8	10.5	10.3	10.5	10.1	9.9
Real Exchange Rate Shock						
Real GDP growth	0.3	1.3	2.0	2.0	2.0	2.0
Inflation	7.4	13.2	4.7	5.0	5.0	5.0
Primary balance	-2.1	-1.8	-1.1	-0.4	0.2	0.8
Effective interest rate	10.8	10.6	10.1	10.0	9.8	9.7
Contingent Liability Shock						
Real GDP growth	0.3	-2.5	-1.9	2.0	2.0	2.0
Inflation	7.4	2.4	2.4	5.0	5.0	5.0
Primary balance	-2.1	-6.9	-1.1	-0.4	0.2	0.8
Effective interest rate	10.8	11.2	10.6	10.4	10.0	9.8

Source: IMF staff.

Statement by the IMF Staff Representative
July 5, 2017

1. **This note reports on information that has become available since the staff report was issued and does not affect the thrust of the staff appraisal.**

- On June 29, the National Monetary Council set the 2019 inflation target at 4.25 percent, and that for 2020 at 4.0 percent, with a tolerance range of 1.5 percentage points on each side of the target. These new targets appear consistent with inflation expectations, which the central bank's survey puts at 4.25 percent for both 2019 and 2020 as of June 23, 2017. The reduction in the target brings Brazil closer in line with other inflation targeting frameworks, and the reduction is sufficiently gradual that it should not materially affect the ongoing monetary policy cycle.

- Recent high frequency indicators confirm the declining trend in inflation, while pointing to some signs of stabilization in the real side of the economy:

    - June mid-month annual inflation was the lowest in nearly a decade, declining from 3.8 (May) to 3.5 percent (June).

    - Boosted by the agricultural sector, 34 thousand new jobs were added to the economy in May. While May is typically a strong month for jobs, the result was above market expectations (15.5 thousand).

- The current account remained in surplus in May, largely reflecting strong exports. At the same time, the financial account showed net outflows, reflecting both weaker FDI inflows and net fixed income portfolio outflows.

Statement by Alexandre Tombini, Executive Director for Brazil
July 5, 2017

1. I thank staff for the high-quality set of papers and the fruitful engagement with the Brazilian authorities.

Recent developments and outlook

2. **After two years of recession, Brazil posted a one percent GDP growth (qoq) in the first quarter of 2017, driven partially by double-digit expansion in agriculture.** Other GDP components also displayed positive growth, signaling stabilization and the prospects for a gradual recovery. Business confidence has gradually improved since last year, although it has not yet translated into investment performance. In the construction sector, for instance, signs of relief have not yet been converted into higher gross fixed capital formation. Real disposable income has benefitted from disinflation, ongoing deleveraging and lower interest rates, enabling a better outlook for private consumption. Nonetheless, a more robust recovery of household expenditures should come on the back of a sustained improvement in labor market conditions, which is expected for later this year.

3. **With inflation expectations well-anchored and an ample output gap, the extent and intensity of the disinflationary process has been a positive surprise.** As inflation dropped from 10.7 percent in January 2016 to 3.6 percent last May, the Central Bank has lowered its policy rate by 400 basis points since October 2016. In tandem with falling inflation and expectations slightly below the target for next year, market participants project further monetary easing to take place over the remainder of the year. Along these lines, monetary policy is expected to provide the economy with an important cyclical impulse over this year and the next, contributing meaningfully to the recovery.

4. **The primary fiscal deficit has been reduced, but still short of what is required to contain the growth in public debt.** Fiscal revenues have fallen significantly more than in previous recessions, while budget rigidities reduce the scope for cutting public spending in the near term. However, the authorities have taken measures to contain discretionary spending in 2017. The Ministry of Finance's primary fiscal target for 2017 was set at approximately -2.1 percent of GDP, with the deficit being progressively reduced in the following years. The primary balance is expected to shift into positive territory in 2020. The Brazilian authorities are conscious that the long-term sustainability of public debt commands the need for structural reforms to contain expenditures and foster GDP growth.

5. **Various indicators strongly suggest that the economy has reached the trough of the cycle, and it is expected that the stabilization of activity will give way to a measured recovery.** Over time, the performance of the economy relies on ensuring a

sustainable fiscal position, recovering confidence and removing obstacles that hamper investment, employment and productivity growth.

Ongoing far-reaching reforms

6. **The continuity of the ongoing reform agenda is fundamental.** Progress on this reform agenda would help the upcoming gradual recovery. The authorities have developed a well-crafted sequencing strategy to move the reform forward, but uncertainties remain.

7. **On the fiscal side, the first major step was the approval of the spending cap, now embedded in the Constitution.** The ceiling is strict, establishing corrective mechanisms, while inducing a healthy debate within the Brazilian society about the composition of public expenditures. To meet the ceiling, social security reform is needed, and budget rigidity must be tackled - examples of key issues that were brought to the top of the agenda by the spending cap.

8. **The pension reform is an important measure to restore fiscal soundness in a sustainable way.** The social security deficit projected at about 4 percent of GDP in 2017 weighs on the public sector primary deficit. The reform sent by the government to Congress has been modified, but the bulk of the originally proposed savings (about 75 percent) has been preserved. Although challenging, the approval of the social security reform would represent a breakthrough for fiscal sustainability and would create space for means-tested income transfer programs. Under difficult conditions, the authorities have intensified their efforts to gather political and public opinion support to the proposition as it requires a 60 percent qualified majority in each house of Congress.

9. **The fiscal situation in a few states is challenging.** While the fiscal condition of most states is manageable, some require sharp adjustment, in addition to the savings from the pension reform. Congress approved a bill in May that allows the suspension of debt payments to the federal government (for a period of 3 years) conditional on approval of fiscal consolidation laws. Rio de Janeiro state has preliminarily agreed with the Ministry of Finance on the terms of a fiscal adjustment program under the new Law, while the state of Rio Grande do Sul is negotiating a similar program. These are legacy problems that have been brewing for years and will require a long-term commitment to robust measures from states and the federal government in order to be solved definitively.

10. **In addition, the authorities are pursuing a broad microeconomic reform agenda to improve the business climate, facilitate job creation and raise productivity growth.** The reform entailing more flexibility in the labor market is in its final congressional stages and is expected to be approved by Congress in the near future. The new model for concessions, reduced local content requirements and enhanced autonomy of regulatory agencies have improved the attractiveness of privatization programs, which has been yielding positive results in the oil and gas, airport and energy sectors. The

subsidized funding rate for the national development bank (BNDES) is being gradually replaced by a new market-based rate, which will rein in fiscal expenditures and enhance monetary policy transmission. The Central Bank is carrying out an encompassing program to streamline procedures and regulation, increase transparency, reduce costs of compliance and improve competitiveness. New custom processes, simplified procedures to start a business, standardization of municipal tax payments, strengthened governance in state-owned companies, reductions in the time needed to pay taxes and comply with legal requirements, and improvements in the bankruptcy law are also being undertaken.

Risks to the outlook

11. **In spite of the sound policy framework and authorities' commitment to fiscal and structural reforms, there are risks to the outlook.** The main risk to the baseline scenario is the uncertainty regarding the speed and approval of the reform agenda, in particular the pension reform, due to the deterioration of the political climate. The authorities continue to push for reform approvals and expect this agenda to continue to move forward in the next few months. Developments in the ongoing overarching corruption probe may turn out to be a source of political instability in the short term, however the economic authorities and the reform agenda continue to enjoy support in Congress. In the longer term, Brazil's strong commitment to fighting corruption bodes well for public and private sector governance, a better business environment, and, thus, higher productivity growth.

12. **The external scenario has been favorable to emerging market economies (EMEs) and to Brazil in particular, but this may not last and should be no reason for complacency.** A faster pace of monetary policy normalization in the US, a rise of trade protectionism in advanced economies, and an abrupt deceleration in China are risks to the outlook. While these outcomes would have negative impacts in the Brazilian economy, as in most EMEs, Brazil has strong balance of payments numbers, proven buffers and tested instruments to mitigate the effects.

13. **Brazilian external and financial sectors have been exposed to real-life stress tests and have performed well.** Given the magnitude and extension of the (economic and non-economic) shocks that have hit the Brazilian economy in the past few years, the performance of the financial sector and the balance of payments has been remarkable. This resilience was built over time. The flexible exchange rate regime, high level of international reserves, and strong financial regulatory framework and supervision have ensured the stability of those two important pillars of the Brazilian economy.