Bolivia: 2018 Article IV Consultation-Press Release and Staff Report

INTERNATIONAL MONETARY FUND

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BOLIVIA

December 2018

2018 ARTICLE IV CONSULTATION—PRESS RELEASE AND STAFF REPORT

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 2018 Article IV consultation with Bolivia, 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 November 9, 2018 consideration of the staff report that concluded the Article IV consultation with Bolivia.
- The **Staff Report** prepared by a staff team of the IMF for the Executive Board's consideration on November 9, 2018, following discussions that ended on October 2, 2018 with the officials of Bolivia on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on October 26, 2018.
- An **Informational Annex** prepared by the IMF staff.

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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IMF Executive Board Concludes 2018 Article IV Consultation with Bolivia

On November 9, 2018, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation with Bolivia.[1]

After fifteen years of strong growth and poverty reduction, Bolivia is facing a more challenging period. The country registered annual real GDP growth of 4.8 percent on average between 2004–17 and built up sizable foreign reserves and fiscal buffers, while the share of the population living in extreme poverty fell by half to 17 percent. Since the commodity price drop in 2014, the authorities have conducted accommodative fiscal and credit policies to support growth. This approach has succeeded in maintaining robust growth but has resulted in large fiscal and external current account deficits, reserve losses, and a sharp increase in public debt. External competitiveness has been negatively affected in recent years by the appreciating US dollar and high wage growth in the context of a stabilized exchange rate.

Real GDP growth is projected at 4.5 percent in 2018, one of the highest rates in the region. Growth is supported by continued accommodative policies, a second economy-wide wage bonus, and strong agriculture output. Growth is forecast to moderate to 3.7 percent in the medium-term, reflecting limited impulse from macro policies and lower total factor productivity in the post-commodity boom period. The government's decision to limit the growth of public investment will help reduce the fiscal deficit over time and slow the growth in public debt. The external current account deficit is expected to narrow slowly owing to a moderation in imports of capital goods, but with capital inflows and remittances expected to be weaker, international reserves are forecast to decline slowly, falling below the Fund's reserve adequacy metric by 2020. The main risks to the outlook are related to political uncertainty surrounding the 2019 elections, failure to lower public investment as envisaged, and commodity-related shocks, including failure to discover new natural gas fields.

[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.

Executive Board Assessment[2]

Executive Directors commended Bolivia's impressive economic growth and improvement in social indicators in the last decade. However, Directors noted that continued accommodative macroeconomic policies, lower commodity prices, and political uncertainty are posing challenges. Going forward, they emphasized that policy adjustments are needed to reduce internal and external imbalances and ensure macroeconomic stability. In addition, further structural reforms will help promote sustainable growth.

Directors welcomed the authorities' decision to contain public investment which would help reduce the fiscal deficit over the medium term. However, they underscored that the current large fiscal deficit and loss of foreign reserves warrant further policy tightening to restore external balance and limit the build-up in vulnerabilities. Directors concurred that fiscal adjustment should come more from the spending side and recommended implementing a medium-term fiscal framework anchored by a debt target to guide fiscal policy. Directors commended the significant declines in poverty and inequality and encouraged the authorities to ensure that social schemes are directed to the most vulnerable groups.

Directors agreed that monetary policy should focus primarily on price stability and preserving the nominal exchange rate anchor. Noting that strong credit growth and central bank lending to state-owned enterprises has contributed to pressure on international reserves, they advised normalizing monetary conditions as inflation pressures resume. Directors encouraged the authorities to strengthen the independence of the central bank. They also called for steps to cease direct lending by the central bank to state-owned enterprises to avoid potential conflicts in the conduct of monetary policy.

Directors noted that the banking sector remains broadly stable. They encouraged the authorities to remove credit quotas and interest rate caps to limit the build-up of vulnerabilities and to ensure that lending decisions better reflect intrinsic risks.

Directors emphasized that accelerating the pace of structural reforms is critical to strengthen productivity and competitiveness, and to support diverse and broad-based growth. They agreed that reform efforts should focus on unleashing private investment to support export diversification, including reform of trade policies and product and labor markets to improve cost competitiveness. Directors called for discontinuation of the practices of centralized wage setting and indexing national bonuses to the GDP growth rate.

Directors welcomed the government's efforts to reduce bureaucracy in business processes and to combat corruption. They encouraged further reforms, including moving to digital

[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 Summing-ups can be found here: http://www.imf.org/external/np/sec/misc/qualifiers.htm.

processes for tax and business-related payments, reforming the legislative framework governing state-owned enterprises, and including the activities of all subsidiaries in the fiscal accounts of the non-financial public sector. They also encouraged Bolivia’s adoption of standards under the Extractive Industries Transparency Initiative and further strengthening of the AML/CFT framework. Addressing weaknesses in data provision will also be important.

Bolivia: Selected Economic and Financial Indicators

I. Social and Demographic Indicators

GDP per capita (U.S. dollars, 2017)	3,382	Poverty headcount ratio (percent of population, 2016)	39.5
Population (millions, 2017)	11.2	Gini index (2016)	44.6
Life expectancy at birth (years, 2015)	69	Adult literacy rate (percent, 2015)	92.5
Mortality rate, under-5 (per thousand, 2016)	36.9	Gross enrollment ratio, primary, both sexes (2015)	97.1

II. Economic Indicators

				Baseline projections		
	2015	2016	2017	2018	2019	2020
Income and prices	(Annual percentage changes)					
Real GDP	4.9	4.3	4.2	4.5	4.2	3.9
Nominal GDP	0.2	3.6	11.1	9.8	7.8	7.8
CPI inflation (period average)	4.1	3.6	2.8	2.8	4.0	4.0
Investment and savings 1/	(In percent of GDP, unless otherwise indicated)					
Total investment	20.7	21.8	24.2	24.3	22.9	21.8
Of which: Public sector	13.7	13.0	13.7	13.3	12.4	11.6
Gross national savings	13.3	15.1	16.0	16.3	15.0	13.8
Combined public sector						
Revenues and grants	38.1	32.8	30.7	31.3	31.9	31.6
Expenditure	45.0	40.0	38.5	38.8	38.2	37.2
Net lending/borrowing (overall balance)	-7.0	-7.3	-7.8	-7.4	-6.3	-5.7
Of which: Non-hydrocarbon balance	-14.2	-10.9	-11.7	-12.6	-11.7	-10.5
Total gross NFPS debt 2/	41.3	46.6	51.1	53.5	54.6	54.6
External sector						
Current account 1/	-5.9	-5.7	-5.3	-4.8	-4.6	-4.5
Exports of goods and services	30.2	24.3	25.1	25.2	24.7	24.6
Imports of goods and services	36.2	31.6	30.8	30.6	30.4	30.1
Financial account	-8.6	-6.6	-6.5	-6.2	-4.6	-4.5
Terms of trade index (percent change)	-23.1	-15.5	9.5	10.0	-2.9	-1.5
Net Central Bank foreign reserves 3/ 4/						
In percent of GDP	39.7	29.6	27.1	21.1	18.6	16.4
In months of imports of goods and services	14.5	10.4	9.7	7.7	6.9	6.1
Money and credit	(Annual percentage changes, unless otherwise indicated)					
Credit to the private sector	17.6	14.8	12.8	11.7	10.9	10.1
Credit to the private sector (percent of GDP)	52.0	57.6	58.5	59.5	61.2	62.5
Broad money	82.5	81.7	80.9	81.3	82.5	83.2
Memorandum items:						
Nominal GDP (in billions of U.S. dollars)	32.9	34.1	37.9	41.6	44.8	48.3
Exchange rates 5/						
Bolivianos/U.S. dollar (end-of-period)	6.9	6.9	6.9	…	…	…
REER, period average 6/ (percent change)	16.1	6.0	-1.4	…	…	…

Sources: Ministry of Economy and Public Finances, Central Bank of Bolivia, National Institute of Statistics, UDAPE, World Bank, and Fund staff calculations.

1/ The discrepancy between the current account and the savings-investment balances reflects methodological differences. For the projection years, the discrepancy is assumed to remain constant in dollar value.

2/ Public debt BCB lending to: FINPRO, FNDR, and SOES (but not SOE borrowing from other domestic institutions).

3/ Excludes reserves from the Latin American Reserve Fund (FLAR) and Offshore Liquidity Requirements (RAL).

4/ All foreign assets valued at market prices.

5/Official (buy) exchange rate.

6/ The REER based on authorities' methodology is different from that of the IMF.

BOLIVIA

STAFF REPORT FOR THE 2018 ARTICLE IV CONSULTATION

October 26, 2018

Context. After years of impressive growth and poverty reduction, Bolivia is facing a more challenging period. Accommodative fiscal and monetary policies combined with lower gas and minerals prices have contributed to continued large twin deficits, foreign reserve losses, and a sharp increase in public debt. External competitiveness has been negatively affected by the appreciating US dollar, high wage growth, and domestic policies that have hindered private sector investment. A definitive change in the policy stance is warranted to restore external balance, minimize a further buildup in vulnerabilities, and promote broad based growth.

Outlook and Risks. After a spurt in 2018, real GDP growth is projected to moderate gradually to its potential. The authorities' decision to limit the growth of public investment will help reduce the twin deficits over time, but further policy tightening will be needed in the near term to restore external balance and contain macro vulnerabilities. The main risks arise from political uncertainty surrounding the 2019 elections, failure to lower public investment as envisaged, and commodity-related shocks.

Policy Recommendations.

1. Implement a rule-based fiscal framework anchored by a medium-term debt target; reduce the non-hydrocarbon primary deficit by 1.4 percent of GDP annually to restore external balance in the short term and arrest the growth of public debt; contain growth in the wage bill and public investment; and make social spending more progressive.

2. Focus the objectives of monetary policy on price stability and preserving the nominal exchange rate anchor; cease direct lending by the central bank to SOEs; and strengthen the independence of the central bank.

3. Remove credit quotas and interest rate ceilings and bolster efforts to improve financial sector supervision.

4. Move decisively on structural reforms to help shift Bolivia's growth model away from the public redistribution of hydrocarbon revenues to private sector-led activity. This would include: lowering tariffs on manufactured goods; freeing up product markets; discontinuing centralized wage setting and indexing of bonuses to GDP growth; over-hauling labor market regulations; preparing reform of the taxation/investment codes in the extractive sectors; and implementing key measures to improve the business climate.

Approved By
Krishna Srinivasan (WHD) and Maria Gonzalez (SPR)

Discussions took place in Santa Cruz, Cochabamba, and La Paz during September 19–October 2, 2018. The team comprised Nicole Laframboise (head), Etibar Jafarov, Marie Kim, Henrique Barbosa (all WHD), Renato Perez (STA), and Sergio Cárdenas (local office). Edwin Rojas (OED) participated in the discussions. The team met with the Minister of Finance, President of the Central Bank, Minister of Planning, senior officials, and participants from private business, the financial sector, academia, and official development partners.

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CONTEXT

1. **After fifteen years of impressive growth and poverty reduction, Bolivia is facing a more challenging period.** The country registered annual real GDP growth of 4.8 percent on average between 2004–17 and built up sizable foreign reserves and fiscal buffers, a result of broadly prudent management of revenues emanating from the commodity price boom. The share of the population living in extreme poverty fell by half to 17 percent. The authorities have set ambitious goals to eradicate extreme poverty, improve access to health and education, and promote state-led industrialization under their "Patriotic Agenda 2025". The first phase has involved large-scale public investment under the five-year (2016–20) *Plan de Desarrollo Económico y Social (PDES*). Since 2014, in a context of lower commodity prices, the strategy of expansionary macro policies has resulted in large fiscal and current account deficits, reserve losses, and higher public debt.

2. **The political situation is uncertain.** The presidential election is scheduled for late 2019. While Bolivian voters in 2016 rejected an amendment to the country's constitution that would have allowed President Morales to run for re-election, Bolivia's constitutional court this year ruled that he can run for re-election indefinitely. While he says he is ready to leave, Morales cites pressure to stay from the public and the ruling party *Movimiento al Socialismo* (MAS), which asserts that he will be their candidate.

Box 1. Past IMF Policy Recommendations

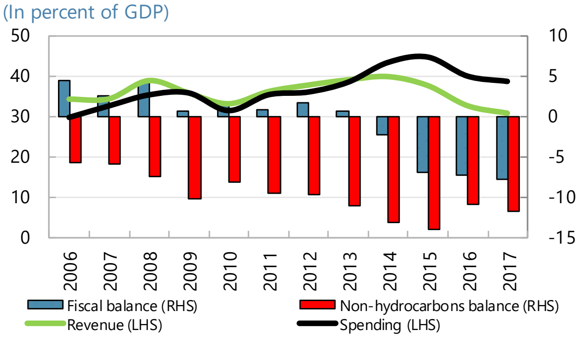
Policy advice in recent years stressed the need to gradually tighten fiscal and credit policies to help restore external balance, reinforce the financial health of public enterprises, strengthen the fiscal policy framework, move to remove fuel subsidies and increase the effectiveness of social spending, and reform product and labor markets (Table 1). The authorities have taken some measures towards adopting a medium-term fiscal framework (MTFF); removed some export restrictions; and raised prices on some types of gasoline and electricity. The authorities prepared an AML/CFT National Strategy in 2016, although that has stalled in parliament; they also set up a Vice Ministry of Institutional Transparency and Fight Against Corruption within the Ministry of Justice (Annex IV).

RECENT DEVELOPMENTS: GAS PRICE REPRIEVE

3. **Bolivia remains one of the fastest-growing economies in Latin America.** Real GDP grew by 4.2 percent in 2017, driven by stronger-than-expected agriculture growth. On the demand side, growth was driven by private consumption and public investment, including by state-owned enterprises (SOEs) and their subsidiaries. Higher goods exports, robust domestic demand, and strong agriculture output helped sustain growth in the first half of 2018 (Figure 1). At 1.8 percent (y/y) in August 2018, consumer price inflation remains low, reflecting stable administered prices, low import prices in the context of the stabilized exchange rate, the good harvest, and supply management policies. A study by a foreign company released in August 2018 estimated proven gas reserves (1P) in Bolivia at 10.7 TCF compared to 10.45 TCF in 2013.

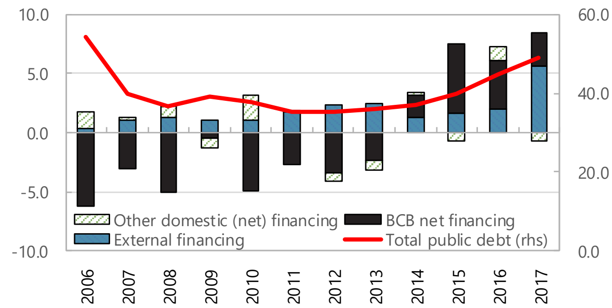
4. The fiscal deficit is still large. As a percent of GDP, the deficit of the non-financial public sector (NFPS) increased to 7.8 in 2017 from 7.2 in 2016, though the increase largely reflected a one-off timing effect of advance salary and pension payments in late 2015 that had the effect of lowering the deficit in 2016. Recurrent fiscal deficits since 2014 have been financed by direct credits to SOEs by the central bank (BCB), some use of government deposits, and foreign borrowing. Gross (net) public debt rose to about 51 (35) percent of GDP in 2017 from about 37 (12) percent of GDP in 2013, but remains lower than the levels observed in many 'BB-'rated (Fitch, Standard & Poor's) countries (Tables 3-4, Figure 2).[1]

Fiscal Balances
(In percent of GDP)



Sources: Authorities' data; and IMF staff estimates.

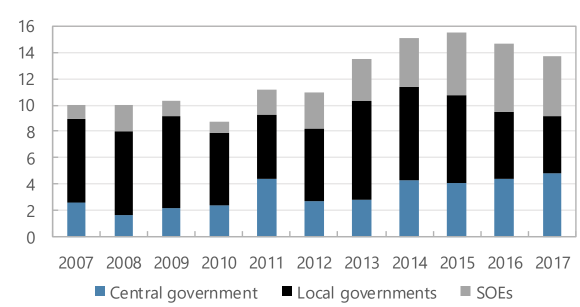
NFPS Financing and Total Public Debt
(In percent of GDP)



Sources: Authorities' data; and IMF staff estimates.

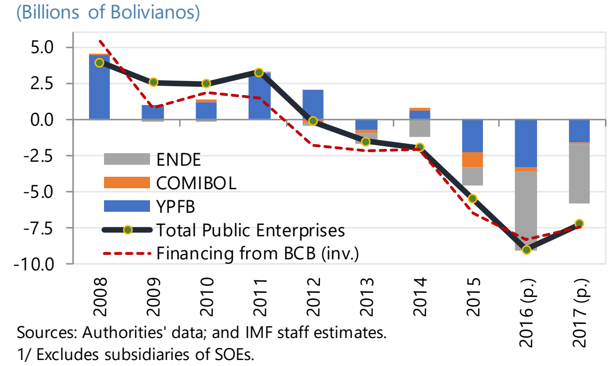
5. While higher gas and minerals prices are helping, SOEs continue to run sizable deficits. Key public enterprises significantly increased capital investments on industrial projects which, combined with lower commodity prices, caused sizable overall deficits during 2015–17. These were financed mostly with BCB loans, which reached about 13 percent of GDP by end-2017. Operating balances have strengthened recently owing to higher commodity prices.

Public Investments
(In percent of GDP)



Sources: Authorities' data; and IMF staff estimates.

Public Enterprises Overall Fiscal Balance 1/
(Billions of Bolivianos)

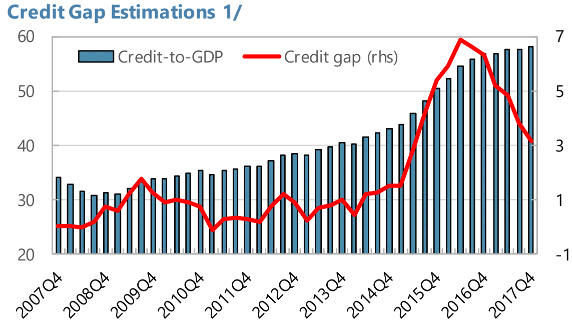


Sources: Authorities' data; and IMF staff estimates.
1/ Excludes subsidiaries of SOEs.

[1] Staff's estimate of total public debt was revised up by 2.3 percent of GDP to include BCB loans to other SOEs and some public funds (FINPRO and FNDR) previously unrecorded.

6. Monetary conditions remain supportive of growth. With a slowdown in deposit growth and still strong credit growth, bank liquidity tightened in early 2018. In response, the BCB lowered the reserve requirement on foreign currency deposits—from 35 (43) percent to 25 (33) percent for term deposits (demand deposits) —following a similar move in 2017, stipulating that banks could use the released resources only for new lending in local currency to 'productive sectors' and social housing. Banks' excess liquidity with the BCB has recently stabilized and average deposit and interbank rates are at or below the inflation rate. Lending rates have remained stable, reflecting the rate ceiling and temporary effects of the change in the calculation of the BCB 's reference rate (*Tasa de Referencia)*, to which most floating-rate loan rates are linked (Figure 4). While lending to the "productive sectors" remains strong at 23 percent in July 2018, the pace is moderating as large banks reach credit targets set under the Financial Services Law (FSL). This is reflected in a narrowing "credit gap".[2]

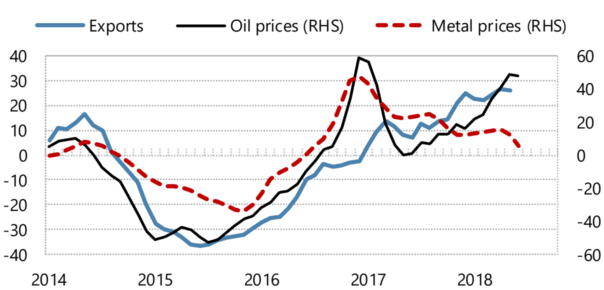
Credit Gap Estimations 1/



Sources: Authorities' data; and Fund staff estimates.
1/ Using one-sided HP filter. Credit gap analyses assume that large deviations from trend growth will lead to higher probability of a correction ("bust phase") in the future.

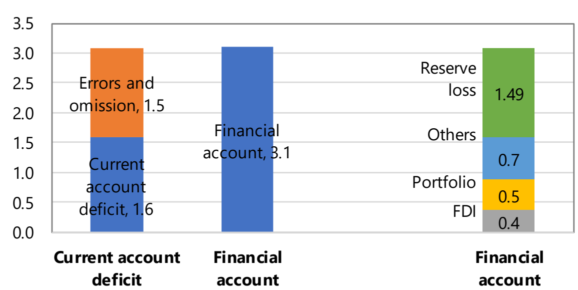
7. The banking sector appears sound, although some indicators have been deteriorating. The overall capital adequacy ratio of the banking system stands at 12.2 percent, with all banks above the regulatory minimum of 10 percent (Annex V). Non-performing loans (NPLs) rose slightly to 1.9 percent of total loans in June 2018 from 1.7 percent a year earlier but remain low by international standards due in part to robust credit growth. The share of restructured loans rose from 1.2 percent at end-2014 to 2.4 percent in June 2018 and banks' return on equity fell from 17 percent in 2016 to 12 percent in 2018, respectively. It is worth noting that Bolivia's pension funds play an important role in the banking sector by providing long-term deposits to banks and investing in banks' subordinated debt. Bank profitability is declining due largely to narrowing interest margins (Figures 4–5).

Exports and Commodity Prices
(y/y 3-months moving average)



Sources: Authorities' data; Haver Analytics; and Fund staff estimates.

Bolivia: BOP 2018 H1 Development
(In percent of GDP)



Sources: Authorities' data and Fund staff estimates.

[2] Estimated using a one-sided Hodrick-Prescott filter, as recommended by the BIS.

8. The external current account deficit has started to narrow, but not the overall balance of payments deficit. In the first half of 2018, export revenues grew by 17 percent (y/y) due to higher commodity prices and an increase in non-traditional exports related to the removal of some export restrictions. Imports increased by only 5.3 percent, reflecting low import prices, although unrecorded imports may have increased based on the emergence of a larger statistical error in the first half of 2018 (Box 2). With FDI lower-than-expected, so far in 2018 only about 50 percent of the current account deficit has been financed by capital inflows. As a consequence, international reserves have been declining, falling to US$8.7 billion at end-September from US$10.3 billion at end-2017; they remain adequate by IMF standard metrics (Figure 3).

OUTLOOK: VULNERABILITIES UNDERLIE ROBUST GROWTH

9. The baseline outlook projects robust growth in the near term. Continued accommodative policies combined with a second Christmas bonus (*Doble Aguinaldo*) would support demand while higher commodity prices and lower capital imports would help reduce the "twin" deficits (fiscal and external current account). Real GDP is forecast to grow by 4.5 and 4.2 percent in 2018 and 2019, respectively, benefiting in part from new ethanol projects that will boost agriculture activity. The deficit of the NFPS is projected to improve slightly to 7.4 and 6.3 percent of GDP, respectively, in 2018 and 2019, owing mainly to higher hydrocarbon revenues, better SOE performance, and lower capital spending. The external current account deficit as a percent of GDP is projected to fall to 4.8 and 4.6 percent in 2018 and 2019, respectively.

10. In the medium term, real GDP growth is projected to moderate and macro-imbalances to decline slowly. Growth is forecast to converge to its potential of 3.7 percent—as estimated by staff—reflecting limited impulse from macroeconomic policies, including weaker private investment and lower total factor productivity in the post-commodity boom period. Based on a review of the *PDES* program, the authorities intend to hold public investment steady in nominal terms, reorienting investment toward urban development, health, and youth employment as large-scale capital projects wind down. The key fiscal assumptions comprise: (i) broadly flat investment that reduces the investment-to-GDP ratio from 13.7 to 9.2 percent by 2023; and (ii) growth in the wage bill below that of nominal GDP. If implemented as envisaged, this change would help lower the deficit of the NFPS to about 3.8 percent of GDP by 2023 and slow the rate of growth in public debt, which would peak at 54.4 percent of GDP in 2022. The current account deficit is expected to narrow slowly to 4.4 percent of GDP by 2023 as moderating imports of capital goods are partly offset by lower capital inflows and weaker remittances. International reserves would decline slowly, falling below the Fund's reserve adequacy metric by 2020 and to four months of imports by 2023 (Table 7).

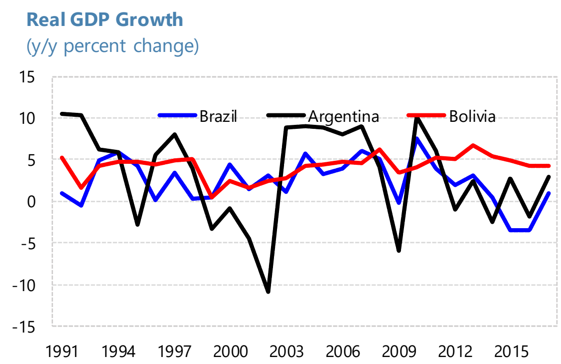
11. Risks to the baseline are tilted downwards (Table 8).

- On the downside, the highest probability risks stem from: (i) political uncertainty related to the 2019 elections that could affect economic policy decision making and/or lead to social unrest; (ii) failure to discover new gas and mineral fields, which would have an increasingly negative impact on the balance of payments; and (iii) failure to freeze public investment as envisaged. Other risks include a larger-than-expected rise in the US dollar or interest rates, lower-than forecast commodity prices and capital inflows, worse-than-expected spillovers from economic strains in Argentina and Brazil, and costs related to spillovers from the crisis in Venezuela.

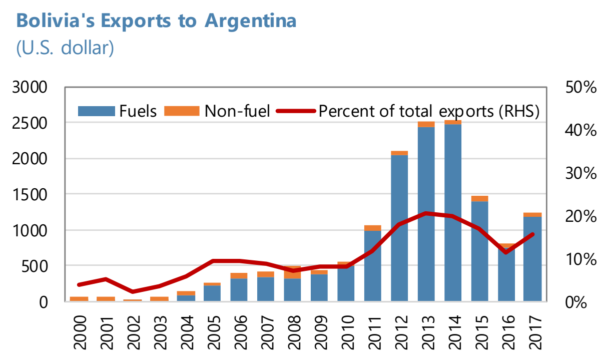
- Upside risks could arise from new discoveries of gas and mining reserves; more rapid success bringing on stream projects in hydrocarbon industrialization, electricity generation, and lithium production; and higher-than-expected hydrocarbon prices.

Box 2. Spillovers from Argentina and Brazil in the Near-Term

Events in Argentina and Brazil are expected to have a limited impact on growth in the near-term but could affect the balance of payments. Historically, GDP growth in Bolivia has shown resilience to adverse shocks in neighboring countries. Most of Bolivia's exports to these markets is natural gas and not likely to be affected by adverse developments there. Financial linkages are minimal and non-traditional exports to both countries are small at only 0.2 percent of GDP. Argentina is, however, the largest source of remittances, accounting for US$700 million (2.0 percent of GDP) annually (World Bank). While official inflows have historically been resilient to shocks in neighboring countries, it is unclear how informal remittances behave. A decline in the latter would have a negative impact on the supply of foreign exchange. Anecdotally, undeclared imports are reported to have increased in border areas. These activities together could have contributed to reserve losses and the larger entry for Errors & Omissions (1.5 percent of GDP) in the balance of payments in the first half of 2018.



Sources: IMF World Economic Outlook database; and fund staff estimates.



Sources: UN comtrade; and fund staff estimates.

POLICY ISSUES: DEFINITIVE CHANGE NEEDED

12. The authorities were effective at managing the economy and using the natural gas windfall to advance socio-economic progress. Broadly prudent macro policies during the commodity boom helped build savings and promote growth and poverty reduction. After 2014, the authorities conducted counter-cyclical policies to support demand and limit the adverse impact of lower international gas prices on the population. While an appropriate response to a temporary shock, staff assess that the trade-off of this approach over several years is a build-up in macro vulnerabilities that pose increasing risks to sustainability and real incomes over the medium term and that outweigh the benefits of maintaining the *status quo*.

A. Policy Consistency and Sustainability—the Guiding Principles

13. Almost five years after the commodity price bust, a shift in the policy stance is needed and a different growth strategy considered. Continuing with the *status quo* would lead the country onto a high debt, lower growth, gas-dependent path—unsustainable under the stabilized exchange rate-based macro-framework. The worsening in imbalances over the past year underscores the merits and continued relevance of previous Fund recommendations. The immediate priority is to tighten macro policies to restore internal and external balance while supporting sustainable growth. Given the high levels of public spending and low efficiency of some public investment (Country Report 17/395), the adverse effects of a gradual fiscal consolidation are likely to be relatively small in the short term.

14. There are three broad elements of a new growth strategy. (i) move to a more business-friendly approach to boost private sector investment, particularly in the traded sector—a key to diversification;[3] (ii) renew efforts to strengthen institutions and governance; and (iii) strengthen regulation and supervision to ensure financial stability in the wake of changes to the sector under the FSL (Annex V).

B. A Roadmap for Sustainable Fiscal Policy

15. Drawing down buffers to support growth has raised fiscal risks and vulnerability to shocks. Also, the risk of policy slippage is higher in the absence of a medium-term framework.

- Gross debt is forecast to exceed 53 percent of GDP in 2018, the threshold requiring "high scrutiny" under the IMF's Debt Sustainability Analysis (DSA) framework for emerging market economies (Annex I). The primary deficit of 6.5 percent of GDP is also well above the level estimated by staff (2.5 percent of GDP) to stabilize debt, thus putting the debt-to-GDP ratio on an upward trajectory. The DSA finds that risks to debt sustainability are significant. For example, a combination of shocks would raise gross public debt to 67 percent of GDP by 2023.

- Bolivia's heavy dependence on the commodity sector and the limited number of external markets also make it vulnerable to exogeneous shocks, suggesting the need for larger buffers.

- The decision to contain the growth in public investment is welcome but the absence of clear guidance on short and medium-term fiscal targets gives rise to uncertainty about the direction of fiscal policy and raises the risks of policy slippage over time.

A Medium-term Framework with a Fiscal Rule to Guide Policy

16. A full-fledged medium-term fiscal framework (MTFF) with a fiscal rule would help instill fiscal discipline and guide policy and short-term objectives. Staff welcome the authorities'

[3] Breaking the Oil Spell: The Gulf Falcons' Path to Diversification, edited by Cherif, Hasanov, and Zhu, 2016.

progress in preparing medium-term fiscal projections and encourage them to follow through on recent IMF Technical Assistance (TA) by designing an MTFF with a timetable, approval process, and clearly defined responsibilities for each agency involved. Beyond that, a fiscal rule with a medium-term anchor and intermediate targets would further strengthen Bolivia's fiscal framework. Staff recommend adopting a public debt target of 40 percent of GDP as a medium-term anchor that would reduce debt-distress risks to low levels. Bolivia's history and relevant cross-country comparisons support this lower target (see Annex III). To meet the debt target on a sustainable basis, staff propose setting as the operational target the non-hydrocarbon primary deficit of the NFPS—an effective indicator to help absorb gas price volatility—at 4.5 percent of non-hydrocarbon GDP (for details see Annex III). Since the fiscal deficit is well above these levels, a transition period would be needed to avoid large negative fiscal impulses. The authorities should also consider introducing an expenditure ceiling that would limit procyclicality during large resource booms, thereby strengthening the framework further.

17. While similar to Fund advice in 2016–2017, the case for fiscal consolidation in the near-term is more compelling now. Imbalances have persisted, buffers have been falling, and risks to the outlook have worsened. While the authorities' plan to freeze growth in public investment will help reduce the twin deficits over time, a more definitive correction is needed now to restore external balance and stem the loss of foreign reserves. In the context of the rules-based MTFF, staff present an alternative "active" policy scenario that reduces the non-hydrocarbon primary deficit by 1.4 percent of GDP per year (0.5 percent of GDP more than in the baseline), brings down the NFPS deficit to 2.3 percent of GDP. and puts the debt-to-GDP ratio on a downward trajectory (see below). This would reduce GDP growth slightly below the baseline rate in the short term but raise it in outer years—in part a confidence effect from improved fiscal and macro sustainability.

18. This gradual adjustment would balance competing objectives and risks. The aim of meeting goals under the Patriotic Agenda would be balanced with the need for prudent debt levels. It also takes into consideration several mitigating factors: (i) that public sector deposits with the BCB are still high, at 14 percent of GDP; (ii) financing needs remain moderate at under 10 percent of GDP owing to the government's success at extending the debt stock maturity (to 20 years); and (iii) that a large share of foreign financing is secured from multilateral and bilateral lenders largely on concessional terms. Given the challenging global outlook, however, even this active scenario could be insufficient to restore sustainability and stronger adjustment efforts may be needed.

19. More generally, some steps could be taken to strengthen fiscal governance (Annex IV). Fiscal projections should be subject to independent assessment, and the main sources of risks to forecasts should be identified and clearly communicated to the public. This would strengthen accountability and budget discipline. Budget and debt projections should be based on conservative growth assumptions as excessive optimism on growth projections raises the risks of higher-than-planned deficits. The higher-than-planned revenue collection should be saved and not spent, as happened in 2017. An update to the 2009 PEFA assessment would be a very helpful contribution to identifying progress and reinforcing areas for reform.

Text Table 1. Bolivia: Baseline and Reform Scenarios

(In percent of GDP unless otherwise specified)

		Projections					
	2017	2018	2019	2020	2021	2022	2023
	PDES projections						
Overall fiscal balance	-7.3	-6.8	-3.6	0.1	…	…	…
International reserves in percent of GDP	…	…	…	19.3	…	…	…
		Baseline scenario					
GDP growth rate	4.2	4.5	4.2	3.9	3.8	3.7	3.7
Overall fiscal balance	-7.8	-7.4	-6.3	-5.7	-5.1	-4.3	-3.8
Overall primary balance	-6.7	-6.4	-4.9	-4.1	-3.4	-2.7	-2.2
Non-hydrocarbon primary balance	-10.6	-11.5	-10.3	-8.9	-7.9	-6.8	-6.0
Public debt	51.1	53.5	54.6	54.6	54.7	54.7	54.4
Net public debt	35.3	39.6	43.0	45.6	47.4	48.2	48.3
International reserves in months of imports	10.5	8.3	7.4	6.5	5.5	4.5	3.8
International reserves in percent of GDP	27.1	21.1	18.6	16.4	13.7	11.2	9.3
		Active scenario					
GDP growth rate	4.2	4.5	4.0	3.7	3.8	3.8	3.9
Overall fiscal balance	-7.8	-7.4	-6.0	-5.1	-4.2	-3.1	-2.3
Overall primary balance	-6.7	-6.4	-4.6	-3.5	-2.6	-1.5	-0.8
Non-hydrocarbon primary balance	-10.6	-11.5	-10.0	-8.3	-7.1	-5.8	-4.7
Public debt	51.1	53.5	54.4	54.0	53.3	52.3	50.6
Net public debt	35.3	39.6	42.8	45.0	46.0	45.7	44.5
International reserves in months of imports	10.5	8.3	7.7	7.5	7.1	6.8	6.9
International reserves in percent of GDP	27.1	21.1	19.5	18.6	17.4	16.6	16.5

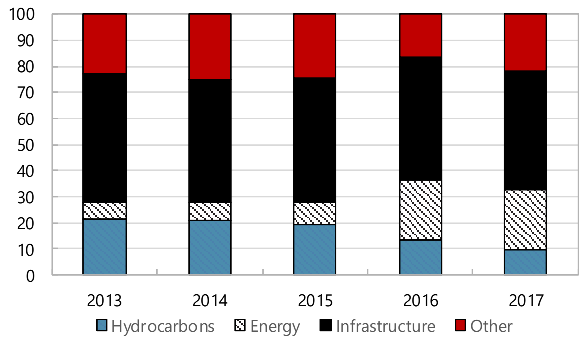
Sources: Bolivian authorities; and IMF staff estimates.

Key Fiscal Measures

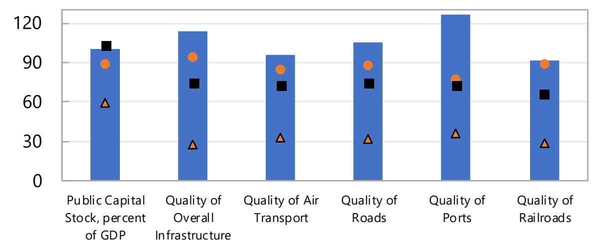
20. As recommended in 2017, fiscal adjustment should come more from the spending side. The large increase in expenditures since 2006 is due mostly to increases in capital spending, wages, and transfers. Staff recommend to:

- **Streamline public investment.** Growth in capital spending has decelerated in recent years but is still among the highest in the world at 13.6 percent of GDP. Moreover, the efficiency of public investment was found to be relatively low (Country Report 17/395), in part because of weaknesses in central-local government coordination, lack of a competitive domestic infrastructure market, and shortcomings in project management. Together these suggest scope to streamline capital spending while increasing its efficiency, without adverse effects on long-term growth.[4] This would involve directing resources towards priority areas, including where Bolivia lags peer countries in terms of outcomes, such as health indicators.

[4] Working paper on investment, growth and debt—DIG model (forthcoming) and Annex III, Country Report 17/395.



Sources: Authorities' data; and Fund staff estimates.



Sources: IMF FAD Expenditure Assessment Tool, World Economic Forum, World Development Indicators, IMF Investment and Capital Stock Dataset, World Economic Forum, Authorities/ data, and Fund Staff Estimates.
1/ Lower values represent best outcomes.

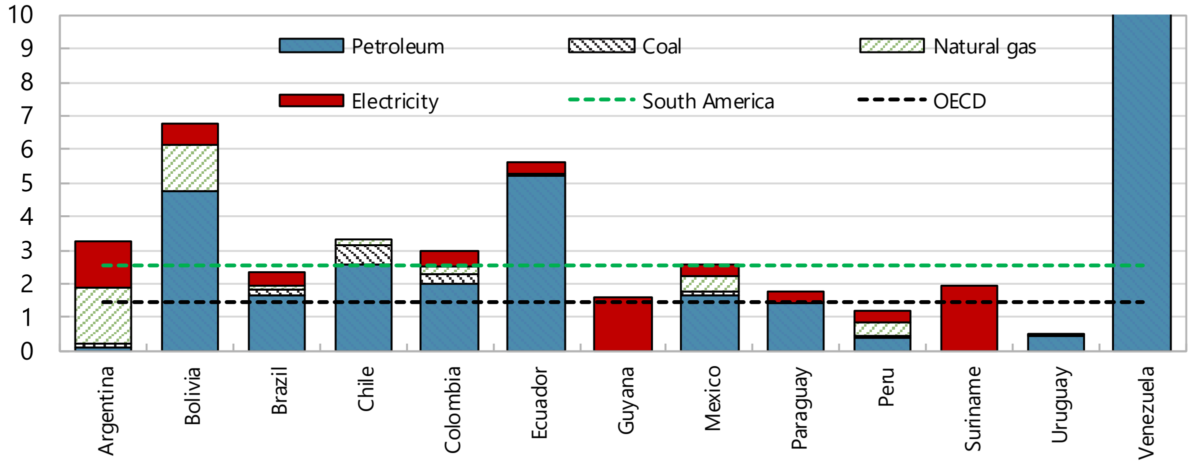
- **Gradually reduce the wage bill as a percent of GDP.** The wage bill of the NFPS increased by about 4.0 percent of GDP from 2006–2015. It dipped in 2016–2017 because of non-payment of *Doble Aguinaldo* but remains higher than the regional average and is expected to rise in 2018 with return of *Aguinaldo* (see ¶32). Reform measures should tackle both employment and compensation and benefits_with the aim of lowering the wage bill as a share of GDP by more than is assumed in the baseline scenario (Table 3). Natural attrition could be used to reduce the headcount which could raise efficiency if combined with active resource reallocation and training.

- **Consider reform of the public-sector wage bill.** In the medium term, the government could undertake a comprehensive reform to ensure a sustainable wage bill aligned with incentives to strengthen the efficiency and effectiveness of the public service. Structural measures would include a functional review, payroll audit, and linking pay to performance and other objective criteria like inflation and market comparators, among other things. This should start with consideration about the size of public sector employment as a function of the quality and quantity of public goods and services desired in Bolivia and be conducted in the context of reform of the broader labor market (Section F).[5] The Fund stands ready to provide technical assistance to help strengthen public sector wage bill management.

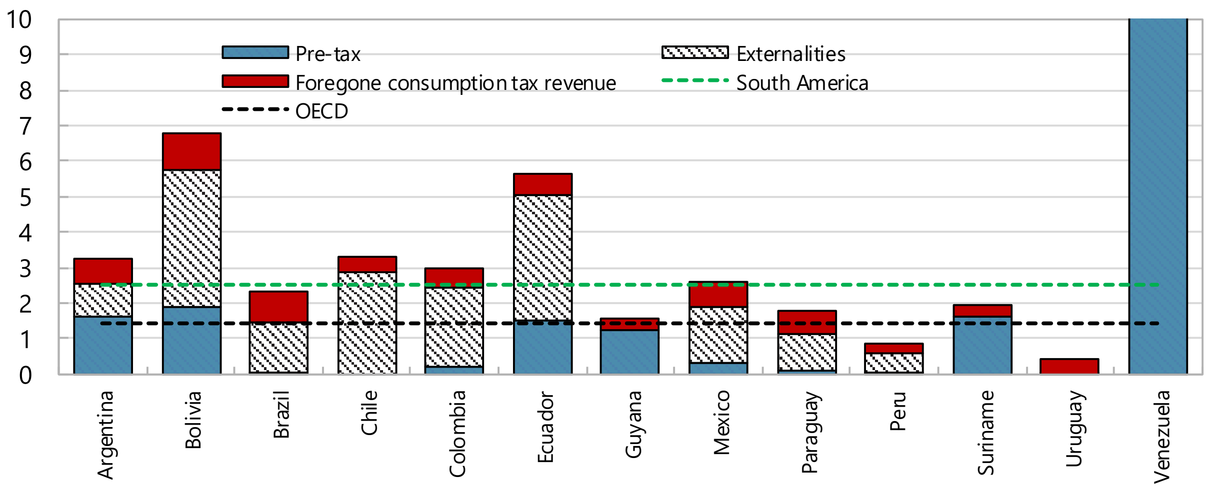
- **Reconsider spending on universal subsidies.** Depending on oil prices, total energy subsidies 'before' and 'after tax' were estimated to range from 2-7 percent of GDP (IMF, 2015; WP/15/30, 2015). Staff welcome the recent increases in energy prices and recommend phasing out energy subsidies and offsetting the adverse effect on the vulnerable with well-targeted social safety measures (chart, Section F).

[5] See IMF (2016), "Managing Government Compensation and Employment-Institutions, Policies, and Reform Challenges".

Energy Subsidies by Product, in percent of GDP, Latest Value Available 1/



Energy Subsidies by Component, in percent of GDP, Latest Value Available 1/



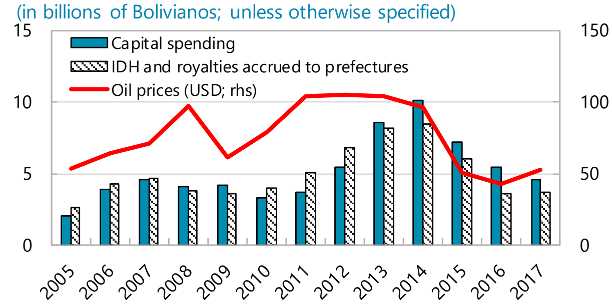
Sources: IMF FAD Expenditure Assessment Tool, IMF Energy Subsidy Estimates.
1/ Dashlines are the median for countries in the region.

- **Explore select revenue measures.** Staff recommend**:** (i) introducing a progressive personal income tax to replace the existing VAT complementary system; (ii) reforming the tax system for hydrocarbon and mineral extraction sectors to incentivize exploration activities (see below); and (iii) strengthening "own-revenues" of local governments. A full-fledged PIT could raise additional revenues of around 1.0 percent of GDP and improve the equity and efficiency of the tax system. A transparent and incentive-compatible tax system for extractive sectors may reduce revenues in the short term but would motivate discovery of more gas reserves and thus generate revenues over the longer term.

21. The financial health of SOEs needs close attention and stronger oversight. Investment by SOEs has risen rapidly under the *PDES*, of which about half is carried out by their subsidiaries and not included in the accounts of the NFPS. To manage associated fiscal and governance risks, all SOEs and subsidiaries should be included in the fiscal accounts and subject to regular public audits. Ongoing work with Fund staff to compile fiscal data in line with GFSM 2014 presents a prime opportunity to address this. Staff also recommend that energy inputs for SOE operations be based on market prices and quasi-fiscal activities of SOEs phased out. The authorities should consider: (i) reforming the legislative framework governing SOEs to increase accountability and transparency; (ii) clarifying the responsibilities of key decision-making bodies and agencies for regulatory and fiscal oversight functions; (iii) strengthening corporate governance arrangements; (iv) improving the budget approval process and budget oversight; and (v) strengthening the investment planning and project management procedures of SOEs (see ¶36, Annex IV).

22. Fiscal federalism arrangements in Bolivia could be improved. The ability of local governments to raise revenues independently and broaden their tax base is constrained under the current system. Some local governments rely heavily on hydrocarbon revenues, which exposes their finances to volatility in gas revenues (chart). Staff recommend: (i) improving coordination at the stage of project evaluation and adoption, with clear spending responsibilities; (ii) allowing local governments to raise revenues independently (e.g., property taxes); and (iii) linking federal transfers to local governments more to criteria other than hydrocarbon revenues such as population size, infrastructure needs, and human development indicators.

Prefectures' Hydrocarbon Revenues and Investments
(in billions of Bolivianos; unless otherwise specified)



Sources: Authorities' data; and Fund staff estimates.

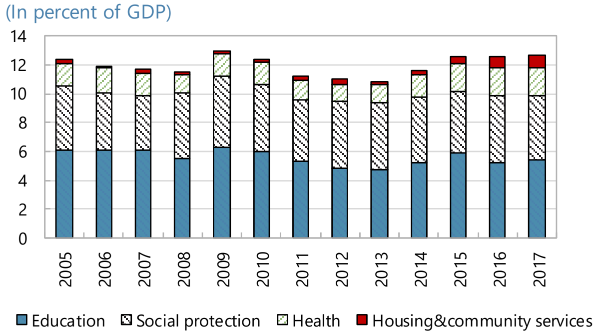
C. Social Policies—An Updated Strategy

23. Bolivia has greatly improved social indicators since the mid-2000s, though progress has leveled off in recent years. Between 2006–17, social spending (in nominal terms) increased by about 10 percent annually, with transfers to the elderly, women, and children benefiting more than half of the population. In addition, access to potable water, electricity, education, and health services has greatly increased. While Bolivia does not strive to meet the UN's Sustainable Development Goals (SDGs), the Patriotic Agenda includes many of them (Table 7). Combined with large increases in the minimum wage, the poverty ratio declined from 61 percent in 2005 to 36 percent in 2017. Extreme poverty declined from 38 percent to 17 percent over the same period, although improvements stalled after 2014. Most of the reduction in poverty and inequality before 2014 was attributed to a declining skills premium (IMF 2014).

24. The model of past success was based on factors that are not sustainable, pointing to the need for an updated strategy. Relying on natural resource windfall revenues to fund social programs should be reconsidered given the outlook for gas and minerals prices over the medium-term. The second factor—economy-wide wage growth above productivity—would further damage

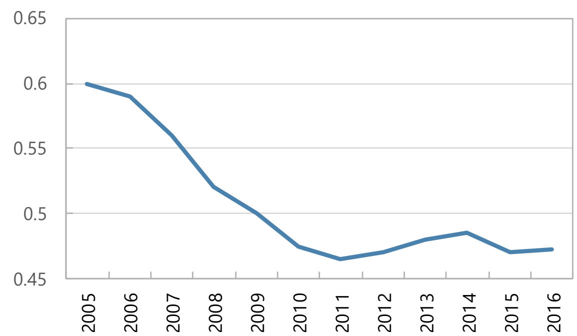
Bolivia's international competitiveness (Section E) and raise macro sustainability concerns. A large share of total social spending (3.7 percent of GDP) accrues to the non-poor even though Bolivia is operating in a context of fiscal constraints. For example, gasoline prices are among the lowest in the world but over 60 percent of fuel subsidies accrue to the non-poor (World Bank 2015). According to the Bank, unrestricted access to tertiary education and the absence of income tax, together with fuel subsidies, mostly benefit higher income groups and make overall fiscal policy regressive. Fund analysis (Country Report 16/387, Box 3) found significant inefficiencies in social spending related to: (a) capacity-based financing systems that limit providers' incentives to manage costs and quality; (b) insufficient coordination among different levels of government; and (c) failure to target most benefits.

Bolivia: Social spending
(In percent of GDP)



Sources: Memoria de la Economia Boliviana 2017.

Bolivia: Gini index



Sources: Memoria de la Economia Boliviana 2017.

25. Accordingly, staff recommend improving the effectiveness and focus of social spending. With poverty rates remaining high and the still sizeable informal economy making it difficult to verify income and means (¶33), reforms should be implemented gradually while social safety nets are strengthened. Similar to 2017, staff propose: (i) introducing progressive fees for higher-income users of some goods and services; (ii) enhancing targeted assistance to the most vulnerable groups; (iii) phasing out energy subsidies; (iv) enhancing competition among providers of social services; and (v) launching an information system for beneficiaries of social programs.

D. Monetary Policy: Simplify and Tighten as Needed

26. The BCB should focus its objectives on price stability and preserving the nominal exchange rate anchor. According to BCB policy, inflation is anchored on quantitative targets, mainly the growth rate of central bank net domestic credit, set in a monetary program in conjunction with the overall fiscal balance target and net credit to the public sector. That said, the BCB has strived to support growth by promoting strong credit growth and lending directly to SOEs. While inflation pressures remain moderate, owing in part to lower import and administered prices (including via supply management), this accommodative monetary policy has contributed to pressure on international reserves. Going forward, administered prices should be reformed to reflect market forces and the BCB should normalize monetary conditions as inflation pressures return. This could obviate the need for regulation limiting the amount of investment abroad by insurance companies—a capital flow management measure under the Fund's Institutional View.[6] Total investments of the insurance sector represent only 1.8 percent of GDP (2017) and the ceiling is not binding at present as assets abroad are well below the ceiling of 10 percent of resources for investment. With Fund TA focusing on early warning indicators in the insurance sector expected soon, staff believe the measure could be maintained for now and reassessed as the supervision capacity of the insurance sector strengthens.

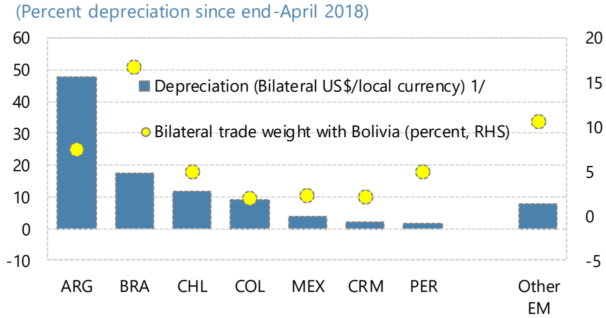
27. Stronger central bank independence would be good for Bolivia. Continued lending to SOEs exposes the BCB to significant credit risks. At negative real interest rates, this creates 'soft' budget constraints which fuel domestic demand (Kornai, 1992) and create fiscal risks to the state. It also undermines the credibility of monetary policy and poses conflicts of interest in the regular conduct of monetary policy. For example, the central bank may not take a needed policy decision if it could negatively affect loan quality of a particular SOE. Public investment by SOEs should be funded by the financial sector or directly from the government's budget. The new Central Bank law presents an opportunity to improve the legislative framework for monetary policy and central bank governance.

E. Reforms Needed to Raise Competitiveness

28. External competitiveness has been battered recently after several years of already challenging conditions. High real wage increases under the stabilized exchange rate and a sizeable appreciation in the real exchange rate from 2011– 16 have been compounded this year by the large depreciations in regional currencies. In addition, controls on domestic prices, trade barriers, and a high tax burden on companies in the extractive sectors have hindered private investment, productivity growth, and export diversification.

29. The real exchange rate resumed an upward (appreciating) path in 2018 (Annex II). After stabilizing in 2017, the real effective exchange rate has appreciated by 9.5 percent during 2018. The Fund's External Balance Assessment finds that Bolivia's external position is substantially weaker than implied by fundamentals and desirable policy settings. While some real appreciation since the

Bilateral Exchange Rate Depreciation Against US dollar
(Percent depreciation since end-April 2018)



Source: Authorities' data; INS database; and Fund staff estimates.
1/ Positive sign indicates depreciation of the local currency.

EBA-Lite Methodologies:
Summary Results for Exchange Rate Assessment 1/

	Percent of GDP			
	Current account norm	Current account balance 2/	Gap	REER 3/
Current Account	0.5	-4.8	-5.2	26.3
REER	…	…	…	32.8
External Stability				
Scenario 1: Stabilize 2017 NFA level	-0.8	-4.4	-3.6	18.5

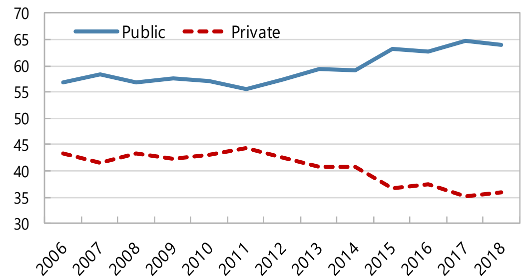
Source: Fund staff estimates.
1/ Based on data for 2017 and Staff projections for 2018. Regressions use sample restricted to WEO fuel exporters.
2/ For the current account approach, the current account corresponds to the projection for 2018. For the external sustainability approaches, the value corresponds to the projection for 2023.
3/ A positive number indicates overvaluation.

6 The regulation was introduced in 1998. The most recent change to the regulation (2015) lowered the maximum limit from 30 percent to 10 percent of total resources for investment.

early 2000s would be consistent with higher wage and productivity growth associated with the path of economic development (Balassa-Samuelson), Fund staff estimates suggest a substantial overvaluation of the exchange rate relative to its long run equilibrium level. Other vulnerabilities arise from the large combined share of minerals and hydrocarbons exports, which rose from about 50 percent of total exports in 2003 to 78 percent in 2017, and heavy reliance on two gas export markets—Argentina and Brazil. The increase in Bolivia's share of world exports has been largely driven by commodity price movements but its share has shown little change in volume terms.

30. The climate for doing business is problematic. National and foreign private investment has been low. Investors cite impediments to investment that include market restrictions and a burdensome and uneven regulatory framework for business (Section F), as described in various international business surveys. The recent adoption of the vaguely-worded law on "social companies," which allows a takeover by employees of companies in "difficulty," has added to concerns of private sector representatives about the security of assets.

Share of total investment
(In percent)



Sources: Authorities' data; and Fund Staff Estimates.

31. Continued commitment to the stabilized exchange rate makes the need for structural reforms even more critical. Staff emphasized that policy adjustment and the implementation of structural reforms were needed to limit further buildup in vulnerabilities and promote broad-based growth. While structural reforms will be necessary regardless, introducing greater exchange rate flexibility could facilitate efforts to restore competitiveness and promote diversification, ease the process of fiscal adjustment, and reduce the negative impact of future external shocks. In contrast, relying on internal devaluation would require lowering or containing wages and compressing demand.[7]

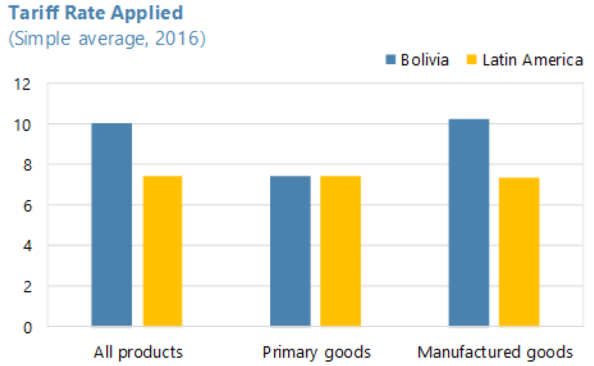
32. In the current context, early structural reform efforts should focus on ways to unleash private investment. Reforms should be balanced against costs, feasibility, and short and medium-term impact, with the following measures expected to have the highest benefit-to-cost ratio:[8]

i. **Trade reform and market entry.** Under Bolivian law, some imports are regulated with quotas or licensing restrictions (WTO, 2017) to ensure sufficient supply to meet local demand. Restrictions on some export products were lifted in late 2017, which helped boost exports without discernible adverse effects on the domestic market. Staff welcomed this step and urged the authorities to phase out remaining controls and consider alternative methods to ensure sufficient domestic

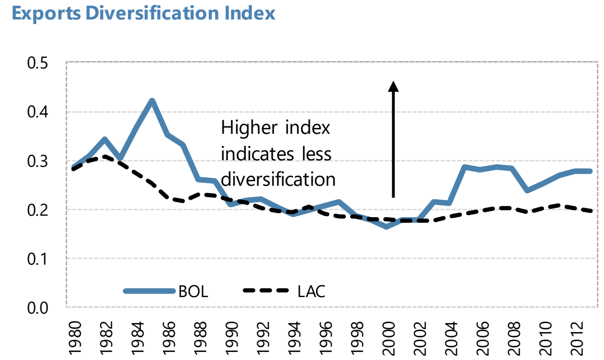
[7] See Ötker-Robe, Inci, David Vavra, *et al*, 2007; IMF OP 256 (IMF); and WHD REO, 2017.

[8] Successful labor and product market reforms could boost long-term growth by about ¼ percentage point each through higher participation rates and total factor productivity (Annex III, Country Report 17/395).

supply. Tariffs on manufactured goods in Bolivia are much higher than in countries across the region (see SIP), stifling investment and the spread of technological advances. Staff recommended lowering trade barriers and easing restrictions on foreign ownership to encourage regimes are robustly associated with export diversification in developing countries.[9]



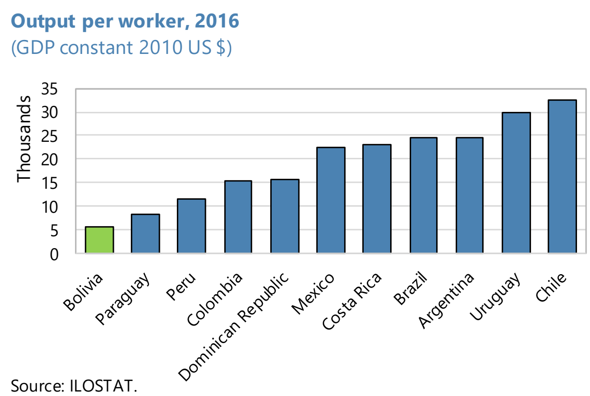
Sources: WITS/UNCTAD.



Sources: Haver Analytics; and Fund Staff Estimates.

ii. **Product markets**. Staff urged the authorities to reduce controls on domestic prices and offset the adverse impact on the most vulnerable with direct transfers and social benefits.

iii. **Labor markets and wage setting.** The annual wage increase is negotiated every year in private between the government and the main labor union. The rate agreed is applied economy-wide, with some exemptions for public sector entities. The payment this year of the second *Aguinaldo* will contribute to nominal wage growth of 13 percent—a real wage increase of about 10 percent—which is not consistent with a stabilized exchange rate nor with efforts to promote competitiveness or diversification. In terms of regulations, the Labor Code dates from 1942 and employment practices are reported to be a key impediment to doing business (Global Competitiveness Report, 2016–17). Staff recommend:



Source: ILOSTAT.

a. discontinuing the practice of centralized wage setting and indexing national bonuses to the "GDP growth" rate, a blunt benchmark unrelated to criteria that should determine wage increases and which gives rise to excessive politicization of GDP statistics;

b. establishing rational criteria for determining wage increases such as inflation or cost of living adjustments, productivity, and market comparators;

[9] See "Trade Costs, Barriers to Entry, and Export Diversification in Developing Countries" (World Bank, 2007).

c. adopting a modern labor code that guarantees strong workers' rights and benefits but removes the government from the wage and employment decisions of private firms; and

d. canceling or amending the "social companies law" and associated regulations in a way that addresses private sector concerns over the security of assets or property.

iv. **Taxation and investment codes.** Bolivia's attractiveness as an investment location for mining was assessed to be very weak. Hydrocarbon operators raised concerns also about the reliability and transparency of contract terms over time, an element of uncertainty that could discourage investment. To raise investor interest and boost investment, Bolivia could consider simplifying the applicable royalty rate bracket structure; replacing current surtaxes with simpler progressive resource rent taxes; adding an accelerated depreciation scheme for development expenditure; removing the domestic fuel subsidy; and implementing best international practices on mergers and acquisitions and overall transparency.

F. Governance and Efficiency to Bring Activity into the Formal Sector

33. Moving households and business into the formal economy would help advance sustained growth and social progress. As returns from the commodity super cycle and public investment booms diminish, other sources of growth will be needed to advance socio-economic progress. Recent analysis found that Bolivia experienced a large reduction in informality from 65 to 46 percent between 2005–2015 (IMF 2018). To build on this important progress, staff propose focusing efforts on two broad themes: creating a more business-friendly environment and strengthening institutions and governance.

34. Much could be done to improve the business climate (Figure 7). The government has taken some positive steps, such as launching a "de-bureaucratization" Law and plans to reduce red tape and convert systems to electronic, web-based methods to raise efficiency. Staff studied the World Bank Doing Business (DB) report on Bolivia to gain a deeper understanding of the issues to better inform our macro-structural diagnosis and policy advice. After consulting with the authorities, survey respondents, and the World Bank, staff identified a number of priority reforms that should be easier to implement, including: (i) changing regulations and digital processes to enable the filing of taxes and all payments online, and possibly reducing the frequency of tax payments (VAT, social security contributions, the transaction tax) in some instances; (ii) allowing broader VAT refunds; and (iii) modernizing the technology and methods used to obtain a business license, get a company deed, and register employees with the national health insurance/pension system. Subsequent reforms could include implementing regulations to enhance investor protections, withdrawing the recent Law of Creation of Social Enterprises, and revising building laws to match international standards (see SIP).

35. Improving governance would also help boost investment and promote inclusion into the formal economy. Governance weaknesses have adverse effects on growth and equality (IMF 2018). Bolivia faces various governance challenges, some of which are understood to enable corruption, including the burden of inefficient and cumbersome regulations which "constrain firms' operations as they present opportunities for soliciting bribes" (World Bank, 2017). In addition, "interactions with certain public bodies such as the tax authority and the customs or the judiciary are often associated with facilitation payments to accelerate bureaucratic procedures" (U4 Overview, Transparency International, 2012). Reform of the judiciary system is a long-term imperative, as noted by the government at the 2016 Summit on National Justice.

36. Staff recognized the efforts underway to combat corruption and identified other areas warranting attention. Over the past decade, the government has enacted an anti-corruption (2010) and witness protection law (2013), merged the Transparency Ministry with Justice, and decentralized the approach by installing an anticorruption unit in each public-sector entity. They also plan to transfer the Real Estate Office to the Ministry of Justice, which should help create a national registry. In line with the Framework for Enhanced Fund Engagement on governance, staff identified a number of areas warranting attention (see Annex IV).[10] Priorities could focus on moving toward digital methods for tax and business-related procedures (¶34), improving the legislative framework governing SOEs and SOE oversight, strengthening the planning and implementation of public investment, including with a full PIMA assessment, submitting financial statements of public entities to independent auditors, and eliminating manual procedures on the Treasury Single Account. Staff believe that a new PEFA mission for the central government would be a valuable follow-up to the 2009 report. Staff also encourage strengthening the AML/CFT framework ahead of the 2020 GAFILAT assessment. In the extractive sectors, the authorities were receptive to the recommendation to adopt standards under the Extractive Industries Transparency Initiative (EITI).

G. Financial Stability and Financial Inclusion

37. The FSL has induced rapid credit growth and may be adversely affecting financial inclusion (Annex V). The imposition of credit quotas and interest rate ceilings may have hindered the assessment of credit risks. While NPLs remain low compared to the region, this could also reflect the high rates of credit growth. The share of restructured loans rose from 1.2 percent in 2014 to 2.4 percent in June 2018, and bank profitability is declining. In addition, the FSL may be inadvertently hurting financial inclusion as available data suggest that the number of small loans decreased by 10 percent between September 2014 and June 2018 while loan amounts increased. International experience suggests that lending caps tend to reduce financial intermediation, lead to less transparency, and raise risks to financial stability, including by hurting the viability of small and medium-sized banks.[11]

38. While the banking sector remains broadly stable, updated bank stress test results confirm trends noted in 2017:

[10] Review of 1997 Guidance Note on Governance—A Proposed Framework for Enhanced Fund Engagement, 2018.

[11] See IMF, SM/18/132 and Jafarov *et al*, 2018 (forthcoming).

a. **Credit risk**: about one half (most) of banks would need to raise capital to meet regulatory requirements in the event the NPL ratio doubled (quadrupled) from current levels. Potential losses would be large for some banks but in aggregate would remain manageable (at 0.1 and 0.9 percent of GDP, respectively).

b. **Liquidity risk:** While liquidity at the system level has improved from a year ago, estimations under an extreme scenario—the largest deposit withdrawal rates observed in recent years happen at all banks simultaneously—suggest that many banks would struggle to cover liquidity needs.

c. **Exchange rate risk:** Direct exchange rate risks are limited, reflecting low dollarization ratios and net foreign asset positions of banks.

Sources: Authorities' data; and IMF staff calculations

39. Accordingly, key provisions of the FSL should be amended. Credit quotas should be relaxed to limit poor-quality credit growth. Interest caps should also be removed so that lending decisions better reflect intrinsic risks. This would remove distortions in the allocation of credit and support desirable allocation of resources in support of growth. ASFI is urged to monitor closely capital quality for its ability to absorb potential shocks and to scrutinize possible risks arising from rapid credit growth to housing. In this context, the Fund welcomes the opportunity to assist the authorities to prepare a real estate price index and urges rapid progress.

40. Efforts to make the supervisory and regulatory framework more risk-based and forward-looking should continue. Specific measures could include: (i) implementing full-fledged stress tests; (ii) introducing capital surcharges for operational and market risks; and (iii) adopting a review and evaluation process that considers the financial institution's risk profile, risk mitigating techniques, and capital planning. The authorities are also encouraged to keep moving forward to strength their AML/CFT framework, including by adopting the National Strategy on AML/CFT and any relevant laws and regulations facilitating its implementation, particularly ahead of their 2020 assessment by GAFILAT. Staff believe that an FSAP Update would also be extremely useful for Bolivia.

H. Data Issues

41. Efforts are needed to ensure that data availability in Bolivia remains strong. While the quality and quantity of macroeconomic data in Bolivia are generally sound, data should be published on a timelier basis according to a pre-announced schedule. Staff encourage the authorities to resume regular and timely publication of indicators that, until recently, been released on a monthly or quarterly basis, including shipments of natural gas, monthly hydrocarbon production, YPFB statistics, fiscal revenues by tax, the monthly production index (IGAE), public investment data, and more timely dissemination of fiscal data. The activities of subsidiaries of SOEs should be included in the accounts of the NFPS, and government-issued US dollar bonds held by residents should be recorded as domestic debt (Table 4, FN 1). Staff also encourage the government to release the recent certificate on gas reserves to the public. Staff welcome the government's plan to adopt one of the Fund's Data Dissemination Standards and encourage them to commit as soon as possible. This would greatly enhance data transparency in Bolivia.

AUTHORITIES' VIEWS

42. The authorities expect strong growth to continue. Together with new hydrocarbon exploration and a projected increase in natural gas production, they also expect a positive growth impact from the production and substitution of ethanol for imported fuel—an environmental friendly investment that has already resulted in an increase in sugar cultivation. The authorities emphasized that fiscal and external current account deficits were mainly caused by large public investments that will raise productive capacity and benefit future generations.

43. The government intends to hold public investment at current levels in nominal terms. They noted that large investments had greatly improved economic and social indicators and there was no need for large increases in the medium term. As mega projects unwind, they indicated that new capital spending would focus on urban development, infrastructure, and youth programs. This was expected to help lower imports given the high import content of mega capital projects.

44. They expect the current account balance to improve in the near term and the fiscal deficit to decline gradually. The moderation in public investment and associated slowdown in imports would coincide with a steady rise in mineral and natural gas exports. They use a different methodology than the Fund to calculate the real effective exchange rate and estimate exchange rate misalignment at much lower levels than Fund staff. They expect significant new revenues from the execution of projects in the PDES, obviating the need for near-term fiscal and external adjustment, beyond that already envisaged. They also emphasized their use of a conservative oil price assumption ($45 per barrel in 2018) in annual budget preparations.

45. The authorities continue to believe in the development role of the BCB. They explained that the return on BCB loans to SOEs is higher than those derived from alternative financial assets, and that financial institutions in Bolivia tend to lend in a procyclical manner, which had led to problems in the past. They also indicated that banks would not likely fund investment projects when commodity prices are low. With respect to credit risks, the authorities emphasized that most BCB loans were guaranteed by the central government. They believe that the central bank should play an important development role and that direct lending to public corporations will remain an important financing source for public investment.

46. The government believes firmly that credit growth under the FSL has improved financial intermediation. The authorities emphasized that banks remained profitable, NPLs were still the lowest in the region, credit was flowing to productive sectors, and in their view, credit quotas had helped to diversify the economy and facilitate financial deepening. In any event, credit growth has been moderating and would not be excessive in the future since banks are set to meet the targets this year. The interest rate celling and the quotas may be revised given developments in the market, but they would be maintained.

47. The authorities emphasized their achievements at reducing poverty and inequality, arguing against any fundamental change. Past social policies had achieved considerable success in reducing inequality and improving social indicators. The authorities argued that phasing out universal subsidies totally might lead to exclusion of some groups. However, they have moved to reduce some energy subsidies and are building a database on all beneficiaries that would be helpful to better target future programs.

48. The authorities have been making efforts to enhance the private sector's contribution to growth. To attract more foreign investment, the authorities are setting up a website portal to provide easier access to information providing tax incentives in the mining and manufacturing sectors. They launched a national plan to reduce bureaucracy and lower corruption, taken steps to digitalize business processes, and made progress to modernize systems for importing and exporting (Annex IV, SIP forthcoming). The authorities are also working to encourage public-private partnership (PPP) to implement infrastructure projects and intend to begin work on a new labor Code.

STAFF APPRAISAL

49. After years of impressive economic and social progress, Bolivia faces a more challenging environment. The authorities have succeeded at sustaining strong GDP growth since the commodity price drop in 2014, but the trade-offs have been large twin deficits, foreign reserve losses, and a sharp increase in public debt. Staff assess that the external position is weaker than implied by fundamentals and desirable policy settings. These vulnerabilities are aggravated by a worsening in both external and domestic risks.

50. The current commodity price outlook is a permanent shock that warrants a rebalancing of policies. Staff welcome the authorities' plan to restrain public investment which would slow the increase in public debt over time. However, a more definitive policy correction is needed in the short term to stem the decline in reserves and erosion of fiscal buffers. In general, a tightening in the overall macro policy stance and reallocation of social spending are needed to anchor stability, raise confidence, and preserve gains in social progress. At the same time, a concerted focus on select structural reforms would help shift Bolivia to a broader, more diversified growth model.

51. A clear medium-term fiscal framework would help guide the needed fiscal consolidation. Staff recommend implementing a full-fledged MTFF elaborated with a fiscal rule. Under this rules-based MTFF, staff propose reducing the non-hydrocarbon primary deficit by about 1.4 percent of GDP per year so as to arrest the growth in debt-to-GDP by 2023. Most of the fiscal tightening should come from the spending side, namely containing growth in the wage bill and public investment. Given a tighter fiscal envelope, it will be essential to ensure that social spending is directed at those segments of society most in need, including by introducing progressive fees for high-income earners on some universal benefits and phasing out broad-based fuel price subsidies. The latter should be well planned and communicated and follow only after alternative means are developed to support the most vulnerable groups.

52. Staff recommend strengthening the independence of the central bank and streamlining policy objectives. Monetary policy should focus on price stability and preservation of the nominal exchange rate anchor. Remaining administered prices should be reformed to reflect markets forces and monetary conditions normalized when inflation pressures resume. The BCB's exposure to SOEs exposes it to important credit risks and could undermine the conduct of monetary policy. Public investment should be undertaken by the central government or funded by the financial sector.

53. Some provisions of the FSL should be modified and efforts to improve financial sector supervision continued. Early signs of credit quality deterioration have emerged, with NPLs and the share of restructured loans increasing. Staff recommend removing credit quotas and interest rate caps so that lending decisions better reflect risks and returns and limit the build-up of systemic risks. The authorities are encouraged to continue work to improve the supervisory and regulatory framework, including implementing full-fledged bank stress tests, introducing capital surcharges for operational and market risks, and strengthening the AML/CFT framework ahead of the 2020 assessment by GAFILAT.

54. Accelerating structural reforms would help shift Bolivia's growth model more toward private sector-led investment and export diversification. First, lowering tariffs on manufacturing goods and freeing up remaining product markets would help energize supply side forces. Second, the practice of indexing national wage bonuses to the GDP growth rate should be discontinued and wage growth aligned with relevant criteria such as cost of living adjustments and productivity. Third, the authorities should consider reducing the government's take in the hydrocarbon and mineral sectors in a transparent manner that avoids introducing discretionary tax incentives, canceling the Social Companies Law, and implementing measures to improve the business climate and reduce vulnerabilities that could enable corruption, including implementing digital processes to enable the filing of taxes and payments online (VAT, social security contributions, transaction tax) and moving toward digital methods for business-related procedures.

55. Data provision is broadly adequate for surveillance, but efforts are needed to address recent weaknesses. The policy of indexing the national wage bonus (*Aguinaldo*) to the rate of GDP growth risks politicizing the release of national accounts statistics and could affect confidence in the integrity of official statistics. Staff urge the authorities to discontinue this practice and to resume regular and timely publication of data on shipments of natural gas, monthly hydrocarbon production, YPFB statistics, the monthly production index (IGAE), tax revenues, public investment data, and monetary data on Other Financial Corporations. Staff encourage Bolivia to subscribe to the e-GDDS or the SDDS, which would address most of these issues and greatly enhance data transparency in Bolivia.

56. It is proposed that the next Article IV consultation with Bolivia be held on the standard 12-month cycle.

Table 1. Bolivia: Past Fund Policy Recommendations

Recommendations	Status
Enhancing the Fiscal policy framework	
Improve the non-hydrocarbons balance	*Partially implemented.* The non-hydrocarbons deficit was reduced in 2016, but increased thereafter, and remains at high levels.
Adopt a medium-term fiscal framework	*In progress.* The authorities plan to create a Macro-Fiscal Unit at the Ministry of Finance to produce fiscal projections, and local governments and public enterprises prepare multi-year budgets. The authorities use conservative oil price assumptions in their budget projections, but did not save higher revenues in 2017 when actual prices exceeded the price assumed in the budget law.
Improving Monetary and Exchange Rate Policies	
Discontinue central bank lending to SOEs	*Not implemented.* Central bank lending to public corporations has continued.
Safeguarding Financial Stability	
Continue strengthening supervision	*In progress.* Credit registry coverage was expanded and the depositor protection fund was created. Regulatory requirements were strengthened, including through increasing the primary capital requirement (from 5 percent to 7 percent of risk-weighted assets and contingencies), and issuing guidance on operational and interest risks. The Financial Stability Council met for the first time in August 2015. In 2017-18, the authorities received IMF TA focusing on strengthening bank supervision and regulation, macro-prudential supervision, and bank stress testing. The authorities have prepared an AML/CFT national strategy, but it has stalled in the parliament.
Modify interest rate caps and credit quotas.	*Limited progress.* Financial insitutions have been given five years to comply, with intermediate annual targets to guide the progress. The July 2015 decree watered down the meaning of productive sectors by allowing tourism and intellectual property-related loans to be included, and some loans given to "nonproductive" sectors for productive purposes can now be classified as “productive.” Nevertheless, small lenders are experiencing difficulties in meeting the targets.
Increasing Potential Growth	
Implement key structural reforms in the labor and product markets, and improve incentives for hydrocarbon and mining exploration.	*Some progress.* The authorities increased gas prices for industrial users, increased electricity prices depending on the amount used, and abolished some key restrictions on exports in 2017-18. They approved a hydrocarbon incentives law in December 2015, which provides incentives for crude oil and condensates production (on a dollar per barrel of production basis). While likely to stimulate production from existing fields, the law falls short regarding making exploration investments substantially more attractive. Government introduced in August 2017 the "ultra efficient" exploration plan that aims to promote reduction of exploration period by prioritization of projects in the face of oil price fall.

Source: Fund staff.

1/ The authorities did not agree with most of these recommendations.

Table 2. Bolivia: Selected Economic and Financial Indicators

		Prel.	Baseline projections					
	2016	2017	2018	2019	2020	2021	2022	2023
Income and prices	(Annual percentage changes)							
Real GDP	4.3	4.2	4.5	4.2	3.9	3.8	3.7	3.7
Nominal GDP	3.6	11.1	9.8	7.8	7.8	7.8	8.1	8.3
CPI inflation (period average)	3.6	2.8	2.8	4.0	4.0	4.0	4.3	4.5
	(In percent of GDP, unless otherwise indicated)							
Investment and savings 1/								
Total investment	21.1	22.2	22.0	20.6	19.2	17.9	16.8	16.0
Of which: Public sector	13.0	13.7	13.3	12.4	11.6	10.9	10.2	9.4
Gross national savings	15.1	16.0	16.3	15.0	13.8	12.5	11.3	10.7
Of which: Public sector	5.7	5.9	5.9	6.1	6.0	5.8	5.8	5.6
Combined public sector								
Revenues and grants	32.8	30.7	31.3	31.9	31.6	31.2	30.8	30.3
Of which: Hydrocarbon related revenue	5.1	4.8	5.7	6.3	5.9	5.5	5.2	4.8
Expenditure	40.0	38.5	38.8	38.2	37.2	36.3	35.2	34.1
Current	25.3	24.9	25.8	26.0	25.9	25.6	25.3	24.9
Capital 2/	14.7	13.6	13.0	12.2	11.4	10.6	9.9	9.2
Net lending/borrowing (overall balance)	-7.3	-7.8	-7.4	-6.3	-5.7	-5.1	-4.3	-3.8
Of which: Non-hydrocarbon balance	-10.9	-11.7	-12.6	-11.7	-10.5	-9.6	-8.5	-7.6
Total gross NFPS debt 3/	46.6	51.1	53.5	54.6	54.6	54.7	54.7	54.4
NFPS deposits	16.1	14.0	11.5	9.4	6.9	5.4	4.8	4.4
External sector								
Current account 1/	-5.7	-5.3	-4.8	-4.6	-4.5	-4.5	-4.6	-4.4
Exports of goods and services	24.3	25.1	25.2	24.7	24.6	24.4	24.0	23.7
Of which: Natural gas	6.0	6.8	7.0	6.9	6.3	5.8	5.3	4.9
Imports of goods and services	31.6	30.8	30.6	30.4	30.1	29.8	29.6	29.1
Capital account	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial account	-6.6	-6.5	-6.2	-4.6	-4.5	-4.5	-4.6	-4.4
Of which: Direct investment net	-0.7	-1.7	-0.8	-1.7	-1.9	-2.1	-2.4	-2.7
Net errors and omissions	-0.9	-1.2	-1.5	0.0	0.0	0.0	0.0	0.0
Terms of trade index (percent change)	-15.5	9.5	10.0	-2.9	-1.5	-1.0	-0.5	0.1
Net Central Bank foreign reserves 4/ 5/								
In millions of U.S. dollars	10,081	10,261	8,774	8,339	7,914	7,138	6,312	5688.7
In months of imports of goods and services	10.4	9.7	7.7	6.9	6.1	5.1	4.3	3.8
In percent of GDP	29.6	27.1	21.1	18.6	16.4	13.7	11.2	9.3
Money and credit	(Annual percentage changes, unless otherwise indicated)							
Credit to the private sector	14.8	12.8	11.7	10.9	10.1	10.1	10.1	9.8
Credit to the private sector (percent of GDP)	57.6	58.5	59.5	61.2	62.5	63.8	65.0	65.9
Broad money (percent of GDP)	81.7	80.9	81.3	82.5	83.2	84.0	84.5	84.7
U.S. dollar and dollar indexed credit (in percent of total credit) 6/	7.1	5.3	5.3	5.3	5.3	5.3	5.3	5.3
Memorandum items:								
Nominal GDP (in billions of U.S. dollars)	34.1	37.9	41.6	44.8	48.3	52.1	56.3	61.0
Exchange rates 7/								
Bolivianos/U.S. dollar (end-of-period)	6.9	6.9	…	…	…	…	…	…
REER, period average (percent change) 8/	6.0	-1.4	…	…	…	…	…	…
Oil prices (in U.S. dollars per barrel)	42.8	52.8	69.4	68.8	65.7	63.1	61.3	60.3

Sources: International Monetary Fund, *Information Notice System;* Ministry of Economy and Public Finances; Central Bank of Bolivia; National Institute of Statistics; UDAPE; and Fund staff calculations.

1/ The discrepancy between the current account and the savings-investment balances reflects methodological differences. For the projection years, the discrepancy is assumed to remain constant in dollar value.
2/ Includes nationalization costs and net lending.
3/ Public debt includes SOE's borrowing from the BCB but not from other domestic institutions, and BCB loans to FINPRO and FNDR.
4/ Excludes reserves from the Latin American Reserve Fund (FLAR) and Offshore Liquidity Requirements (RAL).
5/ All foreign assets valued at market prices.
6/ The authorities use a different definition.
7/ Official (buy) exchange rate.
8/ The REER based on authorities' methodlogy is different from that of the IMF.

Table 3. Bolivia: Operations of the Combined Public Sector 1/

(In percent of GDP unless otherwise specified)

			Baseline projections					
	2016	2017	2018	2019	2020	2021	2022	2023
Revenue	**32.8**	**30.7**	**31.3**	**31.9**	**31.6**	**31.2**	**30.8**	**30.3**
Taxes	26.2	23.9	24.1	24.4	24.4	24.0	23.8	23.4
IDH and royalties	4.1	3.7	4.2	4.5	4.3	3.9	3.7	3.5
Indirect taxes	17.2	15.8	15.5	15.6	15.7	15.7	15.7	15.7
o/w: VAT	8.5	7.8	7.6	7.7	7.8	7.8	7.8	7.8
o/w: Excise tax on fuel	1.4	1.2	1.2	1.2	1.3	1.3	1.3	1.3
Grants	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Other revenue	6.4	6.7	7.1	7.3	7.1	7.1	7.0	6.8
Nontax revenue	5.0	5.2	5.2	5.2	5.2	5.2	5.2	5.2
Public enterprises operating balance	1.0	1.0	1.5	1.8	1.6	1.6	1.5	1.3
Central bank operating balance	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3
Expenditure	**40.0**	**38.5**	**38.8**	**38.2**	**37.2**	**36.3**	**35.2**	**34.1**
Expense	**25.3**	**24.9**	**25.8**	**26.0**	**25.9**	**25.6**	**25.3**	**24.9**
Compensation of employees	11.2	11.7	12.0	11.9	11.8	11.6	11.5	11.3
Purchases of goods and services	3.5	3.8	3.9	3.9	3.9	3.9	3.9	3.9
Interest	1.0	1.1	1.0	1.4	1.6	1.7	1.7	1.7
Domestic	0.5	0.4	0.5	0.8	1.0	1.0	1.1	1.2
Foreign	0.5	0.7	0.5	0.6	0.6	0.6	0.6	0.5
Energy-related subsidies to SOEs 2/	0.5	0.8	1.7	1.8	1.6	1.5	1.4	1.3
Social benefits 3/	8.2	7.2	6.8	6.7	6.6	6.6	6.5	6.4
Other expense	0.8	0.4	0.4	0.4	0.4	0.4	0.3	0.3
Net acquisition of nonfinancial assets 4/	**14.7**	**13.6**	**13.0**	**12.2**	**11.4**	**10.6**	**9.9**	**9.2**
o/w: Public Enterprises	5.2	4.4	4.4	4.3	4.1	4.1	4.0	4.0
Gross operating balance	**7.5**	**5.8**	**5.5**	**5.8**	**5.7**	**5.6**	**5.6**	**5.4**
Net lending/borrowing (overall balance)	**-7.3**	**-7.8**	**-7.4**	**-6.3**	**-5.7**	**-5.1**	**-4.3**	**-3.8**
Net financial transactions	**-7.3**	**-7.8**	**-7.4**	**-6.3**	**-5.7**	**-5.1**	**-4.3**	**-3.8**
Net incurrence of liabilities	**7.3**	**7.8**	**7.4**	**6.3**	**5.7**	**5.1**	**4.3**	**3.8**
External	2.0	5.6	2.1	2.1	1.9	1.5	1.2	1.0
Disbursements	2.9	6.3	2.6	2.8	2.6	2.2	2.1	1.8
Amortizations	-0.8	-0.9	-0.7	-0.8	-0.8	-0.9	-0.9	-0.9
Other external	-0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1
Domestic	5.3	2.2	5.3	4.2	3.7	3.6	3.1	2.8
Banking system	3.9	2.8	5.3	4.2	3.7	3.6	3.1	2.8
Central Bank	4.2	2.8	4.8	3.7	3.4	3.6	3.1	2.8
Commercial banks	-0.2	0.0	0.5	0.4	0.3	0.0	0.0	0.0
Pension funds	-0.4	-0.4	0.0	0.0	0.0	0.0	0.0	0.0
Other domestic	1.4	-0.7	0.0	0.0	0.0	0.0	0.0	0.0
Memorandum items:								
Primary balance	-6.3	-6.7	-6.4	-4.9	-4.1	-3.4	-2.7	-2.2
Overall balance before nationalization	-7.3	-7.8	-7.4	-6.3	-5.7	-5.1	-4.3	-3.8
o/w Non-hydrocarbon primary balance 5/	-9.9	-10.6	-11.5	-10.3	-8.9	-7.9	-6.8	-6.0
Overall balance as a share of non-hydrocarbon GDP	-7.6	-8.1	-7.8	-6.6	-5.9	-5.3	-4.5	-4.0
Hydrocarbon related revenue 6/	5.1	4.8	5.7	6.3	5.9	5.5	5.2	4.8
YPFB balance	-1.4	-0.5	0.1	0.1	-0.2	-0.2	-0.2	-0.2
YPFB operating balance	0.1	0.4	0.7	0.9	0.9	0.8	0.8	0.8
Nonfinancial public sector gross public debt 7/	46.6	51.1	53.5	54.6	54.6	54.7	54.7	54.4
o/w gross foreign public debt 8/	20.5	24.1	24.1	24.5	24.7	24.4	23.8	23.0
NFPS deposits	16.1	14.0	11.5	9.4	6.9	5.4	4.8	4.4
Nominal GDP in billions of Bolivianos	233.9	259.8	285.4	307.6	331.4	357.3	386.3	418.3

Sources: Ministry of Economy and Public Finances and Fund staff calculations.

1/ The operation of mixed-ownership companies, primarily in the telecom, electricity and hydrocarbon sectors, are not included.

2/ Includes incentives for hydrocarbon exploration investments in the projection period.

3/ Includes pensions, cash transfers to households, and social investment programs (previously classified as capital expenditure).

4/ Includes net lending.

5/ Primary balance before nationalization costs minus hydrocarbon related balance (latter defined as the sum of direct hydrocarbon tax (IDH), royalties, and the operating balance of state oil/gas company (YPFB) minus YPFB investments.

6/ Hydrocarbon related revenues are defined as direct hydrocarbon tax (IDH), royalties, and the operating balance of state oil/gas company (YPFB)

7/ Public debt includes SOE's borrowing from the BCB but not from other domestic institutions.

8/ Gross foreign public debt includes sovereign bonds issued internationally but held by residents.

Table 4. Bolivia: Non-Financial Public Sector Total Debt

(In percent of GDP unless otherwise specified)

	2010	2011	2012	2013	2014	2015	2016	2017
Domestic debt	**24.3**	**20.1**	**16.1**	**13.5**	**12.7**	**12.5**	**12.7**	**12.0**
Public financial sector	7.3	6.3	5.3	4.6	4.2	4.4	4.2	4.3
Private sector	17.0	13.8	10.8	8.9	8.5	8.1	8.5	7.7
Maturity								
Short term (less than 1 year)	0.00	0.00	0.04	0.03	0.01	0.00	0.01	0.00
Long-term	24.3	20.1	16.1	13.5	12.7	12.5	12.7	12.0
Foreign debt (in millions of US dollars)	**15.4**	**15.3**	**15.7**	**17.5**	**17.5**	**18.4**	**20.5**	**24.1**
Central government 1/	12.0	12.0	13.7	15.6	15.3	17.3	18.6	22.3
Bilateral	1.3	1.8	1.6	1.9	1.8	1.7	1.8	2.4
Multilateral	10.7	10.2	10.2	10.3	10.5	12.6	13.8	14.6
Government bonds issued abroad	0.0	0.0	1.9	3.3	3.0	3.0	2.9	5.3
Maturity								
Long-term	12.0	12.0	13.7	15.6	15.3	17.3	18.6	22.3
Currency composition								
US dollar	9.0	9.2	11.1	12.9	12.8	14.4	15.7	19.2
Other	3.0	2.8	2.6	2.7	2.5	2.9	2.9	3.1
Other NFPS	3.4	3.3	2.1	2.0	2.1	1.1	2.0	1.8
BCB loans to SOEs	**0.0**	**2.1**	**4.4**	**6.1**	**7.3**	**9.3**	**11.8**	**12.7**
BCB loans to FNDR	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.1**	**0.4**	**0.7**
BCB loans to FINPRO	**0.0**	**0.0**	**0.0**	**0.0**	**0.6**	**1.0**	**1.2**	**1.6**
Total	**39.6**	**37.5**	**36.2**	**37.1**	**38.0**	**41.3**	**46.6**	**51.1**
Memorandum items:								
NFPS deposits with BCB	21.0	21.5	23.7	25.0	22.2	18.3	16.1	14.0
Public capital stock	86.3	85.7	87.9	88.4	96.6	100.5	…	…

Sources: Bolivian authorities; and IMF staff estimates.

1/ Gross foreign public debt includes sovereign bonds issued internationally but held by residents.

Table 5. Bolivia: Financial System Survey 1/

	2016	2017	2018	2019	2020	2021	2022	2023
			Baseline projections					
	(Stocks in millions of Bolivianos, unless otherwise indicated)							
Central Bank								
Net international reserves	69,156	70,388	60,191	57,204	54,291	48,965	43,298	39,025
(Stocks in millions of U.S. dollars)	10,081	10,261	8,774	8,339	7,914	7,138	6,312	5,689
Net domestic assets	-7,539	-3,418	12,986	22,690	32,014	44,350	57,174	68,662
Net credit to the nonfinancial public sector	-5,767	-2,058	11,742	23,242	34,442	47,242	59,162	71,062
Net credit to financial intermediaries	230	5,733	8,807	7,830	6,994	7,536	9,838	9,427
Other items (net)	-2,002	-7,093	-7,563	-8,382	-9,422	-10,428	-11,827	-11,827
Net medium and long-term foreign assets	1,522	2,595	2,595	2,595	2,595	2,595	2,595	2,595
Base money	63,139	69,565	75,772	82,489	88,899	95,910	103,066	110,282
Currency in circulation	43,145	46,335	49,792	53,969	57,597	61,538	65,221	68,542
Bank reserves	19,994	23,230	25,980	28,520	31,302	34,372	37,845	41,740
Legal reserves	15,613	17,012	19,693	21,619	23,728	26,055	28,688	31,640
Financial System 1/								
Net short-term foreign assets	86,841	87,330	78,672	76,973	75,447	71,617	67,568	65,047
(Stocks in millions of U.S. dollars)	12,659	12,730	11,468	11,220	10,998	10,440	9,850	9,482
Net domestic assets	105,685	123,015	155,069	179,957	205,240	234,971	266,278	297,778
Net credit to the public sector	-5,414	-1,677	13,495	26,367	38,596	51,396	63,316	75,216
Credit to the private sector	134,637	151,923	169,704	188,206	207,262	228,136	251,067	275,689
Other items (net)	-23,539	-27,231	-28,130	-34,616	-40,619	-44,562	-48,105	-53,127
Net medium and long-term foreign liabilities (increase -)	1,416	125	1,702	3,279	4,856	6,433	7,482	8,530
Broad money	191,109	210,220	232,039	253,650	275,831	300,155	326,365	354,295
Liabilities in domestic currency	185,796	204,771	225,336	246,292	267,755	291,287	316,601	343,526
Foreign currency deposits	5,314	5,450	6,703	7,358	8,076	8,868	9,764	10,768
	(Annual percentage changes)							
Base money	-11.8	10.2	8.9	8.9	7.8	7.9	7.5	7.0
Credit to the private sector	14.8	12.8	11.7	10.9	10.1	10.1	10.1	9.8
	(Changes in percent of broad money at the beginning of the period)							
Net short-term foreign assets	-11.4	0.3	-4.1	-0.7	-0.6	-1.4	-1.3	-0.8
Net domestic assets	13.7	9.1	15.2	10.7	10.0	10.8	10.4	9.7
Net credit to the public sector	5.4	2.0	7.2	5.5	4.8	4.6	4.0	3.6
Credit to the private sector	9.3	9.0	8.5	8.0	7.5	7.6	7.6	7.5
Net medium and long-term foreign liabilities	-0.3	-0.7	0.8	0.7	0.6	0.6	0.3	0.3
Broad money	2.6	10.0	10.4	9.3	8.7	8.8	8.7	8.6
Liabilities in domestic currency	3.8	9.9	9.8	9.0	8.5	8.5	8.4	8.3
Foreign currency deposits	-1.2	0.1	0.6	0.3	0.3	0.3	0.3	0.3

Sources: Central Bank of Bolivia, and Fund staff calculations.

1/ The financial system comprises the central bank, commercial banks and nonbanks, and the Banco de Desarrollo Productivo (BDP), which is a state-owned second-tier bank.

Table 6. Bolivia: Summary Balance of Payments

	2016	2017	2018	2019	2020	2021	2022	2023
			Baseline projections					
			(in millions of U.S. dollars)					
Current account balance	**-1,944**	**-2,013**	**-1,977**	**-2,082**	**-2,190**	**-2,369**	**-2,615**	**-2,688**
Goods and services	-2,514	-2,174	-2,244	-2,515	-2,685	-2,850	-3,121	-3,326
Goods	-901	-516	-332	-492	-499	-528	-652	-704
Exports	7,030	8,105	9,041	9,521	10,141	10,761	11,373	12,063
Imports	7,931	8,621	9,374	10,014	10,641	11,289	12,026	12,767
Services	-1,613	-1,657	-1,912	-2,022	-2,185	-2,322	-2,469	-2,622
Credit	1,245	1,399	1,436	1,575	1,731	1,934	2,156	2,358
Debit	2,858	3,057	3,348	3,598	3,916	4,256	4,625	4,981
Primary income, net	-621	-1,107	-982	-942	-1,020	-1,162	-1,358	-1,498
Secondary income, net	1,191	1,268	1,249	1,375	1,515	1,643	1,863	2,137
Capital account	**5**	**5**	**0**	**0**	**0**	**0**	**0**	**0**
Financial account	**-2,257**	**-2,476**	**-2,599**	**-2,082**	**-2,190**	**-2,369**	**-2,615**	**-2,688**
Foreign direct investment, net	-246	-632	-333	-782	-922	-1,089	-1,367	-1,645
Net acquisition of assets	89	80	91	131	131	131	131	131
Net incurrence of liabilities	335	711	423	913	1,053	1,219	1,497	1,775
Portfolio investment, net	932	-944	-220	-55	-54	147	149	151
Other investment, net	104	-889	-560	-810	-789	-651	-572	-572
Change in reserve assets	-3,046	-12	-1,486	-435	-425	-776	-826	-623
Net errors and omissions	**-318**	**-469**	**-621**	**0**	**0**	**0**	**0**	**0**
			(in percent of GDP)					
Current account balance	**-5.7**	**-5.3**	**-4.8**	**-4.6**	**-4.5**	**-4.5**	**-4.6**	**-4.4**
Goods and services	-7.4	-5.7	-5.4	-5.6	-5.6	-5.5	-5.5	-5.5
Goods	-2.6	-1.4	-0.8	-1.1	-1.0	-1.0	-1.2	-1.2
Exports	20.6	21.4	21.7	21.2	21.0	20.7	20.2	19.8
Imports	23.3	22.8	22.5	22.3	22.0	21.7	21.4	20.9
Services	-4.7	-4.4	-4.6	-4.5	-4.5	-4.5	-4.4	-4.3
Credit	3.7	3.7	3.5	3.5	3.6	3.7	3.8	3.9
Debit	8.4	8.1	8.0	8.0	8.1	8.2	8.2	8.2
Primary income, net	-1.8	-2.9	-2.4	-2.1	-2.1	-2.2	-2.4	-2.5
Secondary income, net	3.5	3.3	3.0	3.1	3.1	3.2	3.3	3.5
Capital account	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Financial account	**-6.6**	**-6.5**	**-6.2**	**-4.6**	**-4.5**	**-4.5**	**-4.6**	**-4.4**
Foreign direct investment, net	-0.7	-1.7	-0.8	-1.7	-1.9	-2.1	-2.4	-2.7
Net acquisition of assets	0.3	0.2	0.2	0.3	0.3	0.3	0.2	0.2
Net incurrence of liabilities	1.0	1.9	1.0	2.0	2.2	2.3	2.7	2.9
Portfolio investment, net	2.7	-2.5	-0.5	-0.1	-0.1	0.3	0.3	0.2
Other investment, net	0.3	-2.3	-1.3	-1.8	-1.6	-1.3	-1.0	-0.9
Change in reserve assets	-8.9	0.0	-3.6	-1.0	-0.9	-1.5	-1.5	-1.0
Net errors and omissions	**-0.9**	**-1.2**	**-1.5**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Memorandum items:								
Exports, c.i.f. (in millions of U.S. dollars)	7,000	7,752	9,041	9,521	10,141	10,761	11,373	12,063
Natural gas	2,049	2,581	2,903	3,079	3,066	3,013	2,999	2,980
Minerals	3,071	3,723	4,125	4,075	4,321	4,494	4,613	4,737
Soy-related	887	573	848	1,018	1,199	1,412	1,656	1,944
Other exports	993	875	1,164	1,349	1,555	1,842	2,106	2,402
Imports, c.i.f. (in millions of U.S. dollars)	8,515	9,308	9,974	10,614	11,241	11,889	12,626	13,367
Net BCB international reserves	10,081	10,261	8,774	8,339	7,914	7,138	6,312	5,689
In percent of GDP	29.6	27.1	21.1	18.6	16.4	13.7	11.2	9.3
In months of next year's imports of goods and services	10.4	9.7	7.7	6.9	6.1	5.1	4.3	3.8
APSP oil prices (U.S. dollars per barrel)	42.8	52.8	69.4	68.8	65.7	63.1	61.3	60.3

Sources: Central Bank of Bolivia, National Institute of Statistics, and Fund staff calculations.

Table 7. Bolivia: External Vulnerability Indicators

	2016	2017	2018	2019	2020	2021	2022	2023
			Baseline projections					
Financial Indicators								
Public sector debt (percent of GDP)	46.6	51.1	53.5	54.6	54.6	54.7	54.7	54.4
Of which : in domestic currency (percent of GDP)	26.1	27.0	29.4	30.1	29.9	30.3	30.9	31.4
Broad money (M3) (percent change)	2.6	10.0	10.4	9.3	8.7	8.8	8.7	8.6
Credit to the private sector (percent of GDP)	57.6	58.5	59.5	61.2	62.5	63.8	65.0	65.9
Average domestic bank lending rate, domestic currency	10.3	10.2	10.0	...	...	...	...	...
Average domestic bank lending rate, foreign currency	9.8	10.6	11.5	...	...	...	...	...
Dollarization Ratio (percent of total deposits)	2.8	2.6	2.9	2.9	2.9	3.0	3.0	3.0
External Indicators								
Exports, U.S. dollars (percent change)	-16.6	14.9	10.2	5.9	7.0	6.9	6.6	6.6
Imports, U.S. dollars (percent change)	-9.4	8.2	8.9	7.0	6.9	6.8	7.1	6.6
Terms of trade (percent change: deterioration -)	-15.5	9.5	10.0	-2.9	-1.5	-1.0	-0.5	0.1
Current account balance (percent of GDP)	-5.7	-5.3	-4.8	-4.6	-4.5	-4.5	-4.6	-4.4
Capital and financial account balance (percent of GDP)	-6.6	-6.5	-6.2	-4.6	-4.5	-4.5	-4.6	-4.4
Total external debt (percent of GDP)	30.6	32.8	32.5	32.8	32.9	32.7	32.3	31.3
Medium- and long-term public debt (percent of GDP)	20.5	24.1	24.1	24.5	24.7	24.4	23.8	23.0
Medium- and long-term private debt (percent of GDP)	6.0	5.2	7.2	7.1	7.0	7.1	7.2	7.1
Short-term public and private debt (percent of GDP)	4.0	3.4	1.2	1.2	1.2	1.2	1.2	1.2
Total external debt (percent of exports of goods and services)	126.1	130.5	129.1	132.7	133.7	134.3	134.3	132.4
Total external debt service (percent of exports of goods and services)	20.9	24.9	18.3	18.4	18.4	17.0	16.7	16.6
Gross official reserves								
In billions of U.S. dollar	10.1	10.3	8.8	8.3	7.9	7.1	6.3	5.7
In percent of short-term external debt	730.5	796.0	1716.0	1527.1	1369.1	1125.4	905.5	765.0
In percent of broad money	36.2	33.5	25.9	22.6	19.7	16.3	13.3	11.0
In percent of foreign currency deposits at banks	1301.5	1291.6	898.0	777.5	672.3	552.2	443.5	362.4
In months of next year's imports of goods and services	10.4	9.7	7.7	6.9	6.1	5.1	4.3	3.8
Net international reserves (in billions of U.S. dollars)	10.1	10.3	8.8	8.3	7.9	7.1	6.3	5.7

Sources: Central Bank of Bolivia, National Institute of Statistics, and Fund staff calculations.

Table 8. Bolivia: Risk Assessment Matrix

Source/nature of risk (Likelihood)	Expected impact and recommended response
External Risks	
Unsustainable macroeconomic policies (**Medium**): Policies in systemically important countries that boost near-term activity beyond sustainable levels (due to domestic political pressures or in response to external policy spillovers) exacerbate underlying vulnerabilities and, in some cases, backfire by hurting confidence and global growth.	**High.** Fiscal, credit, wage, and structural policies should be consistent with/supportive of the stabilized exchange rate regime. Implement gradual fiscal consolidation and develop a medium-term fiscal framework that provides a medium-term anchor and operational objectives. Public investment should be prioritized and the efficiency improved, and wage increases contained in line with productivity.
Sizeable deviations from baseline commodity prices (**Medium**): Commodity prices could drop significantly if downside global growth risks materialize or supply exceeds expectations. While lower oil prices would, on aggregate, benefit global growth, they would negatively affect oil exporters.	**Medium.** Bolivia's economy is sensitive to commodity prices. Gas and minerals account for 82 percent of total exports, and hydrocarbons alone account for more than 15 percent of government revenues. Without fiscal correction, lower energy prices will put further pressures on reserves. Bolivia would need a strong macro policy response to stop reserve losses and avoid a rise in debt and vulnerabilities.
Tighter global financial conditions and US dollar appreciation (**High**): Bolivia does not have strong financial linkages or high sensitivity to global financial conditions. However, the Boliviano could appreciate further with the US dollar, aggravating competitiveness strains.	**High.** Fiscal and credit policies should be tightened to be consistent with the macro framework anchored by the nominal exchange rate. Introducing greater exchange rate flexibility could help the economy absorb external shocks, ease the process of fiscal adjustment, and facilitate efforts to restore competitiveness when accompanied with structural reforms that promote broad-based growth.
Slowdown in growth and higher risks in neighboring countries (**High**): Argentina and Brazil have seen large currency depreciations and are expecting slower growth. Venezuela migrants are increasing and raising strains in the region.	**Medium.** The elasticity of exports to growth in both countries is low as much of Bolivia's exports to them is natural gas, though Bolivia is competing with them on other goods and a large real appreciation could hurt the trade balance. More flexible labor and goods markets could help promote competitiveness. Pursue macro and structural reforms as noted above, consider introducing exchange rate flexibility.
Domestic Risks	
Declining natural gas production from existing fields and failure to discover new fields (**Medium** to **High**): Production from the existing fields is declining and the success of ongoing exploration activities is uncertain. This may influence negotiations on the extension of a supply contract with Brazil in 2019.	**Medium** to **High.** Private sector participation has not been increasing, in part due unfavorable conditions such as an uncompetitive tax regime and investment uncertainty. Improve the business environment for private sector participation in the hydrocarbons sector. Move forward proactively on the Brazilian contract negotiations.
Distortions in the financial system (**Medium**): Compliance with the Financial Services Law could eventually raise risks due to excessive lending linked to quotas, resulting in weaker credit quality and/or liquidity challenges for banks.	**Medium** to **High**. Modify key provisions of the law (interest rate caps, credit quotas) via decrees or amendments as needed.
Political uncertainty related to the 2019 election (**Medium** to **High**): Sporadic protests have occurred following the Constitutional Court's 2017 ruling overturning the 2016 referendum on presidential term limits. Fiscal expenditures could rise and corrective policies could be delayed.	**Low** to **Medium.** Proceed with corrective policy measures, including restraining fiscal spending. Protests could intensify as the 2019 elections draw closer.

Table 9. Bolivia: Sustainable Development Goals

Goal	Status	Trend
No poverty	Significant challenges remain	on track to achieve goal by 2030
Zero hunger	Major challenges remain	score moderately increasing, insufficient to attain goal
Good health and well-being	Major challenges remain	score stagnating or increasing at less than 50% of required rate
Quality education	Significant challenges remain	score moderately increasing, insufficient to attain goal
Gender equality	Challenges remain	score stagnating or increasing at less than 50% of required rate
Clean water and sanitation	Challenges remain	
Affordable and clean energy	Significant challenges remain	score moderately increasing, insufficient to attain goal
Decent work and economic growth	Significant challenges remain	on track to achieve goal by 2030
Industry, innovation and infrastructure	Major challenges remain	on track to achieve goal by 2030
Reduced inequalities	Major challenges remain	
Sustainable cities and communities	Significant challenges remain	score stagnating or increasing at less than 50% of required rate
Responsible consumption and production	Significant challenges remain	
Climate action	Challenges remain	maintaining SDG achievement
Life on land	Significant challenges remain	score moderately increasing, insufficient to attain goal
Peace, justice and strong institutions	Challenges remain	score moderately increasing, insufficient to attain goal
Partnership for the goals	Challenges remain	

Source: SDG Index and Dashboards Report 2018

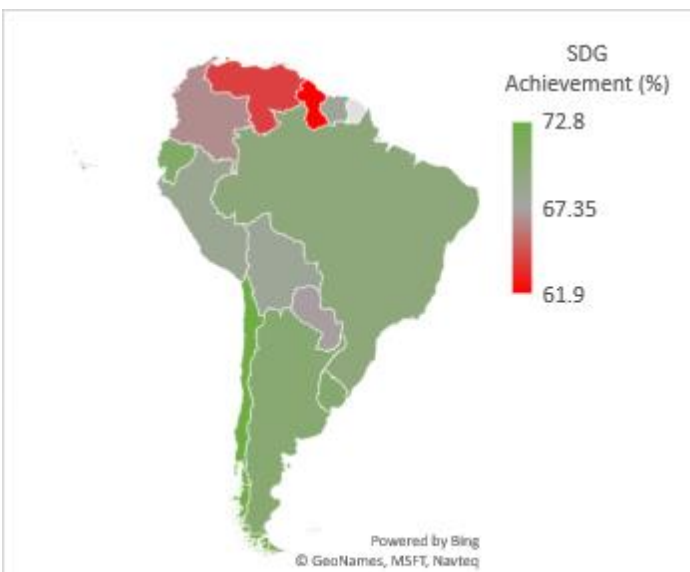
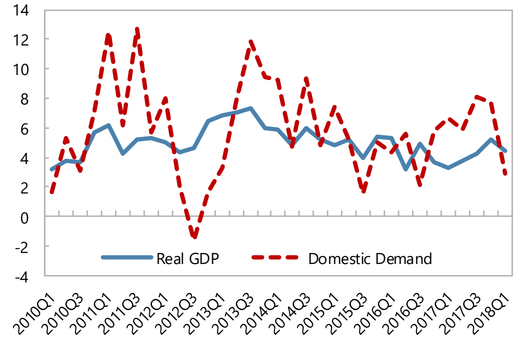


Figure 1. Bolivia: Real Sector Developments

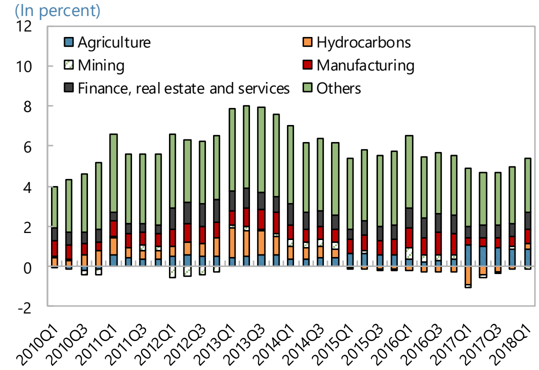
Economic activity is moderating but growth remains robust...

Real GDP and Domestic Demand
(In percent, y/y)



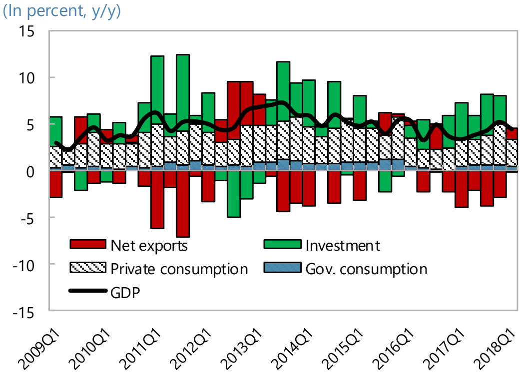
.... fueled by strong growth in agriculture and financial services and recovery in the hydrocarbon sector.

Contributions to GDP Growth, Supply Side
(In percent)



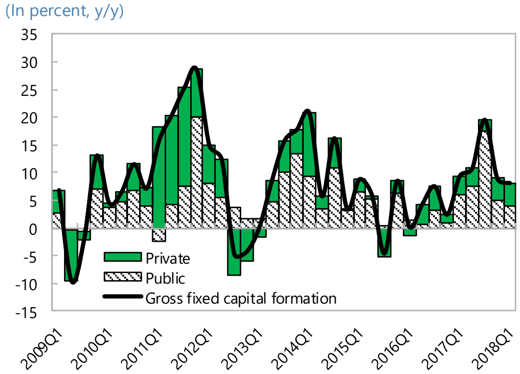
On the demand side, private consumption continues to be the main driver of growth...

Contributions to Real GDP Growth, Demand Side
(In percent, y/y)



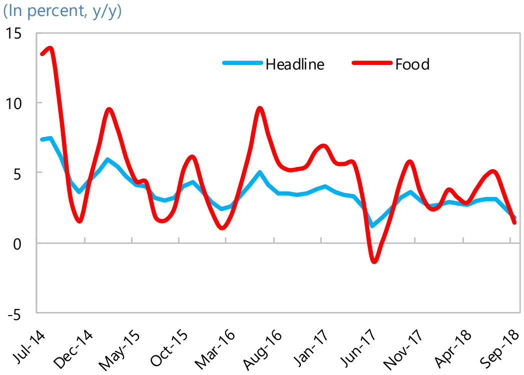
.... while investment has decelerated.

Contributions to Real Investment Growth
(In percent, y/y)



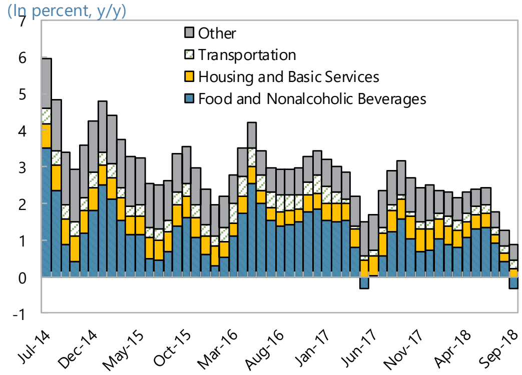
Inflation has remained at moderate levels despite some volatility in food prices ...

CPI Inflation
(In percent, y/y)



...which dominate movements in the headline number given their large weight.

Contribution to CPI Inflation
(In percent, y/y)

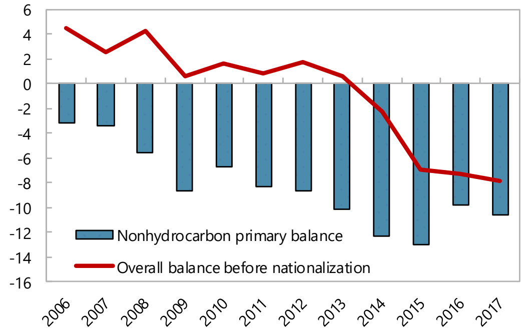


Sources: National Institute of Statistics, Central Bank of Bolivia, Haver Analytics, Inc., SEDLAC, World Bank, Fund staff estimates.

Figure 2. Bolivia: Fiscal Sector Developments

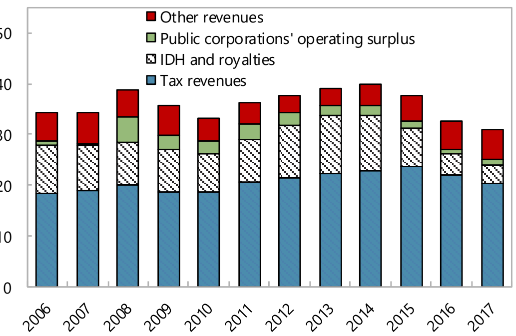
Overall fiscal surpluses during 2006-2013 shifted to sizable deficits …

Fiscal Balance
(In percent of GDP)



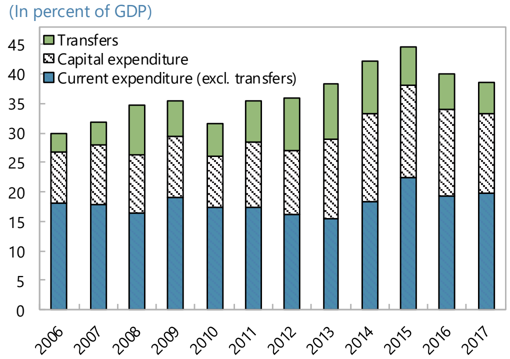
… reflecting sharp declines in hydrocarbon revenues…

Total Revenue Composition
(In percent of GDP)



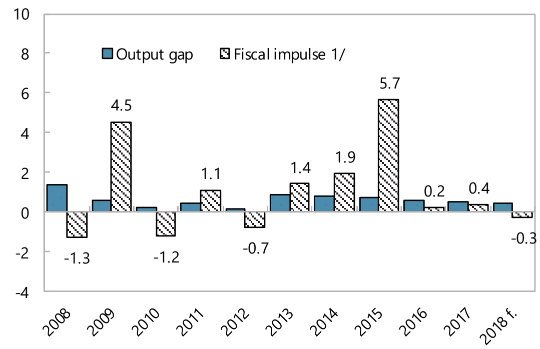
… and continued high expenditures.

Expenditure Composition
(In percent of GDP)



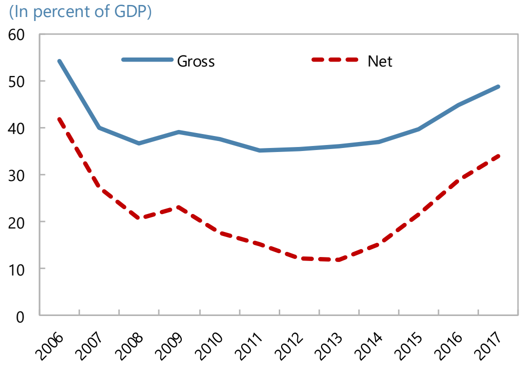
The policy stance has been expansionary.

Output Gap and Fiscal Impulse
(In percent of GDP)



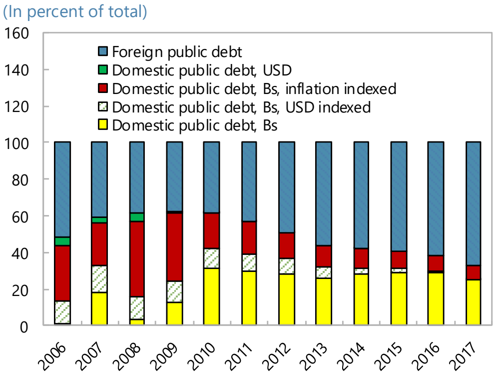
Public debt ratios have risen since 2013.

Public Sector Debt
(In percent of GDP)



The share of general government foreign debt has increased in recent years.

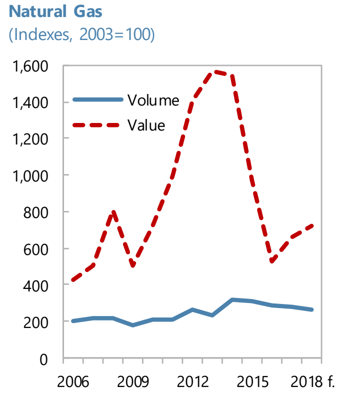
Public Debt (excluding BCB loans to SOEs)
(In percent of total)

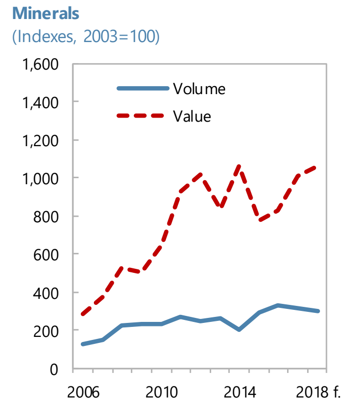


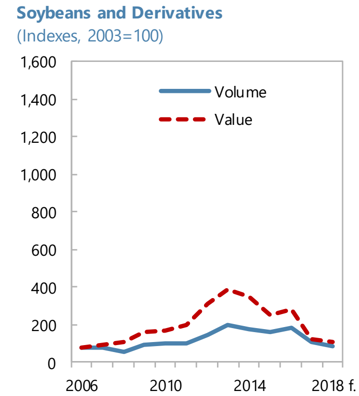
Sources: Ministry of the Economy and Public Finances, Central Bank of Bolivia and Fund staff estimates.
1/ The calculated fiscal impulse in 2017 is due mostly to a one-off calendar effect due to advance payments of salaries and pensions in December 2015 instead of in January 2016 which reduced the deficit in 2016 and implied a large change in the deficit in 2017. Excluding this effect implies a smaller impulse.

Figure 3. Bolivia: External Sector Developments

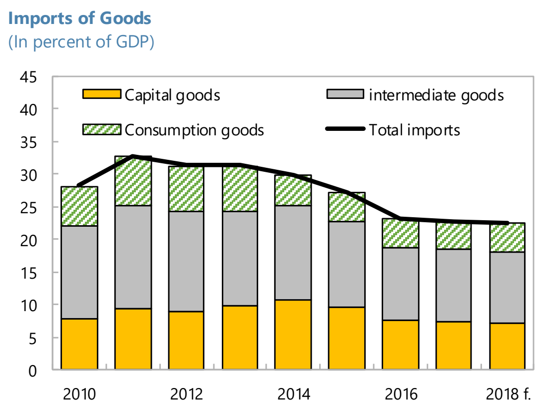
In 2018, Bolivia's key exports have increased in value, reflecting higher commodity prices.



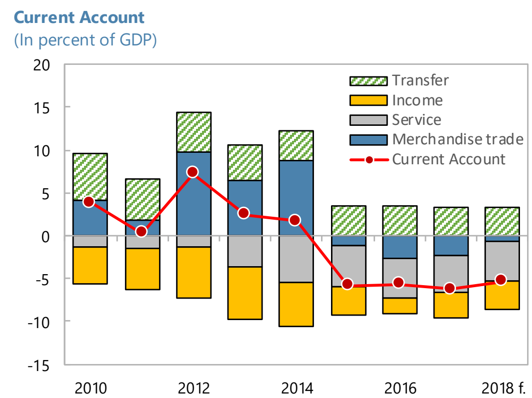




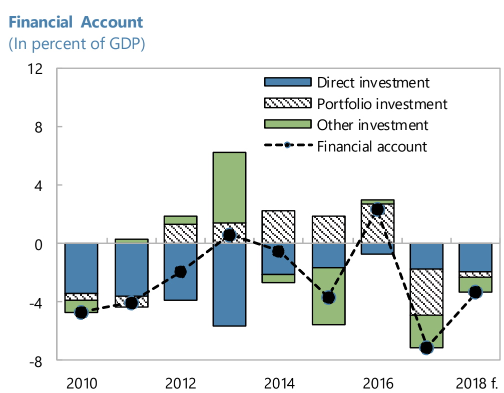
Since 2016, imports have stabilized.



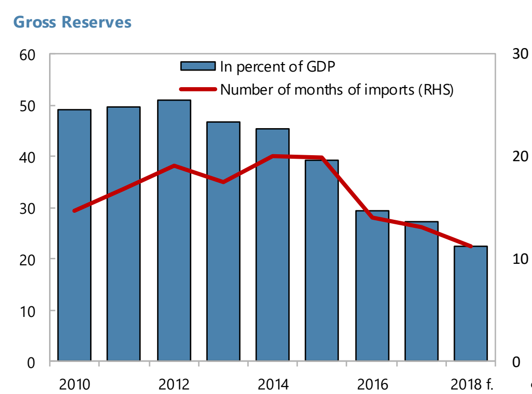
The current account deficit is driven by the service and income deficits. The trade deficit has narrowed.



FDI inflows have increased as a result of new hydrocarbon projects in 2018 ...



... but lower external financing than in 2017 implies a larger drain on reserves.



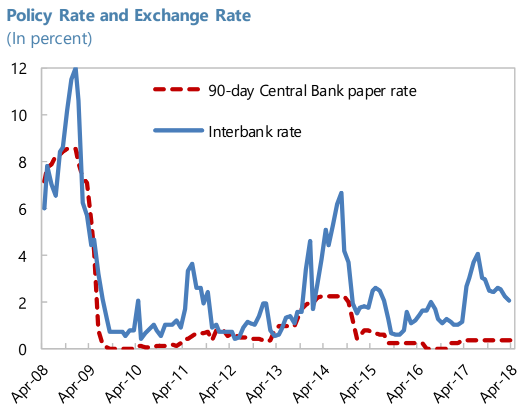
and

Fund staff estimates.

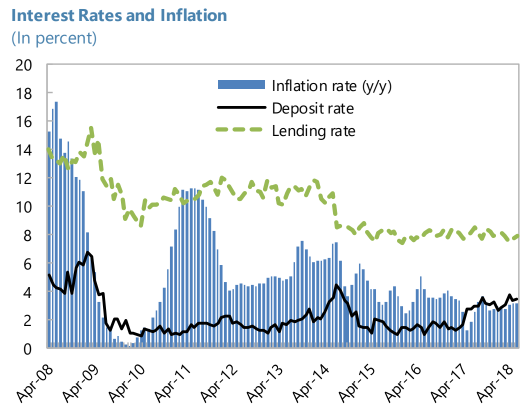
Sources: Central Bank of Bolivia, Haver Analytics, Inc., and Fund staff estimates.

Figure 4. Bolivia: Monetary Developments

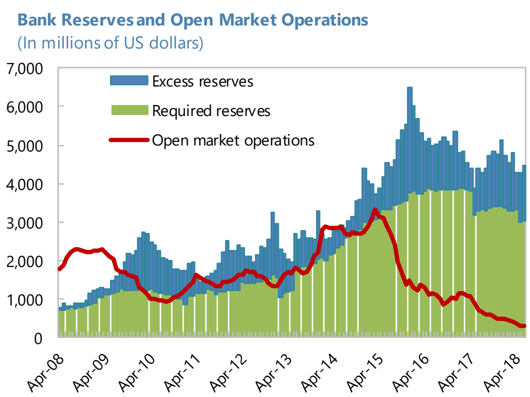
Rates on Central Bank paper have remained low while interbank rates have risen slightly from low levels.



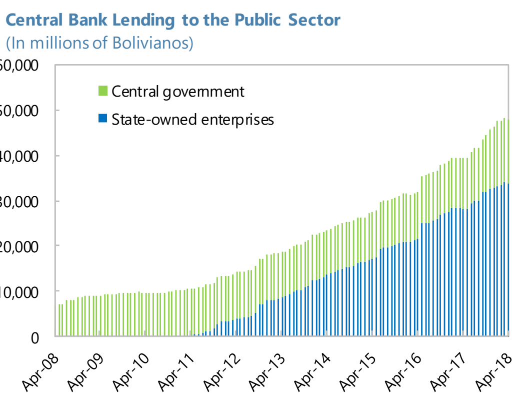
Deposit rates increased in 2017-2018.



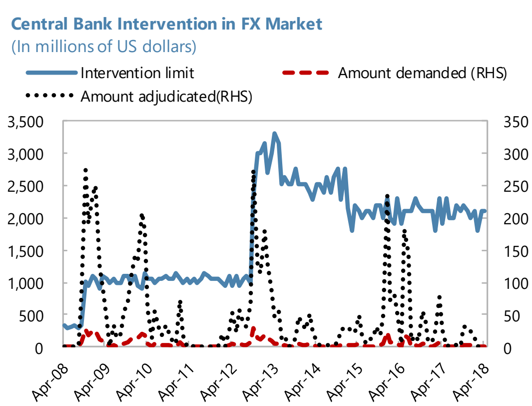
Banks' excess reserves have stabilized while BCB open market operations have declined.



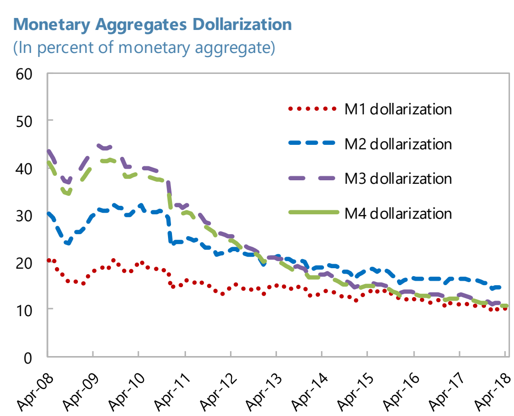
Central bank credits to state-owned enterprises continue to expand.



Central bank foreign exchange interventions remain low.



Dollarization ratios have stabilized at low levels.

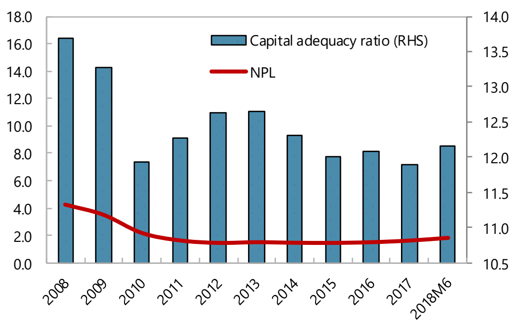


Sources: Central Bank of Bolivia, National Institute of Statistics, and Fund staff estimates.

Figure 5. Bolivia: Financial Sector Developments

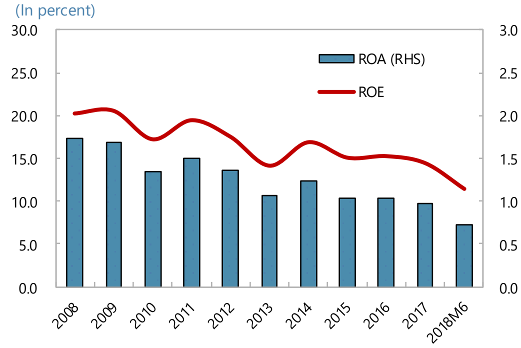
Capital adequacy ratios are above the regulatory minimum, and NPLs remain low…

Capital Adequacy Ratio and Nonperforming Loans
(In percent)



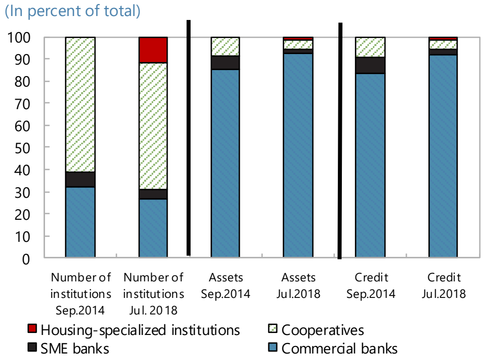
…but bank profitability has been declining.

Rates of Return
(In percent)



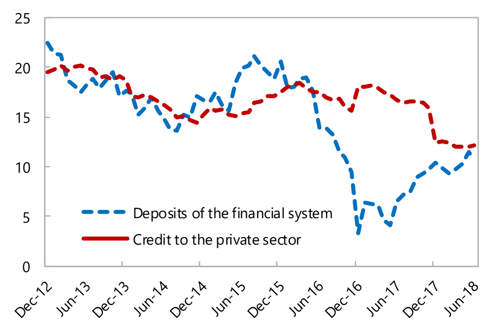
Commercial banks dominate the financial sector, but the number of housing lending institutions is growing.

Composition of Financial Sector 1/
(In percent of total)



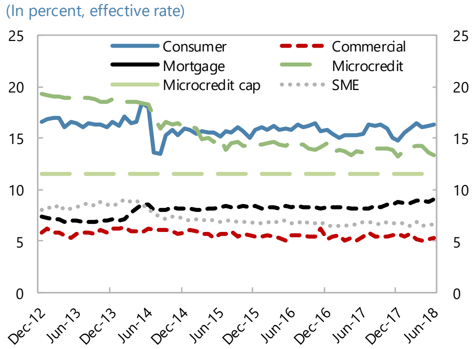
While moderating, overall credit sector growth remains robust and deposit growth has recovered.

Deposits and Credit Growth 2/
(In percent, y/y)



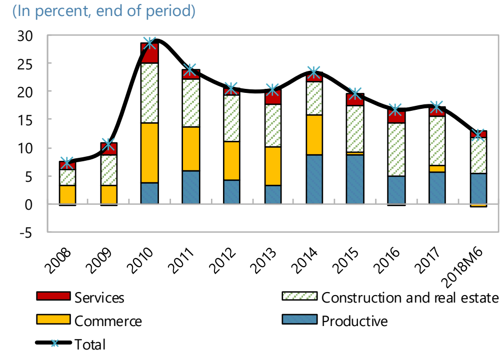
The microcredit lending rate is the most affected by the Financial Services law…

Bank Lending Rate by Type of Credit 2/
(In percent, effective rate)



… while lending to non-productive sectors, such as services and commerce, has stalled.

Contribution to Credit Growth by Destination 3/
(In percent, end of period)



Sources: ASFI and Fund staff calculations.
1/ Licensed institutions only.
2/ The estimations include credit extended by the addition of new financial institutions created during the period, including development institutions *(Instituciones Financieras de Desarrollo)*.
3/ Contributions refer to 2018M6 over 2017M6 levels.

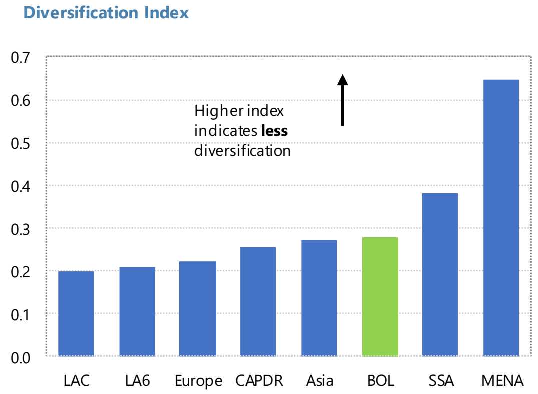
Figure 6. Cross-Country Financial Soundness Indicators 1/

Sources: Financial Soundness Indicators.

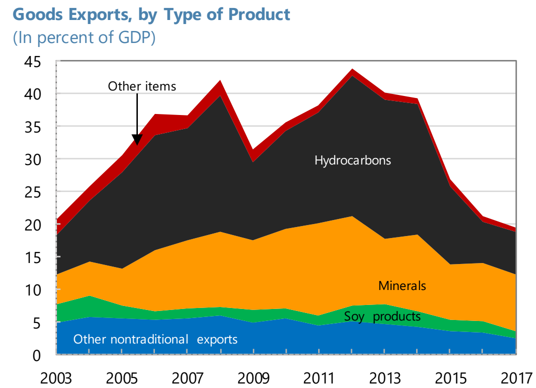
1/ Strictly, cross-country financial sector data may not be comparable.

Figure 7. Bolivia: Structural Reforms and External Competitiveness

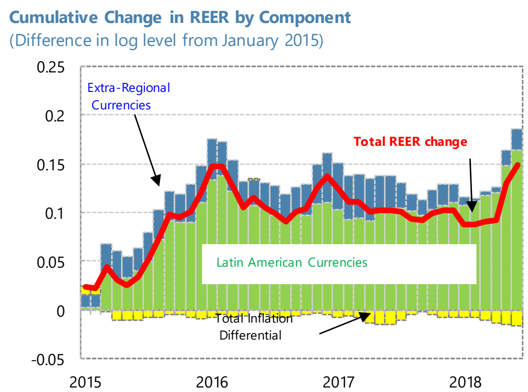
Bolivia's diversification index is low among emerging and developing countries.



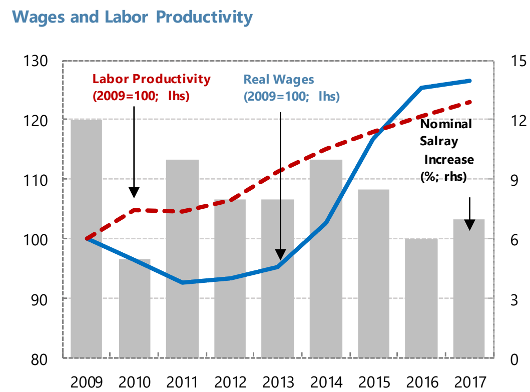
Exports of non-traditional goods, including soy products, are small and have declined



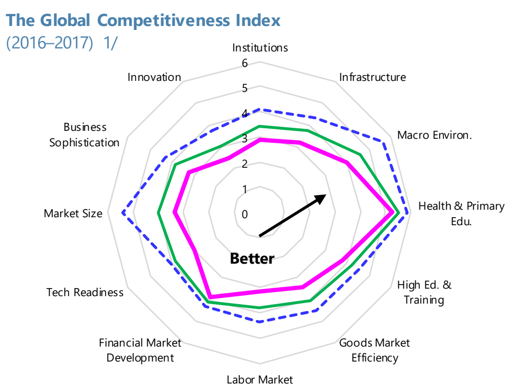
The real effective exchange rate has appreciated in 2018…



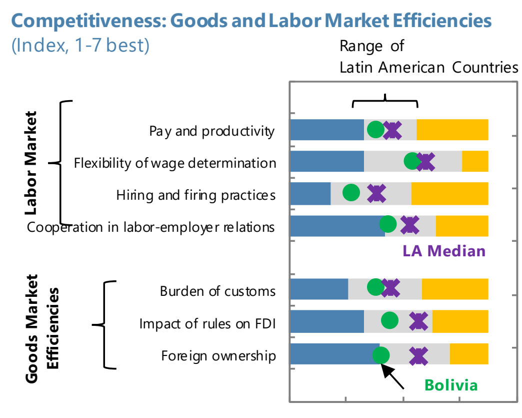
… and wages have been growing faster than productivity for several years.



Structural reforms are needed to set the stage for gains in productivity and competitiveness.



Among other things, labor and goods market reforms could help attract more private sector participation.



Sources: World Economic Forum, Global Competitiveness Database (2016–2017); ILO; *Decretos Supremos 16, 498, 809, 1213, 1549, 1988, 2346, 2748, and 3161*; INE; and Fund staff calculations.

Annex I. Public Debt Sustainability Analysis (DSA)

Staff's analysis applying the Public DSA framework for Market-Access Countries suggests that risks to Bolivia's public debt are significant (2018–23). At 51 percent of GDP in 2017, public debt is moderate by international standards, but is projected to reach 54 percent of GDP in 2023 under the baseline, which assumes that public investments in nominal terms will be kept at the current levels (reducing the public investment-to-GDP ratio by 3.8 percentage points of GDP in 2019–23). The long maturity of most loans (20 years and more) and relatively low interest rates reduce financing needs, which would remain below the respective benchmark under most standard macroeconomic shocks through 2023, except in 2019–20, when they would exceed 10 percent under the "primary balance" and "combined" shocks. The rapid growth in foreign financing in recent years poses risks, but gross financing needs are expected to gradually decline to about 5.9 percent of GDP in 2023 under the baseline and to about 7.4 percent of GDP under the "combined shock." While staff's historical projections have been slightly pessimistic, medium-term projections remain conservative given the prevailing risks to the outlook.

Definition and debt profile: Public sector debt in this DSA includes all financial obligations of the central government and subnational governments and central bank (BCB) loans to non-financial SOEs and two public funds—*Fondo Nacional de Desarrollo Regional (FNDR*), which supports local governments, and *Fondo para la Revolución Industrial Productiva—FINPRO*), which supports SOEs. After declining to 37.5 percent of GDP in 2011, public sector debt increased to 51.1 percent of GDP by 2017. The BCB's lending to SOEs, FNDR, and FINPRO increased from 2.1 percent of GDP in 2011 to 15 percent of GDP in 2017. There was a 4.5 percentage point of GDP increase in gross public debt during 2017, due mainly to external borrowing and BCB lending to SOEs. External debt accounted for about 47 percent of total debt at end-2017. Net public debt (gross debt excluding deposits of the general government and SOEs at the BCB) stood at 35.3 percent of GDP in 2017, with public-sector deposits at the BCB at about 14 percent of GDP.

1. Staff macroeconomic and fiscal assumptions: GDP growth is projected at about 4.5 percent and 4.2 percent in 2018 and 2019, respectively, and is projected to converge to its potential of 3.7 percent thereafter. Inflation is projected at about 4.5 percent in the medium term. The GDP deflator is projected to increase by 4.6 percent in 2018 and 4-5 percent during 2019–23. The budget balance is projected to improve, with the primary deficit declining to 2.2 percent of GDP by 2023 from 6.7 percent of GDP in 2017 with based on the authorities' plan to contain capital spending. While US interest rates are forecast to rise, the impact on the effective interest rate would be gradual and limited given the maturity structure of Bolivia's outstanding debt stock. Under the (baseline) assumptions, gross financing needs of the public sector are projected to fall to about 6- 7 percent of GDP in 2021–23 from about 9 percent of GDP in 2018. The public debt-to GDP ratio is projected to reach 54 percent in 2023.

2. Stress tests:

a. **Primary balance shock.** The primary balance is hit by a shock equal to 2.1 percent of GDP

(50 percent of the 10-year historical standard deviation of the primary balance-to-GDP ratio). The debt/GDP ratio increases to 58.6 percent in 2020 and then gradually decreases to 58.0 percent in 2023, about 3.6 percentage points higher than the baseline debt-to-GDP projection for 2023. We assume an increase in interest rates of 25 bps for every 1 percent of GDP worsening in the primary balance.

b. **Growth shock.** Real GDP growth rates are assumed to be lower by 1 percentage point during 2019–20 (100 percent of the 10-year historical standard deviation of real GDP growth rates). The debt-to-GDP ratio increases to 56.2 in 2020 and then gradually decreases to 55.5 percent in 2023 (1.1 percentage points higher than in the baseline).

c. **Interest rate shock.** Real interest rates increase by about 300 basis points during 2019–23 (the difference between the average real interest rate in 2007–17 and the highest historical real interest rate). The debt-to-GDP ratio gradually increases to 55.3 percent in 2023 (1.2 percentage points higher than the baseline).

d. **Exchange rate shock.** The real effective exchange rate depreciates by 20 percent in 2019. The debt-to-GDP ratio increases to 58.4 percent in 2019 and then falls gradually to 56.7 (2.3 percentage points higher than the baseline).

e. **Combined shock.** A simultaneous combination of the previous four shocks would result in an increasing debt-to-GDP ratio, rising to 64.8 percent in 2019 and further to 66.8 percent by 2023 (12.6 percentage points higher than the baseline).

f. **Contingent liability shock.** A one-time increase in non-interest expenditures in 2019 equivalent to 10 percent of banking sector assets, combined with lower growth and lower inflation in 2018–19 (i.e., growth is reduced by 1 standard deviation) results in the debt-to-GDP ratio increasing to 58.4 percent in 2019 and gradually moderating to 57.8 percent in 2023 (3.5 percentage points higher than the baseline).

Bolivia Public Sector Debt Sustainability Analysis (DSA) - Baseline Scenario

(in percent of GDP unless otherwise indicated)

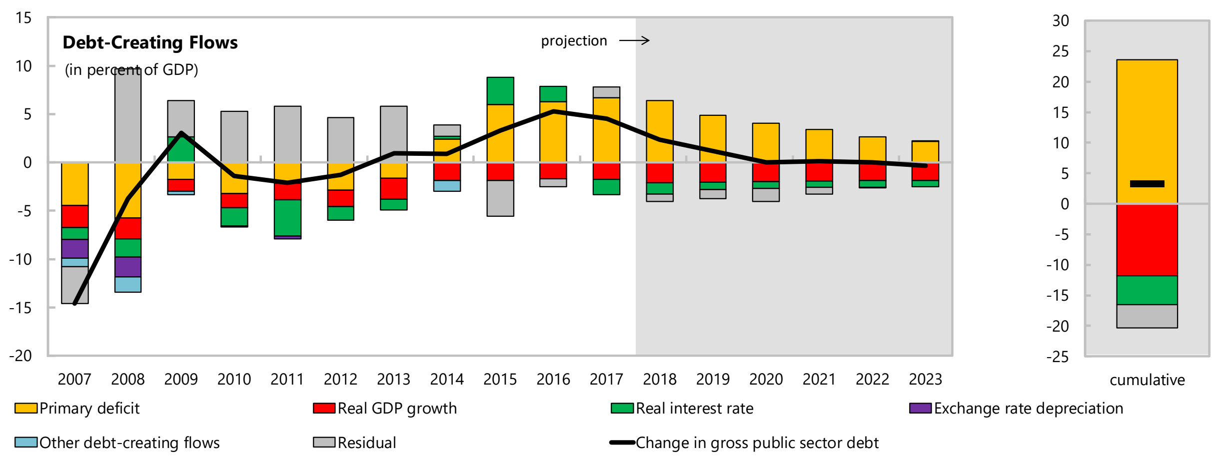
Debt, Economic and Market Indicators [1/]

	Actual			Projections					
	2007-2015 [2/]	2016	2017	2018	2019	2020	2021	2022	2023
Nominal gross public debt	38.9	46.6	51.1	53.5	54.6	54.6	54.7	54.7	54.4
Of which: guarantees	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Public gross financing needs	2.1	7.7	8.4	9.1	8.2	7.6	7.1	6.4	5.9
Net public debt	29.2	39.7	45.7	49.0	51.1	51.8	52.6	53.0	52.9
Public debt (in percent of potential GDP)	37.9	46.9	51.5	54.3	55.0	55.2	55.3	55.3	55.0
Real GDP growth (in percent)	5.1	4.3	4.2	4.5	4.2	3.9	3.8	3.7	3.7
Inflation (GDP deflator, in percent)	5.5	-1.4	6.1	4.6	4.2	4.5	4.5	4.5	4.5
Nominal GDP growth (in percent)	11.2	3.6	11.1	9.8	7.8	7.8	7.8	8.1	8.3
Effective interest rate (in percent) [4/]	3.9	2.5	2.6	2.2	2.9	3.2	3.3	3.3	3.3

As of August 03, 2018		
Sovereign Spreads		
EMBIG (bp) 3/		263
5Y CDS (bp)		N/A
Ratings	Foreign	Local
Moody's	Ba3	Ba3
S&Ps	BB-	BB-
Fitch	BB-	BB-

Contribution to Changes in Public Debt

	Actual			Projections							
	2007-2015	2016	2017	2018	2019	2020	2021	2022	2023	cumulative	debt-stabilizing primary balance [9/]
Change in gross public sector debt	-1.7	5.3	4.5	2.3	1.1	0.0	0.1	0.0	-0.3	3.3	-2.5
Identified debt-creating flows	-4.9	6.1	3.4	3.1	2.1	1.4	0.8	0.1	-0.4	7.1	
Primary deficit	-1.5	6.3	6.7	6.4	4.9	4.1	3.4	2.7	2.2	23.6	
Primary (noninterest) revenue + grants	38.2	32.8	30.7	31.3	31.9	31.6	31.2	30.8	30.3	187.1	
Primary (noninterest) expenditure	36.7	39.0	37.4	37.7	36.8	35.7	34.6	33.5	32.5	210.7	
Automatic debt dynamics [5/]	-2.9	-0.1	-3.3	-3.3	-2.8	-2.7	-2.6	-2.6	-2.5	-16.5	
Interest rate/growth differential [6/]	-2.4	-0.1	-3.3	-3.3	-2.8	-2.7	-2.6	-2.6	-2.5	-16.5	
Of which: real interest rate	-0.6	1.6	-1.5	-1.2	-0.7	-0.7	-0.7	-0.7	-0.7	-4.7	
Of which: real GDP growth	-1.8	-1.7	-1.8	-2.1	-2.1	-2.0	-1.9	-1.9	-1.9	-11.8	
Exchange rate depreciation [7/]	-0.5	0.0	0.0	...	...	...	...	...	...	...	
Other identified debt-creating flows	-0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Fiscal, Expenditures, Nationalization cost (negative)	-0.4	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	
Please specify (2) (e.g., ESM and Euroarea loans)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Residual, including asset changes [8/]	3.2	-0.8	1.1	-0.8	-1.0	-1.4	-0.7	-0.1	0.0	-3.8	



Source: IMF staff.

1/ Public sector is defined as the consolidated public sector. Public debt includes SOEs' borrowing from the BCB but not from other domestic instituions.

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 $[(r - \pi(1+g) - g + ae(1+r)]/(1+g+\pi+g\pi))$ 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 $r - \pi (1+g)$ 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 changes in the stock of guarantees, asset changes, and interest revenues (if any). For projections, includes exchange rate changes during the projection period.

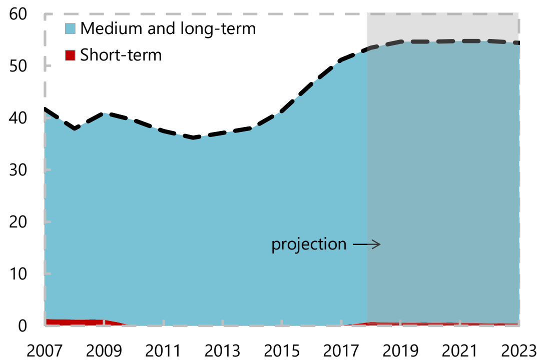
9/ Assumes that key variables (real GDP growth, real interest rate, and other identified debt-creating flows) remain at the level of the last projection year.

Bolivia Public DSA - Composition of Public Debt and Alternative Scenarios

Composition of Public Debt

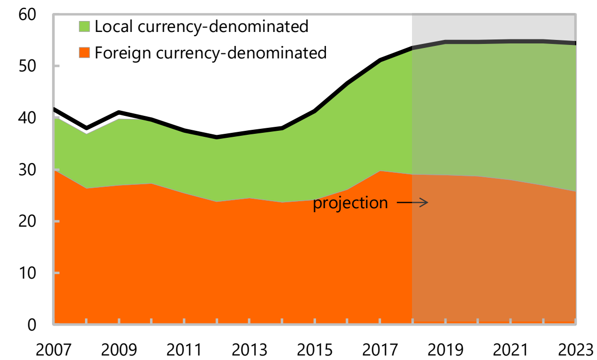
By Maturity

(in percent of GDP)



By Currency

(in percent of GDP)

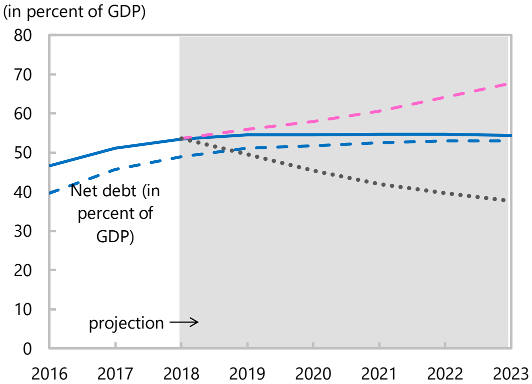


Alternative Scenarios

Baseline Historical Constant Primary Balance

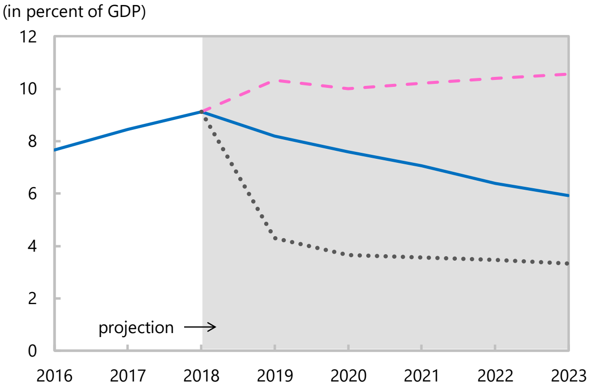
Gross Nominal Public Debt

(in percent of GDP)



Public Gross Financing Needs

(in percent of GDP)



Underlying Assumptions

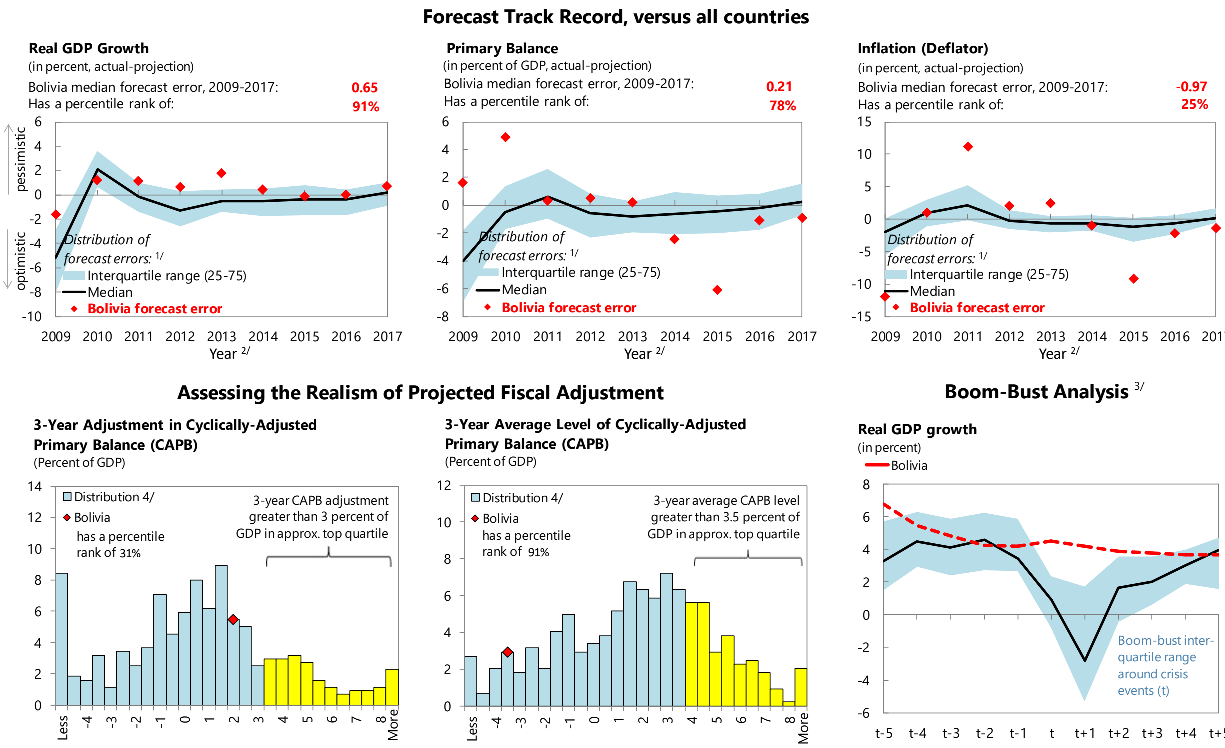
(in percent)

Baseline Scenario	2018	2019	2020	2021	2022	2023
Real GDP growth	4.5	4.2	3.9	3.8	3.7	3.7
Inflation	4.6	4.2	4.5	4.5	4.5	4.5
Primary Balance	-6.4	-4.9	-4.1	-3.4	-2.7	-2.2
Effective interest rate	2.2	2.9	3.2	3.3	3.3	3.3
Constant Primary Balance Scenario						
Real GDP growth	4.5	4.2	3.9	3.8	3.7	3.7
Inflation	4.6	4.2	4.5	4.5	4.5	4.5
Primary Balance	-6.4	-6.4	-6.4	-6.4	-6.4	-6.4
Effective interest rate	2.2	2.9	3.3	3.5	3.5	3.7

Historical Scenario	2018	2019	2020	2021	2022	2023
Real GDP growth	4.5	5.0	5.0	5.0	5.0	5.0
Inflation	4.6	4.2	4.5	4.5	4.5	4.5
Primary Balance	-6.4	-0.4	-0.4	-0.4	-0.4	-0.4
Effective interest rate	2.2	2.9	3.0	3.0	2.9	2.9

Source: IMF staff.

Bolivia Public DSA - Realism of Baseline Assumptions



Source : IMF Staff.

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

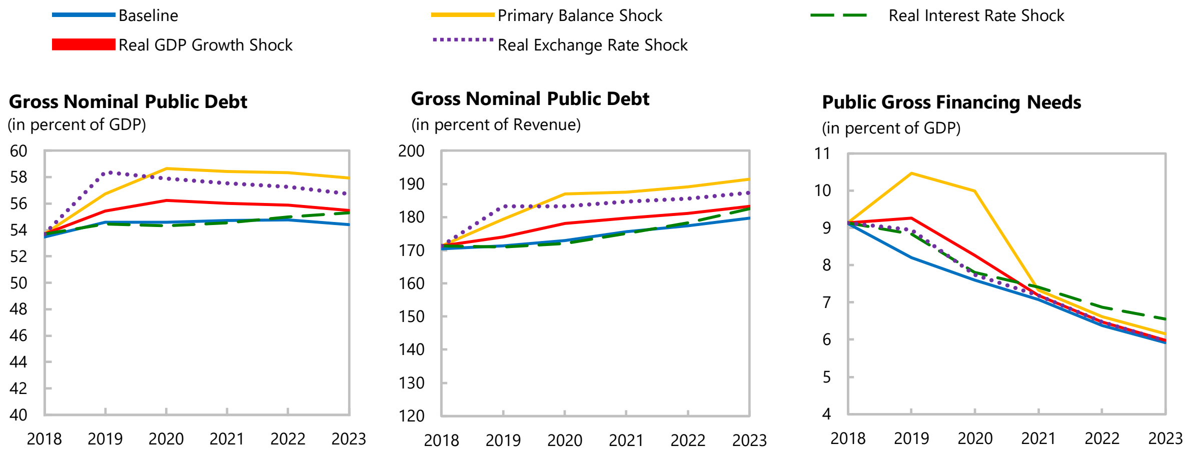
2/ Projections made in the spring WEO vintage of the preceding year.

3/ Bolivia has had a positive output gap for 3 consecutive years, 2015-2017. For Bolivia, t corresponds to 2018; for the distribution, t corresponds to the first year of the crisis.

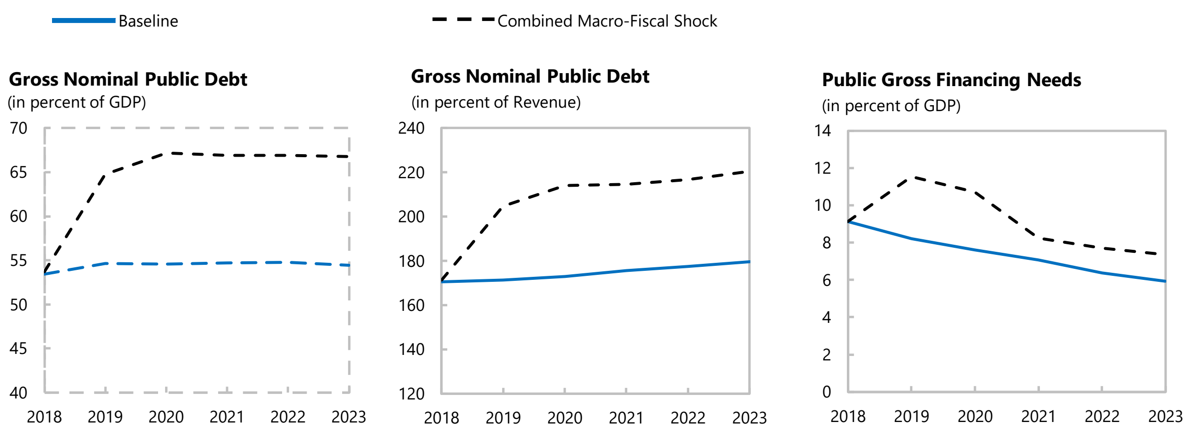
4/ Data cover annual obervations from 1990 to 2011 for advanced and emerging economies with debt greater than 60 percent of GDP. Percent of sample on vertical axis.

Bolivia Public DSA - Stress Tests

Macro-Fiscal Stress Tests



Additional Stress Tests



Underlying Assumptions

(in percent)

	2018	2019	2020	2021	2022	2023
Primary Balance Shock						
Real GDP growth	4.5	4.2	3.9	3.8	3.7	3.7
Inflation	4.6	4.2	4.5	4.5	4.5	4.5
Primary balance	-6.4	-7.2	-6.3	-3.4	-2.7	-2.2
Effective interest rate	2.2	2.9	3.4	3.6	3.6	3.6
Real Interest Rate Shock						
Real GDP growth	4.5	4.2	3.9	3.8	3.7	3.7
Inflation	4.6	4.2	4.5	4.5	4.5	4.5
Primary balance	-6.4	-4.9	-4.1	-3.4	-2.7	-2.2
Effective interest rate	2.2	2.9	3.6	4.0	4.4	4.7
Combined Shock						
Real GDP growth	4.5	3.2	2.9	3.8	3.7	3.7
Inflation	4.6	3.9	4.2	4.5	4.5	4.5
Primary balance	-6.4	-7.2	-6.3	-3.4	-2.7	-2.2
Effective interest rate	2.2	3.2	3.6	4.1	4.4	4.7

	2018	2019	2020	2021	2022	2023
Real GDP Growth Shock						
Real GDP growth	4.5	3.2	2.9	3.8	3.7	3.7
Inflation	4.6	3.9	4.2	4.5	4.5	4.5
Primary balance	-6.4	-5.3	-4.6	-3.4	-2.7	-2.2
Effective interest rate	2.2	2.9	3.2	3.4	3.4	3.4
Real Exchange Rate Shock						
Real GDP growth	4.5	4.2	3.9	3.8	3.7	3.7
Inflation	4.6	10.9	4.5	4.5	4.5	4.5
Primary balance	-6.4	-4.9	-4.1	-3.4	-2.7	-2.2
Effective interest rate	2.2	3.2	3.1	3.2	3.2	3.2

Source: IMF staff.

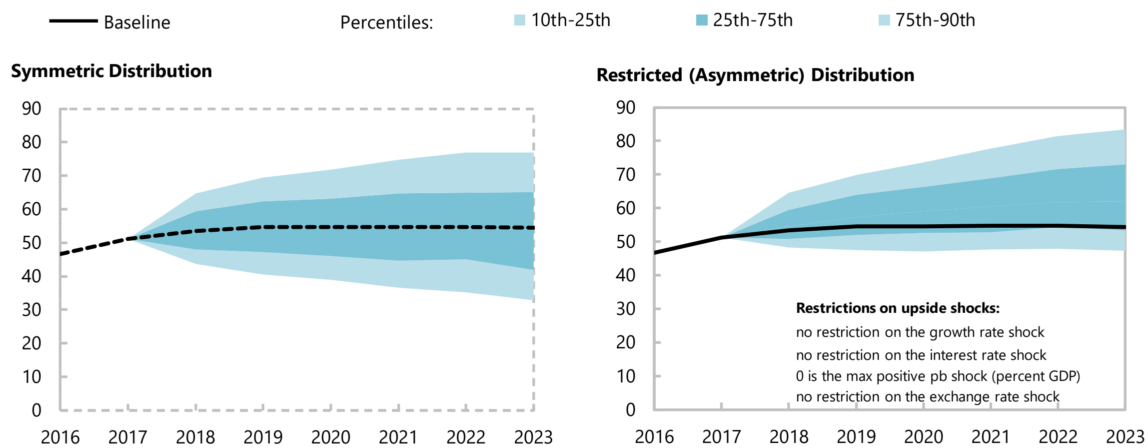
Bolivia Public DSA Risk Assessment

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

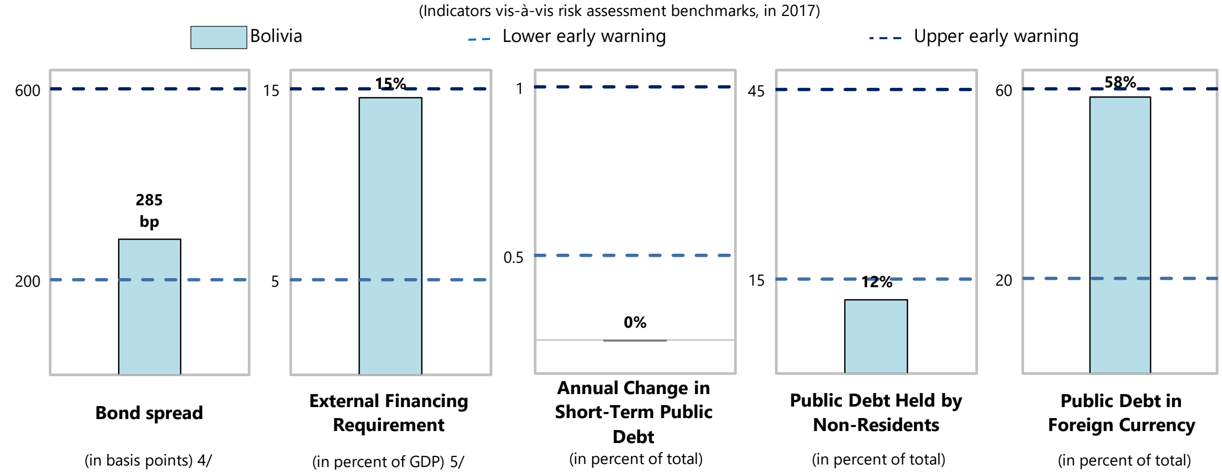
Evolution of Predictive Densities of Gross Nominal Public Debt

(in percent of GDP)



Debt Profile Vulnerabilities

(Indicators vis-à-vis risk assessment benchmarks, in 2017)



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.
Lower and upper risk-assessment benchmarks are:

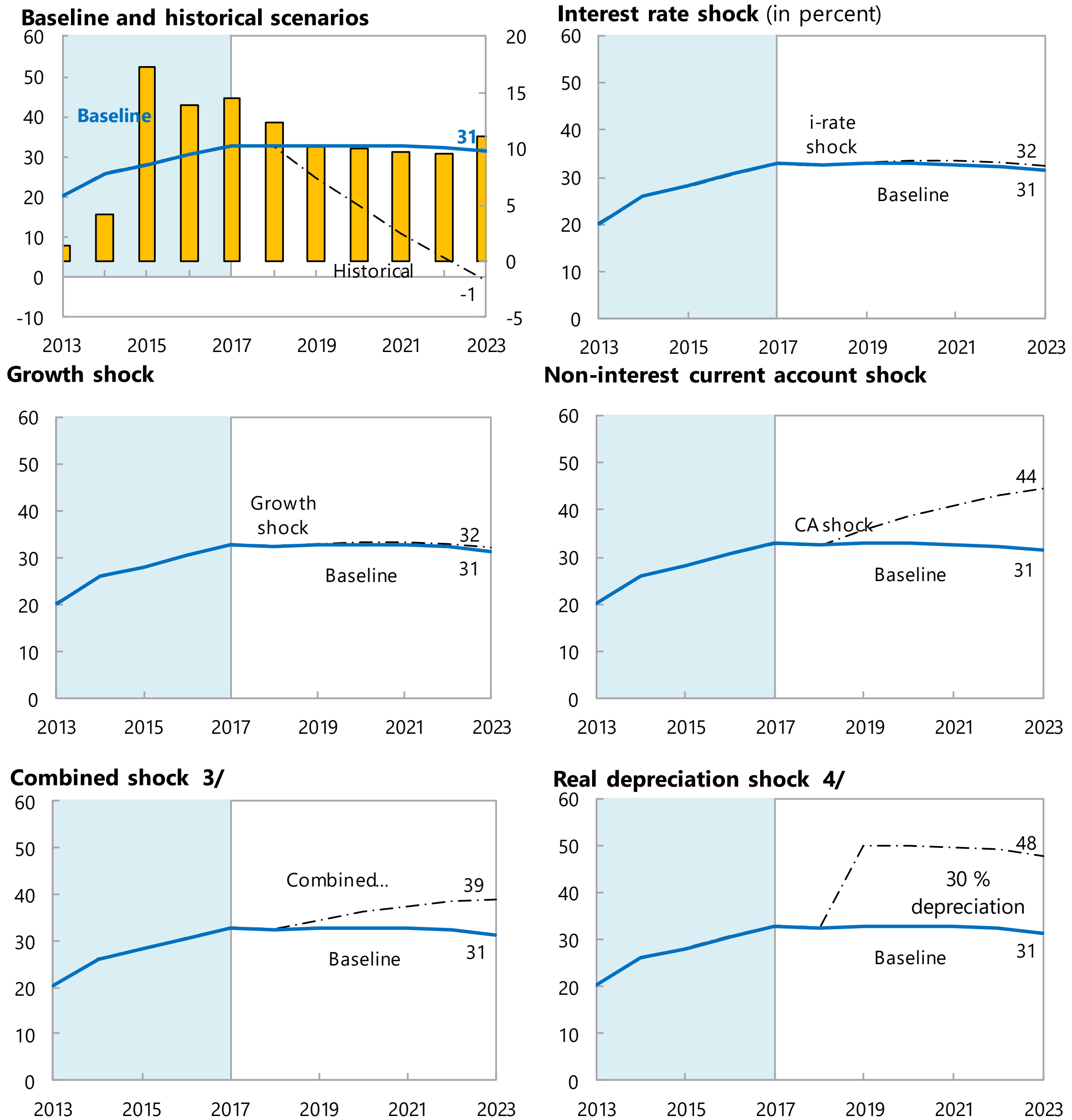
200 and 600 basis points for bond spreads; 5 and 15 percent of GDP for external financing requirement; 0.5 and 1 percent for change in the share of short-term debt; 15 and 45 percent for the public debt held by non-residents; and 20 and 60 percent for the share of foreign-currency denominated debt.

4/ Long-term bond spread over U.S. bonds, an average over the last 3 months, 05-May-18 through 03-Aug-18.

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.

Bolivia: External Debt Sustainability: Bound Tests 1/ 2/

(External debt in percent of GDP)



Sources: International Monetary Fund, Country desk data, and staff estimates.
1/ Shaded areas represent actual data. Individual shocks are permanent one-half standard deviation shocks. Figures in the boxes represent average projections for the respective variables in the baseline and scenario being presented. Ten-year historical average for the variable is also shown.
2/ For historical scenarios, the historical averages are calculated over the ten-year period, and the information is used to project debt dynamics five years ahead.
3/ Permanent 1/4 standard deviation shocks applied to real interest rate, growth rate, and current account balance.
4/ One-time real depreciation of 30 percent occurs in 2010.

Bolivia: External Debt Sustainability Framework, 2013-23
(In percent of GDP, unless otherwise indicated)

	Actual							Projections						
	2013	2014	2015	2016	2017	10-Year Historical Average	10-Year Standard Deviation	2018	2019	2020	2021	2022	2023	Debt-stabilizing non-interest current account 7/
Baseline: External debt 1/	20.2	26.0	28.1	30.6	32.8			**32.5**	**32.8**	**32.9**	**32.7**	**32.3**	**31.3**	**-4.0**
Change in external debt	1.5	5.8	2.1	2.5	2.2			-0.2	0.3	0.0	-0.1	-0.4	-1.0	
Identified external debt-creating flows (4+8+9)	-11.5	-5.3	4.1	4.1	0.7			1.2	0.3	0.0	-0.1	-0.4	-1.0	
Current account deficit, excluding interest payments	-3.9	-3.0	4.7	4.4	3.9			3.5	3.3	3.1	3.1	3.3	3.1	
Deficit in balance of goods and services	-5.6	-3.3	6.0	7.4	5.7			5.4	5.6	5.6	5.5	5.5	5.5	
Exports	42.5	42.6	30.2	24.3	25.1			25.2	24.7	24.6	24.4	24.0	23.7	
Imports	36.8	39.3	36.2	31.6	30.8			30.6	30.4	30.1	29.8	29.6	29.1	
Net non-debt creating capital inflows (negative)	-5.8	-2.2	-1.7	-0.8	-1.7			-0.8	-1.7	-1.9	-2.1	-2.4	-2.7	
Net foreign direct investment, equity	5.8	2.1	1.7	0.7	1.7			0.8	1.7	1.9	2.1	2.4	2.6	
Net portfolio investment,equity	0.0	0.1	0.1	0.1	0.1			0.0	0.0	0.0	0.0	0.0	0.0	
Automatic debt dynamics 2/	-1.8	-0.2	1.2	0.5	-1.5			-1.5	-1.2	-1.1	-1.2	-1.3	-1.4	
Denominator: 1+g+r+gr	1.1	1.1	1.0	1.0	1.1			1.1	1.1	1.1	1.1	1.1	1.1	
Contribution from nominal interest rate	0.4	1.2	1.2	1.3	1.4			1.3	1.4	1.4	1.4	1.3	1.3	
Contribution from real GDP growth	-1.1	-1.0	-1.3	-1.2	-1.2			-1.3	-1.3	-1.2	-1.2	-1.1	-1.1	
Contribution from price and exchange rate changes 3/	-1.1	-0.4	1.3	0.4	-1.7			-1.4	-1.3	-1.4	-1.4	-1.5	-1.6	
Residual, incl. change in gross foreign assets (2-3) 4/	13.0	11.1	-2.0	-1.6	1.5			-2.9	-1.3	-1.4	-1.4	-1.5	-1.6	
External debt-to-exports ratio (in percent)	47.7	61.0	93.1	126.1	130.5			129.1	132.7	133.7	134.3	134.3	132.4	
Gross external financing need (in billions of US dollars) 5/	0.4	1.4	5.7	4.7	5.5			5.1	4.6	4.8	5.0	5.4	6.8	
in percent of GDP	1.4	4.2	17.3	13.9	14.6			12.3	10.2	9.9	9.5	9.4	10.8	
Scenario with key variables at their historical averages 6/								**32.5**	**24.8**	**17.7**	**11.1**	**4.9**	**-0.8**	**-2.9**
Key Macroeconomic Assumptions Underlying Baseline														
Real GDP growth (in percent)	6.8	5.5	4.9	4.3	4.2	5.0	1.0	4.5	4.2	3.9	3.8	3.7	3.7	
Exchange rate appreciation (US dollar value of local currency, c	0.0	0.0	0.0	0.0	0.0	1.3	2.7	0.0	0.0	0.0	0.0	0.0	0.0	
GDP deflator (change in domestic currency)	6.0	2.0	-4.6	-1.4	6.1	4.7	6.1	4.6	4.2	4.5	4.6	4.9	5.1	
GDP deflator in US dollars (change in percent)	6.0	2.0	-4.6	-1.4	6.1	6.1	7.5	4.6	4.2	4.5	4.6	4.9	5.1	
Nominal external interest rate (in percent)	2.5	6.6	4.6	4.8	5.2	3.6	1.6	4.3	4.6	4.8	4.7	4.5	4.3	
Growth of exports (US dollar terms, in percent)	4.0	9.8	-29.1	-16.6	14.9	9.4	24.8	10.2	5.9	7.0	6.9	6.6	6.6	
Growth of imports (US dollar terms, in percent)	11.4	16.8	-7.8	-9.4	8.2	11.8	17.5	8.9	7.0	6.9	6.8	7.1	6.6	
Current account balance, excluding interest payments	3.9	3.0	-4.7	-4.4	-3.9	2.5	5.7	-3.5	-3.3	-3.1	-3.1	-3.3	-3.1	
Net non-debt creating capital inflows	5.8	2.2	1.7	0.8	1.7	2.9	1.4	0.8	1.7	1.9	2.1	2.4	2.7	

1/ Gross foreign public debt includes sovereign bonds issued internationally but held by residents.
2/ 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.
3/ 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).
4/ For projection, line includes the impact of price and exchange rate changes.
5/ Defined as current account deficit, plus amortization on medium- and long-term debt, plus short-term debt at end of previous period.
6/ 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.
7/ Long-run, constant balance that stabilizes the debt ratio assuming that key variables (real GDP growth, nominal interest rate, dollar deflator growth, and non-debt inflows in percent of GDP) remain at their levels of the last projection year.

Annex II. External Sector Assessment

Foreign asset and liability position and trajectory	**Background**. Bolivia has been a net debtor since 2016Q4. The net international investment position (NIIP) fell from 4.7 billion (14.2 percent of GDP) in 2014 to -2.4 billion (-6.3 percent of GDP) at end-2017. The decline in net foreign assets was largely driven by the widening in the current account deficit, coinciding with the commodity boom cycle. Foreign liabilities increased by 5.7 percent of GDP, which included an external sovereign bond issuance of US$1 billion in 2017. **Assessment**. The negative NIIP is expected to deteriorate reflecting persistent current account deficits through 2023. According to the NFA model, maintaining the NIIP at the 2017 level of -6.3 percent of GDP would require a current account deficit of 0.8 percent of GDP, implying a real depreciation of 18.5 percent. On the upside, Bolivia does not have large short-term gross financing needs as much of the external debt is long-term, though external debt-to-GDP has risen rapidly, raising external vulnerability.	**Overall Assessment**: *The external position of Bolivia in 2018 is substantially weaker than implied by fundamentals and desirable policy settings*. **Potential policy responses**: Fiscal consolidation supported with structural reforms are needed to improve Bolivia's competitiveness and potential growth. To preserve the stabilized exchange rate, Bolivia will need to rely on internal adjustment. In this regard, wage should grow in line with the productivity, and the government should employ a set of structural reforms that improve the business environment by lowering tariff barriers and strengthening governance.
Current account	**Background**. The current account in Bolivia closely follows commodity price swings. With the collapse in commodity prices in 2014, the current account reverted to deficit after 10 years of continuous surplus. Over the last three years, the current account deficit has averaged 5.6 percent of GDP, with exports declining by 17.6 percent of GDP. The terms-of-trade are projected to recover in 2018, helping to narrow the current account deficit. The medium-term baseline scenario assumes slowing in exports as hydrocarbon production from the existing fields declines and imports moderate in line with lower public investment. As a result, the current account deficit is expected to moderate slightly. **Assessment**. EBA-lite model-based estimates suggest a cyclically adjusted current account deficit of 5.1 percent of GDP, compared to a norm of 0.5 percent of GDP; this implies an imbalance of 5.6 percent of GDP. The regression-based model, modified so that it only includes fuel exporters, suggests that a real exchange rate adjustment of 26.3 percent is needed to close the current account gap.	
Real exchange rate	**Background**. CPI-based real effective exchange rate (REER) has been on an appreciating trend since end-2017. As of September 2018, the REER had appreciated by 9.5 percent since end-2017. This trend largely reflects depreciation of Bolivia's major trading partners against the U.S. dollar since the Argentina Crisis erupted, coupled with an appreciating U.S. dollar, to which the Boliviano is pegged. **Assessment**. For 2018, the REER regression model indicates an overvaluation of 33 percent compared to the level implied by fundamentals and desirable policies. The regression is modified to only include fuel exporters and the result is sensitive to fiscal and financial policies, among others. The model assumes an appropriate cyclically adjusted fiscal deficit of 4.3 percent of GDP, which would put the debt-to-GDP ratio back to its 2016 level. To realign the exchange rate with fundamentals, policies would focus on fiscal consolidation and improving productivity and competitiveness, including with lower wage growth.	

Capital and financial accounts: flows and policy measures	**Background**. Bolivia successfully issued sovereign bonds of US$1 billion (2.6 percent of GDP) in 2017 with a maturity of 10 years at an interest rate of 4.5 percent. FDI inflows are expected to be lower this year at about 1.0 percent of GDP compared to a three-year average of 1.5 percent of GDP. According to the Chinn-Ito index, Bolivia's capital account is less open than the LAC average. **Assessment**. The current account deficit has been financed mainly by drawing down international reserves. The normalization in U.S. monetary policy is expected to result in a rise in the cost of external funding. To support sustainable and durable growth, the authorities need to put in place policies that attract larger FDI inflows, preferably non-debt creating, to revitalize the non-hydrocarbon sector.		
FX intervention and reserves level	**Background**. Bolivia has a stabilized exchange rate regime pegged to U.S. dollar. Through auctions and direct sales, the central bank sold about 2.5 billion of reserves in 2017. Recent data for 2018 suggests a slowing in FX sales. **Assessment**. Reserves remain adequate (at 8 months of imports) according to standard Fund Assessing Reserve Adequacy (ARA) metrics. However, reserves loss has accelerated in 2018 and are forecast to fall below adequate levels based on the ARA by end-2020. To preserve the stabilized exchange rate, correcting external imbalances will have to rely more on internal adjustment, including fiscal consolidation and wage containment, supported by structural reforms to raise productivity.		
Technical Background Notes	Regression coefficients are estimated using fuel exporting countries as defined by WEO. The external assessment for 2018 is based on baseline projections presented in the Table 1-6. While the size of overvaluation varies slightly depending on year used, the overall assessment of a moderate weak external sector assessment remains unchanged.		
Commodity module	The consumption-based allocation model suggests a current account norm at above 1.0 percent of GDP for Bolivia measured at constant real per capita annuity, whereas the EBA-lite CA methodology suggests -0.5 percent of GDP. The higher current account norm in the consumption allocation model than in the EBA-CA model reflects the volatility of revenue flows which motivates more precautionary savings to smooth consumption. To filter out any cyclical components, the focus should be on the medium term.		
Investment income module	The investment-needs model suggests a CA norm that is lower than that implied by the consumption-allocation model. For Bolivia, the medium-term CA norm from the investment model is close to 0 percent. Bolivia's CA norm is sensitive to public and private investment efficiency. This exercise illustrates that the external misalignment depends on investment efficiency and thus motivates specific policies around it. To filter out any cyclical components, the focus should be on the medium term.		

Annex III. A Proposed Fiscal Rule for Bolivia

Public sector finances in Bolivia face challenges related to volatility in commodity revenues. While the authorities saved a significant portion of hydrocarbon revenues during the commodity boom ending in 2014, they had also increased public investment, wages, and transfers substantially during this time. Total expenditures rose on average by 16 percent per annum (nominal) from 2006–14, broadly in line with increases in hydrocarbon revenues of 19 percent per annum). However, during 2014–17, when hydrocarbon-related revenues fell by about 25 percent on average per year (nominal), total expenditures grew by 1.4 percent per annum (nominal).

Background

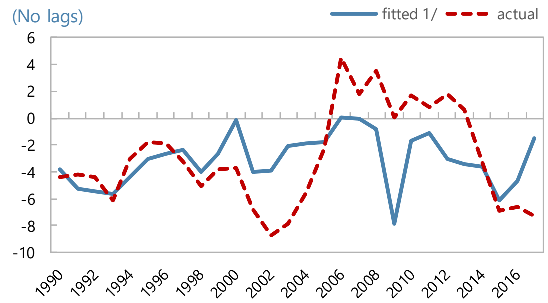
Cross-country analysis indicates that fiscal policy in Bolivia has been broadly counter-cyclical, though this is mostly related to revenue dynamics.

- Panel regressions of fiscal outcomes on exogenous variables suggest that Bolivia's fiscal balances were higher than in other countries with similar characteristics during the commodity boom but were lower in recent years.[1]

- A closer examination suggests that Bolivia had larger increases in revenues than in peer countries during the boom period and faster declines in recent years. As a percent of GDP, expenditures rose faster than in peer countries during the boom but declined at a similar rate in recent years.

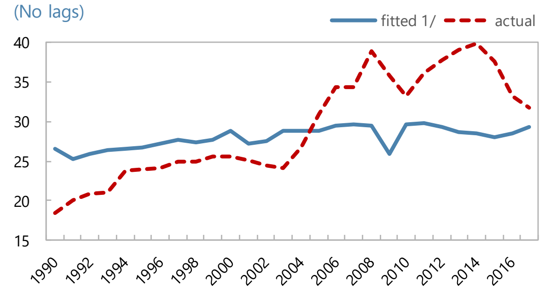
- The above findings are unchanged when the exercise is repeated using dynamic panel models. Adding one lag of the dependent variables as an explanatory variable significantly improves regression fit statistics, but the time persistence of fiscal outcomes makes it difficult to draw policy implications from the comparison with peer countries.

Bolivia: Fiscal balance
(No lags)



Sources: Authorities' data; and Fund staff estimates.
1/ Values predicted by explanatory variables.

Bolivia: Revenue
(No lags)



Sources: Authorities' data; and Fund staff estimates.
1/ Values predicted by explanatory variables.

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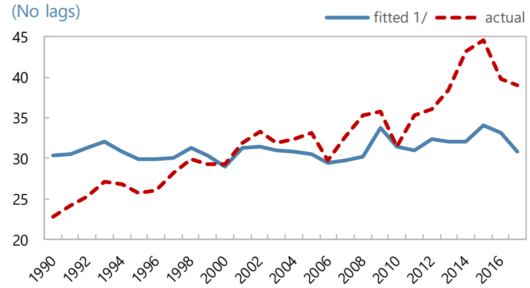
[1] Based on fixed-effect panel regressions of fiscal outcomes on exogenous variables for 173 countries covering the 1986-2017 period. Explanatory variables include the global cycle variables such as world growth, world growth interacted with average trade openness, world inflation, world inflation interacted with average trade openness, the VIX, US 10-year yields, and US Fed funds rates, as well as the following country-specific variables: the ratio of short-term debt to GDP, commodity export prices, commodity import prices, population growth deviation from historical trends, major political regime transitions, occurrence of natural disasters, and country fixed-effects.

Bolivia's hydrocarbon resource horizon is short compared to other hydrocarbon exporters. Proven reserves of natural gas are estimated at 10.7 trillion cubic feet, equivalent to less than 20 years of the average production observed in recent years. The horizon could be even shorter if the pace of decline in the output of existing gas fields accelerates and discoveries stall. Such an adverse scenario would require a sharp reduction in expenditures in the future.

Bolivia: Expenditure
(No lags)



Sources: Authorities' data; and Fund staff estimates.
1/ Values predicted by explanatory variables.

From a public finance management perspective, fiscal discipline could benefit from a stronger medium-term planning framework. As medium-term fiscal projections are not prepared regularly, the fiscal space available for including new public investment projects into each annual budget is unclear. As such, the Ministry of Finance faces uncertainty regarding the future demands on resources, which affects the liquidity projections and debt management.[2]

In this context, a fiscal rule might be useful for Bolivia. Fiscal rules have been found to support policy credibility and fiscal discipline. Evidence suggests that the use of rules anchors expectations of sustainable public finances (IMF, 2009) and improves fiscal performance. As of 2017, more than 90 countries used fiscal rules, of which more than 60 were emerging market and developing countries. Many countries have more than one fiscal rule.

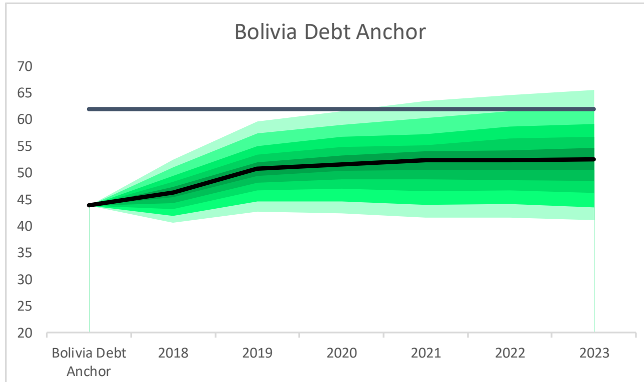
Elements of a suitable fiscal rule

Simplicity and flexibility are two important factors in designing a fiscal rule. A good rule should be simple, so it can be readily operationalized, communicated to the public, and monitored. But it should also have adequate flexibility to respond to shocks. For example, some analysts suggest that cyclically adjusted balance rules are superior in dealing with supply shocks.

IMF staff propose that the Bolivian authorities adopt a fiscal rule with the following components: (a) a 40 percent of GDP gross debt limit as a medium-term anchor and, (b) a non-hydrocarbon budget deficit limit of 4.5 percent of non-hydrocarbon GDP as an operational target to help achieve the debt target on a sustainable basis. A cyclically adjusted primary balance is not advised at this time for Bolivia because of the challenges related to estimating and communicating the concept. The authorities should also consider introducing an expenditure ceiling that would limit procyclicality during large resource booms, thereby strengthening the framework further.

[2] Earlier findings from indicators used by the PEFA methodology found that fiscal discipline was hindered by continuous budget changes, which give rise to the risk of spending unrelated to the policies enunciated.

The debt limit of 40 percent of GDP was calibrated in five steps. First, an IMF/World Bank study is used to set a high-risk threshold (maximum)—at 62 percent of GDP—beyond which a debt distress episode is thought to happen with a high probability. Second, the starting primary deficit in the estimation is assumed to be the level projected in the medium term, instead of the higher 2017 outcome, since the former better represents the medium-term fiscal policy stance. Third, stochastic simulations are performed to gauge the potential impact of macroeconomic and fiscal shocks on debt over the medium term (see the text fan chart summarizing these simulations). Fourth, the initial debt level that would keep debt below the "maximum"' threshold of 62 percent of GDP over the medium term, with 90 percent probability under various negative shocks, is assessed at 43 percent (IMF 2016, Baum and others, 2018). Finally, the estimated figure is rounded to 40 percent of GDP, in the interests of simplicity and prudence. The experience of other countries is also considered in the process of rounding (below).



Estimations suggest that tighter fiscal policies upfront would reduce the need for greater tightening later. For illustration purposes, the above exercise is repeated assuming different primary balances as the starting point: (i) a deficit of 6.7 percent of GDP, the outcome for 2017; and (ii) a deficit of 1.0 percent of GDP, as projected for the medium term under the IMF staff's active scenario (page 11 of the Staff Report). The calibrated debt targets under these scenarios range from 19 percent of GDP using the 2017 outcome for primary balance as a starting point—which implies that current large deficits continue in the transition period—to 45 percent of GDP if the authorities adopt policies as suggested under the active scenario.

Calibrated Debt-to-GDP Targets with the "Maxiumum" Set at 62 percent of GDP

Primary balance used in the estimations (in percent of GDP)	
2017 outcome of -6.7 percent	19.0
-3.3 percent, as the projection for 2023 in the baseline scenario	43.3
-1.0 percent, as the projection for 2023 in the reform scenario	45.1

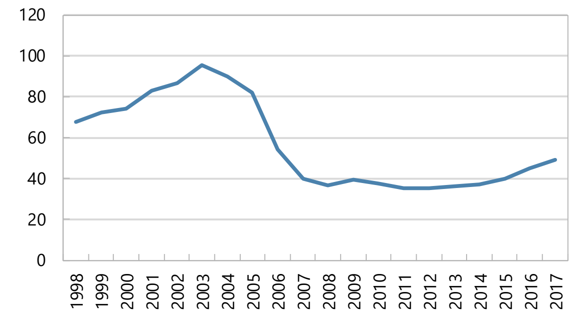
Sources: Bolivian Authorities; and IMF staff estimates.

Bolivia's history and cross-country comparisons support a lower debt target for Bolivia.

- Bolivia has had experiences of high public debt and debt distress, receiving debt relief under the Heavily Indebted Poor Countries (HIPC) initiative in 1998 and 2001 and, after debt rose again to 96 percent of GDP by 2003, again under the Multilateral Debt Relief Initiative (MDRI) in 2005. As a result of the second operation involving the IMF, World Bank and Inter-American Development

Bank (from 2007), Bolivia's debt-to-GDP ratio fell from over 82 percent to 40 percent in 2007. It declined further to 35 percent in 2012 after several years of fiscal surpluses and, despite sizable deficits in 2014–15, remained under 40 percent until 2015, owing in part to the use of government deposits to finance deficits. The debt ratio has been increasing rapidly since then.

NFPS Debt-to-GDP Ratio (in percent)



Sources: Bolivian authorities; and IMF staff estimates.

- In Latin America, Ecuador and Peru—also commodity exporters—have debt targets of 40 and 30 percent of GDP, respectively, as does Panama, which relies on revenues from the Panama Canal.[3] Among advanced economies, Canada has set a goal of eliminating general government net debt by 2021. More globally, countries with a debt target generally set the target at 60 percent of GDP, but most of these countries do not have sizable commodity revenues, and thus are not exposed to volatility in commodity prices. Most energy exporting countries have significantly lower levels of debt than Bolivia.

The non-hydrocarbon budget limit of 4.5 percent of non-hydrocarbon GDP is calibrated so as to allow the debt limit to be achieved on a sustainable basis. The non-hydrocarbon deficit and non-hydrocarbon GDP variables are chosen to shield the economy from volatility in hydrocarbon revenues.

The 4.5 percent target is at the high end of the range of estimates for fiscal sustainability under the permanent income hypothesis (PIH) approach. Analysis applying the PIH suggests that Bolivia could sustainably run non-hydrocarbon budget deficits of about 3.2-4.5 percent of non-hydrocarbon GDP, depending on various assumptions, namely the longevity of existing gas fields and new reserve discoveries, hydrocarbon prices, yields earned on accumulated assets, and the rate of GDP growth. This means that the proposed rule would eventually lead to consumption of hydrocarbon-related revenues under different scenarios but would still be sufficient to keep the debt ratio under 40 percent of GDP well after all hydrocarbon revenues are exhausted.

Transition

As debt and the non-hydrocarbon budget deficit of the NFPS are higher than those in the proposed rule, a transition period would be needed for convergence to "steady-state" levels.

[3] Ecuador, Peru, and Panama have also one or two additional rules. Since 2010, Ecuador has had a rule resembling a non-oil golden rule such that permanent expenditure cannot be higher than permanent revenue. This replaced the previous non-oil budget balance rule and expenditure growth rule. Peru has two other rules: a structural budget balance rule limiting the deficit to 1.0 percent of GDP and an expenditure rule. Panama has a budget balance rule limiting the deficit of the NFPS to 1.0 percent of GDP (excluding the Panama Canal Authority).

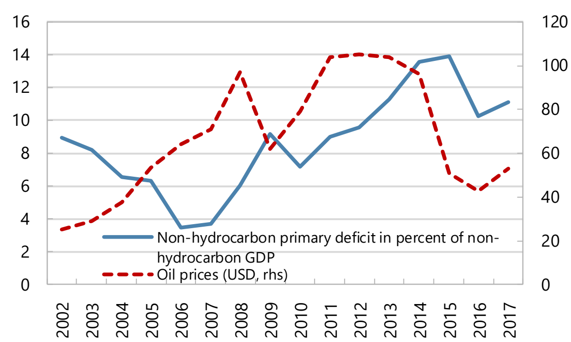
The active scenario illustrates a fairly gradual but marked transition that lowers the non-hydrocarbon budget deficit without adverse effects on long-term growth.

Finally, a suitable rule framework should consider the options of escape clauses and an expenditure rule to delink expenditures and revenues.

- Escape clauses would allow fiscal policy the flexibility to respond to extraordinary shocks (e.g., natural disasters, a severe economic recession, commodity price shock, etc.), although it would need to be clearly defined *ex ante*.

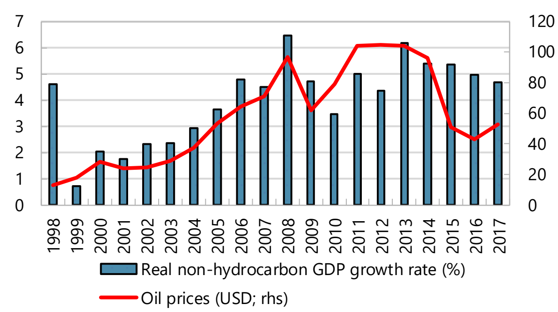
- An expenditure rule would help guarantee that the effects of volatility in hydrocarbon revenues on non-oil GDP are contained. This is needed because a strong positive correlation between oil prices and non-hydrocarbon GDP can persist even after adopting a non-hydrocarbon deficit rule (e.g., through a confidence factor). In this context, it would be worth considering an expenditure rule.

Oil Prices and NFPS Non-hydrocarbon Deficit



Sources: Bolivian authorities; and IMF staff estimates.

Oil Prices and Real non-Hydrocarbon GDP Growth Rate



Source: Bolivian authorities; and IMF staff estimates.

Annex IV. Governance Issues and Options

Governance weaknesses can have adverse effects on economic growth and equity (IMF 2018a). Corruption—a specific consequence of some of these weaknesses—has been linked to lower long-term growth (Ugur 2014), lower tax collection (IMF 2007), and inequality (Gupta, Davoodi and Alonso-Terme 1998), among other things.[1] To promote long-term, sustainable growth, it is important to identify and address governance vulnerabilities as early as possible.

Like many emerging markets, Bolivia faces various governance challenges, some of which are understood to enable corruption. International and domestic surveys have identified many issues considered as deterrents to investment or impediments to doing business (SIP forthcoming). Some of these are related to governance, including legal insecurity, inefficient or cumbersome regulations, and low-level corruption. In addition, private investment in Bolivia has been weak and declining as a share of total investment. With commodity prices expected to remain low, it will be important to raise private investment so that productivity growth and diversification can help propel further gains in real incomes and inequality.

Following the Executive Board's Review of the 1997 Guidance Note on Governance—A Proposed Framework for Enhanced Fund Engagement, staff have undertaken a preliminary assessment of governance issues in Bolivia following the principles laid out in the Framework, including the need to: (i) use reliable sources of information and (ii) focus on issues regarded as macro-critical. Based on a body of knowledge derived from Fund technical assistance (TA) experts and reports, inputs from the World Bank and Inter-American Development Bank (IDB), external assessments of governance and transparency, and analyses from past Article IV consultations, staff identified the following set of macro-critical areas of weakness warranting analysis and follow up this year: (i) fiscal governance, in particular public financial management (PFM); (ii) transparency of government operations in the natural resource sector; (iii) certain aspects of the regulatory environment for the private sector and asset/investor protection; and (iv) follow up on progress to strengthen AML-CFT. Other areas warranting attention in future Consultations are also discussed.

A. The Government's Efforts to Improve Governance

The authorities have promoted several anti-corruption initiatives over the last decade, with a focus on transparency and setting up information systems. The most important initiatives were:

- The *Ministerio de Transparencia Institucional y Lucha Contra la Corrupción* (Ministry of Transparency and Anti-Corruption), created in 2009 with an explicit mandate and investigative powers to identify corruption risks, establish partnerships with other organizations such as the United Nations Office of Drugs and Crime (UNODC), and to promote transparency policies within the government;

[1] Corruption is defined as "the abuse of public office for private gain" (World Bank 1997).

- The merger of this Ministry with the Ministry of Justice in 2018 to create the *Ministerio de Justicia y Transparencia Institucional* (Ministry of Justice and Institutional Transparency), in the context of a policy change towards decentralization.

- The decentralization of investigation of corruption, both proactive and as a response to complaints, from the central government to "transparency units" created within each body of the public administration, such as states, municipalities, SOE branches and subsidiaries. The Vice-ministry has the responsibility of coordinating these units and of taking over investigations if they involve sums over US$1 million, or if they involve the head of an entity of the public administration.

- Enactment of the sweeping "*Marcelo Quiroga Santa Cruz*" anti-corruption law in 2010 and the Witness Protection Law in 2013. Together these make up the legal framework governing anti-corruption law enforcement activities and the protection of witnesses involved in investigations.

- The development of systems designed to centralize corruption-related information, such as the *Sistema Integrado de Información Anticorrupción y de Recuperación de Bienes del Estado* (Integrated System of Anticorruption Information and Recovery of Government Assets).

- A joint program with the UNODC, under the banner of the United Nations Convention against Corruption (to which Bolivia is a signatory), to promote best transparency practices and procedures in the municipalities.

The authorities have also received Fund TA to strengthen institutions and regulations on governance -related issues, namely anti-money laundering regulations and oversight (AML/CFT), treasury and cash management, and tax and customs administration. The IMF welcomes the authorities' engagement in these issues and is committed to working with them to improve the framework for governance conditions. The government also requested TA in 2017 to strengthen the overall framework to prevent corruption, although was not specific on areas of need.

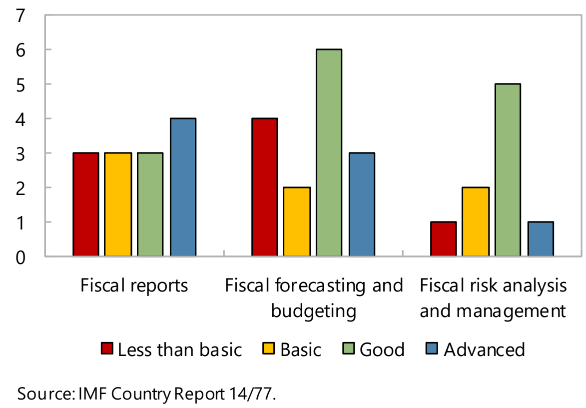
B. Staff Assessment

Fostering good governance is a complex challenge. The Fund recognizes the government's efforts noted above. To help advance their agenda, this section highlights the most macro-critical governance issues to be addressed, reviews trade-offs and policy implications, and offers suggestions on ways to strengthen institutions and performance.

Public Financial Management

Bolivia was assessed under the Public Expenditure and Financial Accountability (PEFA) Review in 2009 and the Fund's Fiscal Transparency Assessment in 2014. At that time, the PEFA awarded solid ratings of A or B (ratings from A-D) to 40 percent of the performance indicators. The 2014 IMF Fiscal Transparency Report classified 60 percent of Bolivia's fiscal transparency practices as "Advanced" or "Good". Following these assessments, the Fund has worked closely with the government to strengthen weaknesses in select areas and many changes have occurred.

Bolivia: Fiscal Transparency Practices



The Fund has been working with the authorities on the following TA aimed at promoting transparent and efficient fiscal management (PFM).

a. **Governance and oversight of SOEs**. As mentioned in the 2017 and 2018 Staff Reports, the monitoring and accountability of SOEs should be strengthened, particularly since the activities of subsidiaries are not included in the accounts of the NFPS or subject to regular public audits. The present law governing SOEs has several weaknesses: (i) a complicated governance structure in the Act dilutes the responsibilities of the decision making bodies and agencies for SOE regulation; (ii) the line between ownership and supervisory functions of the state is blurred; (iii) the Act does not insulate corporate governance fully from political interference; and (iv) the effectiveness of monitoring and oversight of SOE budgets is unclear. As these create weaknesses that can be exploited for private gain, the authorities should consider reform of legislation governing SOEs to increase accountability and transparency, clarify the responsibilities of key decision-making bodies and agencies for regulatory and fiscal oversight functions, strengthen corporate governance regulations, and improve the budget approval process and budget oversight —consistent with the 2009 PEFA report.

b. **Public investment**. Given the share of investment carried out by the government, particularly SOEs and their subsidiaries, staff recommend that the authorities conduct an in-depth Public Investment Management Assessment (PIMA) study with assistance from the Fund's Fiscal Affairs Department (FAD). A partial analysis conducted during the 2017 Article IV consultation identified these key priorities: improving "project management and evaluation, central-local coordination, private sector participation in the infrastructure market, and monitoring of the existing stock of assets" (Country Report No. 17/395, Annex V). Improvements in project planning, management and evaluation might have helped prevent a scandal in 2015 surrounding the *Fondo Indigena*, a government development fund which invested millions of bolivianos in so-called "ghost" projects.[2] This would also strengthen assurances of accountability about the selection of large investment projects, particularly from SOEs in the extractive sectors.

c. **External auditing**: The financial statements of the Central Government are currently not audited by an independent external auditing institution. An independent financial audit would boost the reliability of financial and budgetary information. This is a weakness identified both in the 2009 PEFA and the 2014 Fiscal Transparency Assessment.

d. **Operational risks involving the Treasury Single Account (TSA).** Bolivia's TSA adheres to best practices in most areas, including an extensive coverage of central government entities and state-owned enterprises (SOEs), and automatic revenue collection processes with the Central Bank and with public and private financial institutions. Recent TA identified operational problems and manual processes that affect the TSA's financial information accuracy and timeliness, which creates vulnerabilities by preventing the Treasury from having adequate information for decision making. Accordingly, staff urge adoption of recent TA recommendations to: (i) develop technological solutions to eliminate manual procedures, and (ii) automate revenue streams, revenue accounting classifications, and the integration of all cash forecasts (inflows, outflows and financing).

e. **Medium-term fiscal framework.** As laid out in the Staff Report and in recent TA on PFM, a Medium Term Fiscal Framework would help address some of the governance risks associated with excess spending above budget targets and mid-term supplementary budgets that have occurred when revenues have exceeded projections by making the process more transparent and predictable.

The Extractive Sectors

Mining and hydrocarbon-related revenues are significant. Together they contributed 30 percent on average of annual total fiscal revenues over the period of 2009–17. The government is heavily involved in all stages of business in these sectors. Given the large amounts of investment related to resource exploitation by definition, a high level of transparency is advised. Management at the state oil company—*Yacimientos Petrolíferos Fiscales Bolivianos* (YPFB)—has been changed seven times in ten years. One of these executives was arrested and indicted on corruption charges and other employees, including technicians, were also arrested. While concerning, this also demonstrates the government's interest in pursuing criminal activity and discouraging corruption. Overall, these cases underscore the need for a stronger legal framework governing SOEs as noted above, and for greater transparency and institutional governance.

Staff recommend adopting international standards under the Extractive Industries Transparency Initiative (EITI). This global standard on governance of oil, gas and mineral resources has been found to "help set up new national standards for accountability and disclosure of resource-

[2] https://cnnespanol.cnn.com/2015/12/11/millonario-escandalo-de-corrupcion-en-bolivia-investigan-desfalco-en-el-fondo-indigena/

related revenues" (World Bank, 2015). The EITI is comprehensive and includes basic transparency requirements such as the publication of the procedures for license allocation, a register of licenses and contracts, and a discussion of beneficial ownership and role of the state. Although Bolivia has comprehensive transparency laws, there is still evidence that much information on the extractive sector mandated by these laws is not available, especially regarding departmental and municipal governments. Adopting EITI standards would speed up disclosure since the standards call for transparency in revenue collection from every activity in sector, including direct budget allocations and by SOEs and their subsidiaries. The authorities were receptive to this proposal and indicated they would follow up through the Ministry of Foreign Affairs, the entity responsible for all international engagements. Joining the EITI should complement, and not substitute, the SOE oversight recommendations laid out above.

Business Regulation

The burden of inefficient and cumbersome regulations can constrain firms and present opportunities for corruption. Navigating through rules, forms, payments, regulations and other procedures is one of the oft-cited obstacles to doing business in the country. Interactions with public bodies are often associated with higher incidence of "facilitation payments". As discussed in the Selected Issues Paper on Doing Business, strengthening the regulatory environment for private investment and moving to online payments and processes will be critical for reducing both the supply and demand for corruption, facilitating private investment and business activity, and attracting activity into the formal sector.

In line with findings on the Doing Business report, staff propose the following reforms to strengthen governance in the government's interaction with private business: (i) move to full online filing and tax payments (including for VAT, social security contributions, the transaction tax) and possibly reduce the frequency of payments in some instances; and (ii) make improvements in IT (automation, web based, digital applications) to reduce the interactions needed to obtain a business license from the municipality, get a company deed, obtain construction permits, and other administrative services. (iii) In addition, the authorities could work on regulations to enhance investor protections and corporate governance regulations. The government has recognized that reform of the judiciary system is essential, but it is likely to be a long-term undertaking.

AML/CFT

The AML/CFT framework can provide useful support in strengthening governance and institutions. The authorities have been strengthening AML/CFT supervision in the financial sector and are in the process of approving and implementing a National AML/CFT Strategy. The IMF provided TA and worked with the government between 2012-2017 on strengthening risk-based supervision and developing a National Strategy and Action Plan for AML/CFT. First proposed in 2016, the Strategy has stalled in the Plurinational Legislative Assembly. Staff encourage the government to move forward discussions with all concerned stakeholders to implement the National Strategy and continue strengthening the AML/CFT framework, particularly ahead of the 2020 assessment by GAFILAT.

Other Areas for Consideration

Independence of institutions. In addition to credit risks for the bank (Staff Report page 15), central bank lending to SOEs poses a potential conflict of interest in the conduct of monetary policy. The legislation governing credit to SOEs and the transparency of these operations are described in the *Resoluciones de Directorio,* but the consultation process and decisions on the technical, commercial or social viability of the projects funded by the BCB are not well understood, nor are the investment criteria used. In addition to the potential benefits from a thorough PIMA exercise (see above), staff maintain that direct lending by the BCB to SOEs be shifted on to the government budget or undertaken by the financial sector, and that legislation be amended to restrict systematic BCB lending to SOEs and government.

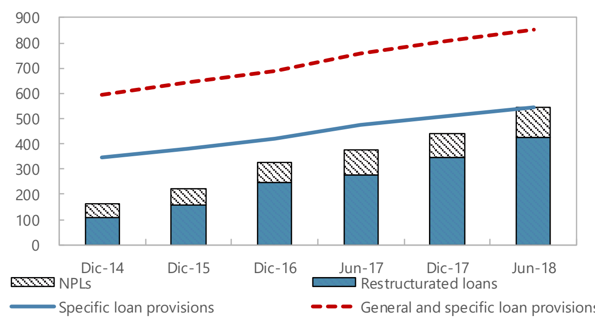
Official statistics. Macroeconomic data in Bolivia is generally sound and the technical capacities at the statistical agency (INE) strong. Nevertheless, the policy of indexing the *Doble Aguinaldo* national wage bonus to real GDP growth has politicized the release of national accounts statistics and may have contributed to a reduction in the dissemination of some data. This could have negative repercussions on the independence of INE and could erode the public's confidence in official statistics. As recommended by staff, the practice of indexing the economy-wide wage increase to real GDP growth should be discontinued as soon as possible. Staff encourage the authorities to subscribe to the e-GDDS and upgrade shortly thereafter to the SDDS, which would enhance data transparency in Bolivia.

Annex V. Impact of the Financial Services Law

The banking sector in Bolivia remains stable, although some indicators have shown signs of deterioration. The overall capital adequacy ratio of the banking system stands at 12.2 percent, with all banks above the regulatory minimum of 10 percent. NPLs rose slightly to 1.9 percent of total loans in June 2018 from 1.7 percent a year earlier but remain very low compared to the region (Figure 6) due in part to robust credit growth. The share of restructured loans rose from 1.2 percent in December 2014 to 2.4 percent in June 2018. Bank profitability is declining due to narrowing interest margins, while the high tax burden on banks constrains their ability to increase capital (Figure 5). Pension funds play an important role providing long term deposits to the banking sector and purchasing banks' subordinated debt. ASFI is urged to closely monitor the capital quality for its ability to absorb potential shocks.

The FSL enacted in 2013 was designed to promote financial inclusion, preserve financial stability, and enhance credit to the housing and "productive" sectors. The FSL provided the legal framework for the deposit insurance scheme and credit registry. It also promoted ongoing improvements in supervision, implementation of several core Basel II and III principles, the creation of a Financial Stability Council, enhancements in consumer protection, and various AML/CFT measures. These are all significant enhancements to the legislative framework governing the financial system.

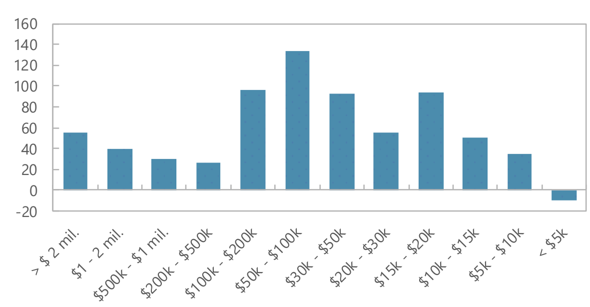
General and specific provision coverage
(Thousands of local currency)



Source: Authorities' data and Fund staff calculations.

The law also included provisions to regulate lending rates, set lending targets to the productive sectors and social housing, and grant discretionary powers to the central bank to set floors on deposit rates.[1] Supreme Decrees have been used to regulate ceilings on lending rates. This includes rates for social housing (5.5–6.5 percent), loans to the productive sectors (6–7 percent), and microfinance loans (11.5 percent). Most notably, full service banks /MSE banks were directed to provide at least 60 percent/50 percent of their loan portfolios to social housing and the productive sectors by the end of 2018.

Growth in Loans by Amount, Sep 2014- Jun 2018
(In percent, values in US dollars)

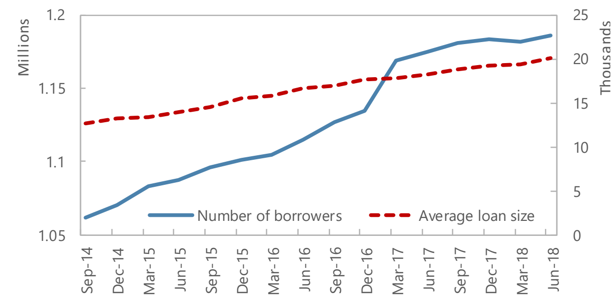


Source: Authorities' data and Fund staff calculations.

[1] Productive sectors are defined broadly as non-service sectors, including agriculture, mining, and manufacturing. A 2015 modification to expand the scope of the "productive sector" added the tourism sector and intellectual property.

The credit quotas and rate caps have had the effect of altering the allocation and composition of credit flows. The credit quotas, which were to be reached by end-2018, led to a sharp acceleration in annual credit growth by 16.7 percent on average from 2014–17. Loan amounts increased by about 60 percent between September 2014 and June 2018, and larger loans were extended to fewer borrowers, potentially exacerbating idiosyncratic shock risks.

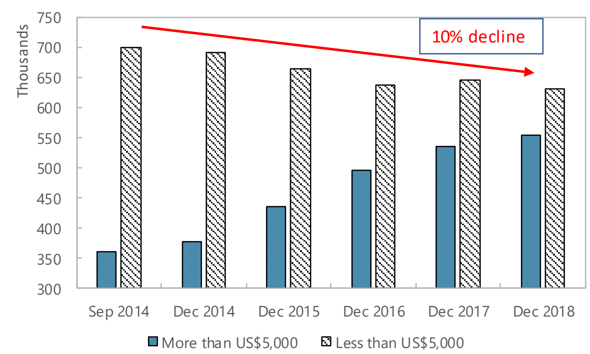
Number of Borrowers and Average Loan Size
(In US dollars)



Source: Authorities' data and Fund staff calculations.

Lending caps appear to have taken a toll on small borrowers. Borrowers of less than US$5,000 dollars decreased by 10 percent from September 2014 to June 2018, and average loan amounts increased. This suggests that small borrowers may have been excluded from the formal financial system. Financial inclusion objectives could be better attained by promoting further competition in the financial system and eliminating interest rate caps. On the latter, international experience points to negative effects, such as the withdrawal of financial services from the poor (Kenya), an increase in informal (unregulated) lending, an increase in the costs of borrowing caused by additional fees and commissions (Armenia, Nicaragua, South Africa), and a decrease in product diversity (Maimbo and Collegos, 2014).

Number of borrowers, by amount



Source: Authorities' data and Fund staff calculations.

Pressures on banks to reach loan quotas has created favorable conditions for major borrowers in the productive sector, including some SOE subsidiaries. Major borrowers have benefited from low interest rates and long-term maturities. This may have encouraged these borrowers to become over-indebted, with attendant adverse implications for NPLs down the road. At the same time, loan concentration and the large share of the aggregate loan portfolio with fixed interest rates could pose interest rate risks to the system under plausible shocks, although the latter risk is partially offset by the fact that banks' liabilities also have long maturities and fixed interest rates. The recent change in the calculation of the BCB's reference rate (*Tasa de Referencia*), to which most floating rate loans are linked, implies lower profits for banks temporarily since yields on floating-rate loans have decreased while banks' borrowing costs have been rising. It is strongly recommended that ASFI conduct full-fledged stress tests on a regular basis to anticipate potential deterioration in the financial health of the system in the context of the strong credit dynamic that has evolved since the FSL was enforced.

INTERNATIONAL MONETARY FUND

BOLIVIA

November 9, 2018

STAFF REPORT FOR THE 2018 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX[1]

Prepared By	The Western Hemisphere Department (in consultation with other Fund departments).

CONTENTS

[1] Information regarding Relations with the World Bank and Inter-American Development Bank can be found at: https://www.worldbank.org/en/country/bolivia and https://www.iadb.org/en/countries/bolivia/overview.

FUND RELATIONS

(As of October 31, 2018)

Membership Status: Joined December 27, 1945; accepted its obligations under Article VIII, Sections 2, 3, and 4 on June 5, 1967. The exchange system is free of restrictions on current international payments and transfers.

General Resources Account

	SDR Million	% Quota
Quota	240.10	100.00
Fund holdings of currency (Exchange Rate)	214.08	89.16
Reserve Tranche Position	26.02	10.84

SDR Department

	SDR Million	% Quota
Net cumulative allocation	164.13	100.00
Holdings	166.89	101.68

Outstanding Purchases and Loans: None

Latest Financial Arrangements (In SDR Millions)

Type	Date of Arrangement	Expiration Date	Amount Approved (SDR Million)	Amount Drawn (SDR Million)
Stand-By Arrangement	Apr 02, 2003	Mar 31, 2006	145.78	111.50
ECF[2]	Sep 18, 1998	Jun 07, 2002	100.96	63.86
ECF[1]	Dec 19, 1994	Sep 09, 1998	100.96	100.96

Projected Payments to the Fund[3]

(SDR Million; Based on existing use of resources and present holdings of SDRs)

	2018	2019	2020	2021	2022
Principal					
Charges/Interest	0.00	0.00	0.00	0.00	0.00
Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Safeguards Assessment. Under the Fund's safeguards assessment policy, the Central Bank of Bolivia (BCB) was subject to an assessment with respect to the April 2, 2003 Stand-By Arrangement (SBA). A safeguards assessment was completed on June 27, 2003, and while no systemic risks with the BCB's safeguards were identified, uncertainties were expressed about the de facto lack of

[2] Formerly PRGF.

[3] When a member has overdue financial obligations outstanding for more than three months, the amount of such arrears will be shown in this section.

operational independence and program monetary data. An update assessment was completed on September 27, 2004 in conjunction with an augmentation of the SBA. This assessment confirmed that measures had been implemented to address all previously identified vulnerabilities, except for those requiring a change in the central bank law. Currently, BCB is not subject to the policy.

Exchange Arrangement: The Bolivian currency is the boliviano and the *de jure* exchange rate regime is crawling peg to the U.S. dollar. Within the scope of the official crawling peg exchange rate regime, in an external environment characterized by market exchange rate volatility and decreasing external inflation, the sliding rate was set to zero in 2011 to anchor the public's expectations. Consequently, the boliviano has stabilized against the U.S. dollar since November 2011. Accordingly, the de facto exchange rate arrangement has been retroactively reclassified to a 'stabilized arrangement' from a crawling peg, effective November 2, 2011. The exchange regime is free of restrictions and multiple currency practices.

Article IV Consultation: The last Article IV consultation was completed by the Executive Board on December 13, 2017 (IMF Country Report No. 17/395). Bolivia is on a standard 12-month consultation cycle.

Implementation of HIPC Initiative

	Original Framework	Enhanced Framework	Total
Commitment of HIPC assistance			
Decision point date	Sep 1997	Feb 2000	
Assistance committed by all creditors (US$ million)[4]	448.00	854.00	
Of which: IMF assistance (US$ million)	29.00	55.32	
(SDR equivalent in millions)	21.25	41.14	
Completion point date	Sep 1998	Jun 2001	
Disbursement of IMF assistance (SDR million)			
Assistance disbursed to the member	21.25	41.14	62.39
Interim assistance	...	...	...
Completion point balance	21.25	41.14	62.39
Additional disbursement of interest income[5]	...	3.09	3.09
Total disbursements	**21.25**	**44.23**	**65.48**
Implementation of MDRI Assistance			
Total debt relief (SDR Million)[6]			160.93
Financed by: MDRI Trust			154.82
Remaining HIPC resources			6.11
Debt relief by facility (SDR Million)			

Debt Relief by Facility (SDR Million)

		Eligible Debt		
	Delivery Date	GRA	PRGF	Total
	January 2006	83.08	N/A	83.08
	January 2006	6.70	71.15	77.85

Implementation of Post-Catastrophe Debt Relief (PCDR): Not Applicable

[4] Assistance committed under the original framework is expressed in net present value (NPV) terms at the completion point, and assistance committed under the enhanced framework is expressed in NPV terms at the decision point. Hence these two amounts cannot be added.

[5] Under the enhanced framework, an additional disbursement is made at the completion point corresponding to interest income earned on the amount committed at the decision point but not disbursed during the interim period.

[6] The Multilateral Debt Relief Initiative (MDRI) provides 100 percent debt relief to eligible member countries that are qualified for the assistance. Grant assistance from the MDRI Trust and HIPC resources provide debt relief to cover the full stock of debt owed to the Fund as of end-2004 that remains outstanding at the time the member qualifies for such debt relief.

Technical Assistance, 2012–September 2018

Department	Purpose	Date
LEG	AML/CFT regulatory and institutional framework	Jan. 2012
STA	Government Finance Statistics	Feb. 12
LEG	AML/CFT regulatory and institutional framework	Jul. 12
FAD	Integration of tax and customs administrations	Aug. 12
FAD	Tax policy (mining code reform)	Dec. 12
LEG	AML/CFT regulatory and institutional framework	Apr. 2013
FAD	ROSC Evaluation of fiscal transparency	Apr. 13
MCM	Medium-term debt strategy	Apr. 13
FAD	Institutional strengthening of tax and customs administration	Jul. 13
FAD	Tax policy (international taxation, personal income tax and tax expenditure)	Jul. 13
STA	SDDS assessment	Oct. 13
STA	National accounts	Oct. 13
FAD	VAT gap and tax expenditure	Feb. 2014
FAD	Auditing and evaluation of TA for the national tax service)	Feb. 14
LEG	Structure and tools for strengthening AML/CFT institutional, regulatory and supervisory framework of the ASFI	Feb 14
LEG	Development of a national strategy and structures and tools for strengthening the overall AML/CFT regime of the pension and insurance supervisor	Ago. 14
FAD	Special schemes for small taxpayers and personal income tax	Oct. 14
FAD	Strategies for transfer pricing and control of medium and small taxpayers	Oct. 14
FAD	Medium-term fiscal framework	Nov. 14
LEG	Structures and tools for strengthening the overall AML/CFT supervisory regime of the pension and insurance supervisor	Nov. 14
STA	Government finance statistics	Dec. 14
STA	Price statistics	Feb. 2015
LEG	Follow-up in development of a national strategy and structures and tools for strengthening the overall AML/CFT regime of the pension and insurance supervisor	Apr. 15
LEG	Follow-up in development of a national strategy and structures and tools for strengthening the overall AML/CFT regime of the pension and insurance supervisor	Aug. 15
FAD	Customs administration modernization (risk management)	Aug. 15
STA	External sector statistics	Sep. 15
LEG	Follow-up in development of a national strategy and structures and tools for strengthening the overall AML/CFT regime of the pension and insurance supervisor	Oct. 15
STA	Reporting and dissemination of FSIs	Dec. 15

Technical Assistance, 2012–September 2018 (Concluded)

FAD	Follow-up to customs administration modernization (risk management)	Jan. 2016
FAD	Assessment of the current organization and operation of the GRACOS offices	Jan. 16
FAD	Follow-up tax administration	Jan. 16
STA	External sector statistics	Apr. 16
STA	Price statistics	Apr. 16
LEG	Follow-up in development of a national strategy and structures and tools for strengthening the overall AML/CFT regime of the pension and insurance supervisor	Jul. 16
FAD	Advice on techniques for planning and executing tax auditing of large taxpayers in the financial sector	Aug. 16
FAD	Tax administration	Oct. 16
LEG	Follow-up in development of a national strategy and structures and tools for strengthening the overall AML/CFT regime of the pension and insurance supervisor	Oct. 16
STA	Follow-up to external sector statistics	Oct. 16
FAD	Tax administration on designing and implementing a strategy to enhance collection process and manage tax arrears.	Dec. 16
STA	Price statistics	Dec. 16
ICD	Technical training of general equilibrium models (DSGE) for economic policy decision making.	Feb. 2017
FAD	Follow-up tax administration	Mar. 17
FAD	Follow-up tax administration	Apr. 17
MCM	Banking regulation and supervision	May 17
FAD	Revenue administration	Jun. 17
FAD	Custom administration	Jun. 17
FAD	Follow-up revenue administration	Jan. 18
STA	National accounts mission	Feb. 18
MCM	Macroprudential policy	Mar 18
STA	Government finance statistics	Mar. 18
MCM	Strengthen supervisors' bank stress testing capacity	Apr. 18
FAD	Follow-up revenue administration	Jul. 18
MCM	Liquidity Stress Testing	Jul. 18
FAD	Strengthen the management of the general treasury of the nation	Aug 18
FAD	Follow-up revenue administration	Sep. 18

STATISTICAL ISSUES

(As of November 8, 2018)

A. Assessment of Data Adequacy for Surveillance

General. Data provision is broadly adequate for surveillance, but staff urge the authorities to move forward on key improvements. Priority reforms include: (i) completing the rebasing of the GDP; and (ii) improving the coverage of the nonfinancial public sector.

National Accounts. The National Statistical Office (INE) disseminates annual and quarterly national accounts series compiled by the production and expenditure approaches, in current values and volume terms. The current base year of the national accounts (1990) is outdated and rebasing the GDP series is of critical importance for the country given the significant changes in the Bolivian economy observed since 1990. INE has started a project to update the national accounts base year to 2010 and implement the key recommendations of the *System of National Accounts 2008*. STA is providing technical assistance (TA) to INE to support these efforts.

Labor market. The quality of household and employment surveys has declined in the last few years, due mainly to resource constraints. The quarterly employment survey was discontinued in 2010, leading to the absence of quarterly information on unemployment, employment, and wages. Yearly information on wages is still compiled by INE.

Prices statistics. INE released a Consumer Price Index rebased to 2016 in February 2018. STA is providing assistance to update the Production Price Index. The authorities have requested assistance for the compilation of a real estate price index.

Government finance statistics. Annual data on the operations of the consolidated central government do not cover all operations of state-owned enterprises, their subsidiaries, decentralized agencies, and operations channeled through special funds. The ongoing implementation of a comprehensive public financial management system, with funding from the IADB/WB, will help in this regard, but it will be very important to improve the reporting and monitoring of the operations and debt of all public entities and their subsidiaries. The authorities started the process of converting their fiscal data into the *Government Finance Statistics Manual 2014* (*GFSM 2014)* format. The *GFSM 2014* data for the years 2015, 2016 and 2017 are expected to be send to STA by the end of 2018. The latest fiscal data on STA's database corresponds to 2007.

Monetary and Financial Statistics. Monetary data are produced and reported to STA for publication in International Financial Statistics on a regular monthly basis using the standardized reporting forms, and compiled in line with the *Monetary and Financial Statistics Manual and Compilation Guide* (*MFSMCG*).

Financial Soundness Indicators (FSIs). The central bank compiles almost all FSIs for deposit takers to support the financial sector assessment (only sectoral distribution of loans is currently missing), and reports them to STA on a monthly basis for posting on the IMF's website.

External sector statistics (ESS). In November 2016, the BCB began publishing balance of payments and international investment position (IIP) data according to the *Balance of Payments Manual, sixth edition* (*BPM6*). The revised ESS contains methodological enhancements, including improved coverage in the financial account and IIP, better classifications of institutional sectors and financial instruments, and a more comprehensive method to account for processing services performed on certain types of Bolivia's exports. However, government-issued external bonds held by residents are now being recorded as external debt, which is not consistent with the *BPM6*. Fund staff have insisted that the recording of external sector debt, and all debts, follow the definitions and classifications laid out in *BPM6*, which will also ensure consistency with the IIP.

B. Data Standards and Quality

Bolivia has been a participant in the Enhanced General Data Dissemination System (e-GDDS) since November 2002. A Special Data Dissemination Standard (SDDS) Assessment mission, conducted by STA in October 2014, found that Bolivia was close to meeting the SDDS requirements, but SDDS subscription has not yet been achieved. Staff encourage Bolivia to participate fully in the e-GDDS by disseminating data through a National Summary Data Page on the internet and publishing an advance release calendar, and to subscribe rapidly to the SDDS, which would greatly enhance data dissemination and transparency in Bolivia. A data Report on the Observance of Standards and Codes (ROSC) was published on August 13, 2007.

Bolivia: Indicators Required for Surveillance

(As of November 8, 2018)

	Date of Latest Observation	Date Received	Frequency of Data[1]	Frequency of Reporting[1]	Frequency of Publication[1]
Exchange Rates	Daily	Daily	D	D	D
International Reserve Assets and Reserve Liabilities of the Monetary Authorities[2]	Daily	Daily	D	D	D
Reserve/Base Money	Sep. 2018	Oct. 2018	M	M	M
Broad Money	Aug. 2018	Oct. 2018	M	M	M
Central Bank Balance Sheet	Sep. 2018	Oct. 2018	M	M	M
Consolidated Balance Sheet of the Banking System	Sep. 2018	Oct. 2018	M	M	M
Interest Rates[3]	Aug. 2018	Oct. 2018	W	W	W
Consumer Price Index	Oct. 2018	Nov. 2018	M	M	M
Revenue, Expenditure, Balance and Composition of Financing[4] – General Government[5]	Jun. 2018	Oct. 2018	M	M	M
Revenue, Expenditure, Balance and Composition of Financing[4]– Central Government[6]	Jun. 2018	Oct. 2018	M	M	M
Stock of Central Government and Central Government-Guaranteed Debt[7]	Sep. 2018	Oct. 2018	M	M	M
External Current Account Balance	Q2 2018	Oct. 2018	Q	Q	Q
Exports and Imports of Goods and Services[8]	Q2 2018	Oct. 2018	Q	Q	Q
GDP/GNP	Q2 2018	Oct. 2018	Q	Q	Q
Gross External Debt	Q2 2018	Oct. 2018	Q	Q	Q
International Investment Position[9]	Q1 2018	Jun. 2018	Q	Q	Q

[1] Daily (D), Weekly (W), Monthly (M), Quarterly (Q), Annually (A); Irregular (I); Not Available (NA).

[2] 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.

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

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

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

[6] Bolivia does not compile central government fiscal data.

[7] Guaranteed non-financial public sector debt. Including currency and maturity composition.

[8] Monthly frequencies for goods only.

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