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Bolivia

2011 ARTICLE IV CONSULTATION COVER

June 2, 2011

2011 Article IV Consultation—Staff Report; Supplement and Staff Statement; Public Information Notice on the Executive Board Discussion; and Statement by the Executive Director for Bolivia

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 2011 Article IV consultation with Bolivia, the following documents have been released and are included in this package:

- The staff report for the 2011 Article IV consultation, prepared by a staff team of the IMF, following discussions that ended on March 22, 2011, 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 April 28, 2011. The views expressed in the staff report are those of the staff team and do not necessarily reflect the views of the Executive Board of the IMF.
- A staff supplement on the External and Public Debt Sustainability Analysis.
- A staff statement of May 23, 2011 updating information on recent developments.
- A Public Information Notice (PIN) summarizing the views of the Executive Board as expressed during its May 23, 2011 discussion of the staff report that concluded the Article IV consultation.
- A statement by the Executive Director for Bolivia.

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BOLIVIA

STAFF REPORT FOR THE 2011 ARTICLE IV CONSULTATION

April 28, 2011

KEY ISSUES

Short-term prospects. With a supportive external environment, real GDP growth is projected at 4.5 percent in 2011, and the external current account would remain in surplus. A key policy priority is to secure a return to low inflation, after a sharp increase in recent months. Monetary conditions would need to be tightened and interest rates allowed to rise from currently negative levels in real terms. A faster appreciation of the boliviano, which is estimated to be moderately undervalued, would contribute to offset external inflation pressures.

Strengthening the macroeconomic policy framework. In 2011, the overall surplus of the public sector is projected to narrow from 2 percent of GDP to about 0.7 percent of GDP. The authorities are encouraged to put in place a medium-term fiscal framework to manage hydrocarbon wealth and avoid pro-cyclical public spending. As the number and activities of state-owned enterprises has expanded, greater transparency and accountability in their operations would help contain fiscal risks and improve their effectiveness.

Maintaining financial sector soundness. Financial sector indicators are strong, banks appear resilient to a range of shocks, and dollarization has declined. Regulations should be geared toward preserving the solvency of banks and the resources assigned to supervision should be increased. The crisis management framework needs strengthening.

Enhancing medium-term growth and social protection. Sustaining high and stable medium-term growth will require improvements in the investment climate, including by ensuring stability in the legal framework. While social policies have been effective and Bolivia has made inroads towards achieving MDGs, enhancing the targeting of transfer programs will help further improve the condition of the most vulnerable groups.

Approved By
Gilbert Terrier and
Jan Kees Martijn

Discussions took place in Santa Cruz and La Paz during March 16–22. Staff representatives comprised G. Lopetegui (head), L. Breuer (regional Resident Representative), J. Pereira, M. Rosales, and O. Sulla (all WHD).

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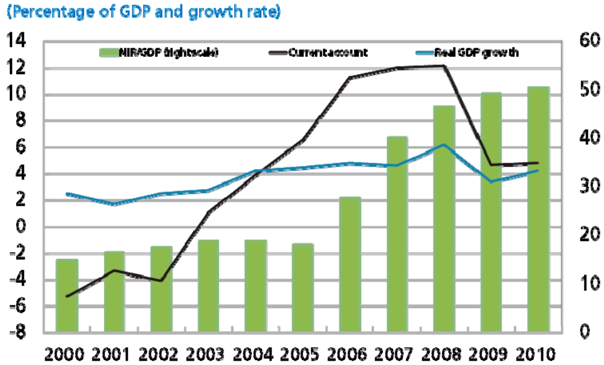
BACKGROUND

1. **Bolivia has posted a solid macroeconomic performance in recent years, on the back of strong terms of trade and prudent economic policies.** Increased export volumes and prices led to a doubling of export receipts between 2005 and 2010, while real GDP growth rose from 3.1 percent in the first half of the past decade to 4.6 percent in the second half. The strength of the external and fiscal positions in recent years has allowed Bolivia to build a strong reserves cushion which has reduced macroeconomic vulnerability, while the net international investment position switched to a credit balance in 2008 and rose to the equivalent of 17½ percent of GDP in 2010.

Bolivia: Growth, Current Account and NIR
(Percentage of GDP and growth rate)



Source: Central Bank of Bolivia.

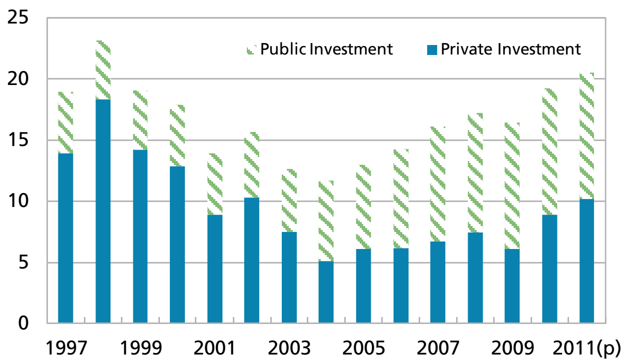
2. **At the same time, deep political and social changes have been taking place.** The election of president Morales in 2006 initiated a period of strengthening of social policies and a broader role of the state in economic affairs. The new constitution (2009) is leading to profound changes in the country's legal framework, and requires amending key economic laws, including those ruling the central bank, the financial sector, the exploitation of natural resources, and inter-governmental fiscal relations. Despite broad support for government policies, tensions persist due to longstanding social and regional disputes, which constrain the room for policy maneuver.

3. **Progress has been made on improving social inclusion and income distribution.** Cash transfer programs have been successful in reducing extreme poverty (from about 30 percent in 2008 to 26 percent in 2009). However, poverty, infant mortality, school desertion, and other long-standing inequalities persist, including with large disparities in access to basic services across territorial, ethnic, and gender lines. The percentage of the population living in extreme poverty is still above the average in Latin America (12.6 percent), with high levels of infant mortality and child malnutrition.

4. **The authorities' development plan envisages the expansion and industrialization of natural resource production.** The plan is ambitious, particularly in the areas of hydrocarbons, mining, electricity, and infrastructure (amounting up to 100 percent of current GDP over the next few years). While strategic control of these sectors would remain in the hands of the state, the authorities favor entering into partnerships with the private sector for the implementation of the plan, with a view to improving access to modern forms of management, technology, and financing. However, the implementation of investment projects has suffered delays, while private

investment remains low, reflecting in part uncertainties over the legal framework and a high tax burden in strategic sectors.

Public and Private Investment
(Percent of nominal GDP)



Note: (p) means projected.

5. **In concluding the 2009 Article IV consultation, the Executive Board praised the Bolivian authorities for their sound macroeconomic management, and concurred that structural reform and increased investment were necessary to boost growth and reduce poverty further.** Directors advised strengthening the non-hydrocarbon balance, including through the gradual withdrawal of fuel subsidies, and establishing a formal framework for the fiscal management of natural resources. Directors supported a gradual tightening of monetary conditions and considered that central bank financing to the public sector should be avoided to strengthen the independence of monetary policy; most Directors encouraged the authorities to set the stage for higher exchange rate flexibility. In the financial sector, Directors suggested to focus on pending reforms and maintaining strong financial supervision. Progress in these areas has been varied. The central bank restarted periodic adjustments in the exchange rate, though excess liquidity in the banking sector has declined only gradually. The authorities attempted to eliminate fuel subsidies upfront, but this measure was reversed in the face of social unrest. Preparations to address other fiscal issues are ongoing. In the financial sector, the authorities are working on banking legislation.

6. **Exchange system and statistics.** Bolivia has accepted the obligations under Article VIII, sections 2, 3, and 4. The exchange system is free of restrictions on the making of payments and transfers for current international transactions. Despite shortcomings, data provision to the Fund is broadly adequate for surveillance. Bolivia has participated in the General Data Disemination System since November 2002.

RECENT DEVELOPMENTS

7. **Despite adverse weather shocks, economic growth picked up in 2010 and the external sector strengthened further, while inflation rose significantly.**

- Real GDP grew by 4.2 percent on account of higher hydrocarbons production, with high terms of trade supporting domestic demand. Adverse weather conditions held agricultural production back, while construction grew at brisk pace. The economy is estimated to be operating at close to potential.

- The external current account surplus rose to 4.8 percent of GDP, due to higher commodity prices and natural gas export volumes. Net international reserves currently stand at 50 percent of GDP and 80 percent of broad money, keeping external vulnerabilities low.

- Twelve-month inflation rose sharply, to 7.2 percent in December and 11 percent in March 2011, on the back of higher food commodity prices and some de-anchoring of expectations following a failed attempt at raising fuel prices last December (Box 1), and amid ample liquidity in the banking sector.[1]

8. Monetary policy has remained accommodative, while an unexpected decline in public capital spending in 2010 acted as a drag on growth.

- Despite central bank actions to remove the monetary stimulus since the second half of 2010, monetary policy remains lax. Nominal short-term interest rates for deposits are near zero, liquidity is ample (banks' excess liquidity amounts to 8 percent of deposits), and both the money supply (M1) and bank credit are growing at near 20 percent.

- After about two years of maintaining the boliviano pegged to the dollar, the central bank has let the currency gradually appreciate (around 1 percent since late 2010), to reduce external inflation pressures. The *de-jure* exchange-rate regime remains a crawling peg without pre-announcement of future adjustments. *De facto*, the currency has been *stabilized* against the U.S. dollar.

- The overall public sector surplus rose to 2.0 percent of GDP, from 0.3 percent in 2009. This resulted largely from a significant under-execution of investment plans, associated with political transition in sub-national governments and delays in public enterprises. The central government is estimated to have registered a deficit of 2 percent of GDP and the rest of the public sector a surplus of 4 percent of GDP.

9. Financial sector indicators are strong, but banks have experienced episodes of deposit volatility in recent months.

- In the context of higher credit growth fueled by low interest rates, banks have remained profitable, well capitalized, and their nonperforming loan ratios (NPLs) are low. Progress on de-dollarization of balance sheets has continued, with boliviano-denominated credit and deposits standing at about 55 percent of the total.

[1] In December 2010, the government announced increases in fuel prices ranging from 60-80 percent. The measure led to immediate food and transport price increases and generated adverse reactions from businesses and unions, with violent demonstrations. The authorities reversed the price adjustment a few days later.

- Bank runs in June and December 2010 reflected a new sensitivity of depositors. These runs were seemingly fueled by false rumors about the state of a bank and about government policy intentions, respectively. The December run was strong, systemic, and brief—it affected all types of institutions, and deposits fell 3.5 percent (mostly U.S. dollar) in three days. Since then, deposits have started to recover.

10. **Congress has approved a road map for fiscal decentralization and a reform of the pension system.** The decentralization law sets the stage for a discussion of revenue assignments and spending responsibilities across different levels of government, a process which is likely to take time to be fully implemented (Annex I). The pension reform creates a semi-contributory regime with stepped up benefits for low-income households, funded with higher contributions from employers and employees. It also introduces a lower retirement age (58 years for men and 55 for women), and nationalizes the administration of the pension funds (Annex II).

OUTLOOK

11. **With a broadly-supportive external environment, short-term growth prospects are favorable, and inflation is expected to decline gradually.**

- Assisted by growth in the region, favorable terms of trade, and an expected fiscal impulse linked to higher public investment, real GDP growth is projected at 4.5 percent in 2011. The external current account would remain in surplus (4 percent of GDP) and the fiscal surplus would narrow to below 1 percent of GDP.

- Inflation is projected to remain high in the coming months and decline gradually, to 8 percent by end-2011. Achieving this objective contains downside risks, given domestic pressures on the economy, which is operating at close to potential. In addition, higher international food prices, a possible adjustment in transportation fares, and wage costs increases associated both with the pension reform and salary increases (in the 10–20 percent range) will have a negative bearing on inflation.

12. **The medium-term outlook has balanced upside and downside risks.** The staff's baseline scenario is for economic growth to stabilize at 4.5 percent, or slightly above the observed long-term trend to take into account the tail winds associated with high commodity prices over the projection period. The economy can grow at faster rates, provided that the government effectively implement its major investment projects and investment in the private sector accompanies the rising trend in public investment. Downside risks to growth are associated with possibly lower commodity prices and export volumes, and with adverse domestic market sentiment, should inflation continue rising.

13. The authorities' views on short-term and medium-term prospects are more optimistic. They considered that inflation expectations were gradually abating and that current policies would allow inflation to decline to 6 percent this year, while growth would reach 5 percent, spurred by public investment. They are also more sanguine about upside risks to growth, resulting from the implementation of their development program.

Selected Economic Indicators				
	2008	2009	2010	2011
Real GDP (percent change)	6.1	3.4	4.2	4.5
CPI (end of period percent change)	11.8	0.3	7.2	7.9
Overall fiscal balance (percent of GDP)	2.8	0.3	2.0	0.7
Of which: Non-hydrocarbons fiscal balance (percent of GDP)	-7.5	-12.1	-8.4	-9.0
Current account balance (percent of GDP)	12.1	4.7	4.8	3.8

POLICY DISCUSSIONS

14. Discussions focused on the short-run policy mix, reforms to strengthen the policy framework, and policies to sustain high and stable growth over the medium-term.

- With low macro-financial risks in the short term, the policy priority is to secure a return to low inflation.
- Given the importance of commodities in GDP, exports, and fiscal revenue, Bolivia would benefit from a policy framework that reduces macroeconomic volatility and ensures a sustainable fiscal policy.
- As financial intermediation grows, a key challenge will be to preserve the health of the financial system—discussions in this area benefited from the FSAP-Update.
- Achieving sustained and high growth would require overcoming constraints that have held back private investment.

A. Macroeconomic Policies

15. The authorities have responded to rising inflation by starting to withdraw the monetary stimulus and allowing the Boliviano to appreciate, while introducing trade policy measures and price agreements in agriculture. Interest rates have yet to react to higher central bank sterilization activities, and the modest appreciation of the currency in recent months (1 percent) has not significantly impacted on inflation and expectations. In response to food-security concerns, and to reduce the impact of inflation on the poor, the government has also limited exports of certain products (sugar, soybeans), reduced import tariffs (corn), and established price agreements (milk, poultry).

16. Staff expects a moderate fiscal impulse, supporting domestic demand but, possibly, preventing a faster decline in

inflation. Despite higher hydrocarbon revenue, the overall surplus of the public sector is expected to fall from 2 percent of GDP in 2010 to 0.7 percent in 2011. To a large extent, this would reflect an increase in capital expenditure.[2] With the output gap virtually closed, the estimated fiscal impulse for 2011—about 1½ percent of GDP—may run counter to the inflation objective of the government (Box 2).

17. Staff suggested a tighter policy mix in 2011 to contain inflationary pressures. In particular, staff noted that the central bank would need to tighten monetary conditions further—including through stepped-up open market operations and higher reserve requirements for domestic currency deposits. The envisaged fiscal impulse will also increase the burden on the central bank to withdraw liquidity and increase interest rates. Staff also suggested a faster appreciation of the boliviano, which is estimated to be moderately undervalued (Box 3).

18. The authorities reaffirmed that containing inflation is a priority for them, and they considered that the recent resurgence was temporary, warranting a gradual approach. In their view, the main driver of inflation has been external, and the gradual appreciation of the exchange rate will help moderate the effects of this factor. The authorities also believe that central bank sterilization policies will effectively absorb liquidity over the coming months and that interest rates will naturally find their equilibrium levels. They acknowledged that inflationary expectations had been temporarily de-anchored in December, but highlighted that food prices would soon decline as a result of favorable weather conditions and ongoing government policies to increase supply.

19. With gas prices at high levels and current policies, staff projects moderate fiscal surpluses in the coming years. Export prices for gas are expected to reach historic highs in 2011—about twice as high as in 2005—and remain elevated in the next few years, implying hydrocarbon revenues of about 12 percent of GDP for the public sector as a whole, or above one-third of total revenue. Spending has been projected to gradually rise to 35 percent of GDP, in line with the levels achieved in 2008-09—a projection which does not incorporate major investment projects planned by the government, as the precise phasing of these investments still needs to be decided. On this basis, the overall fiscal balance would remain in surplus (1–1½ percent of GDP), consistent with a non-hydrocarbon deficit of 9½ percent of GDP and a gradual decline in public debt to 30 percent of GDP by 2016.

20. Given the strength of financial cushions, the favorable outlook, and the prevalence of poverty and development needs, staff indicated that investment levels could rise above baseline projections without jeopardizing debt sustainability. An increase in total spending of 2 percent of GDP above baseline

[2] Staff's fiscal projection assumes that 75 percent of the investment budget will be implemented, somewhat above the outcome in recent years.

projections during 2012–16 would result in a stable net debt ratio by 2016, still maintaining Bolivia's strong fiscal position. Staff noted that higher investment could benefit Bolivia in terms of economic growth if care was taken to ensure that it is accompanied by efforts to boost its effectiveness. In turn, this would require enhancing implementation capacity across all levels of government. The authorities agreed with the need to maintain current spending under control, and noted that boosting public investment was also necessary for GDP diversification.

B. Strengthening the Policy Framework

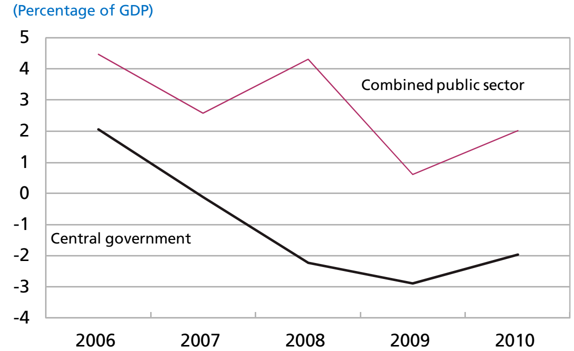
21. While the authorities should be commended for their macroeconomic management in recent years, there is room to enhance the policy framework to improve the economy's resilience to shocks and strengthen the sustainability of fiscal policy. Bolivia has built large macroeconomic buffers thanks to a fiscal policy that has largely avoided spending the hydrocarbon-revenue windfall resulting from high gas prices. While fiscal savings have been key to limiting real appreciation pressures from the export boom, volatile commodity prices and large current account surpluses have posed challenges to monetary and exchange rate policy. Inflation has been volatile, peaking in boom years (2007–08), declining to near zero in 2009, and rising again in 2010 and early 2011. In the context of limited exchange rate flexibility, the central bank has faced challenges in sterilizing international reserve accumulation, which has led to high levels of money growth and some inflationary pressures. Against this background, a number of key issues need to be considered in improving the policy framweork, most of which are in the authorities' agenda:

- **Medium-term fiscal framework.** Taking into account Bolivia's fiscal dependency on hydrocarbon resources, and given the plans for large public investment projects, the authorities are working on a multi-year framework to guide fiscal policy and budget planning. This framework would be sent to congress to complement annual budget discussion and align the government strategic priorities with projected resources. On the revenue side, the authorities plan to base their budget projections on prudent estimates of oil and gas prices, so as to generate savings in periods of high prices. These savings would be accumulated in a fiscal fund, for stabilization and development purposes. Staff strongly supported the authorities' efforts in this area, which should help avoid procyclical public spending and maintain strong liquidity buffers. Staff also suggested that the authorities' plans to create a fiscal fund would benefit from an expansion of its revenue base—at present, it only takes into account two-thirds of total hydrocarbon royalties—and from clearer rules for the use of the resources.

- **Limiting central bank financing of public sector and state-owned enterprises.** While the authorities have shown restraint in the use of central bank financing to date, the 2011 Budget authorizes the central bank to provide large credits to SOEs (up to 30 percent of net international reserves), in addition to US$2 billion already committed in previous years (equivalent to 20 percent of current reserves). Staff noted that such a large potential fiscal claim on the central bank risks jeopardizing confidence in the policymaking framework, compromising independent monetary policy and raising external vulnerabilities. In this context, staff suggested that the authorities strengthen the public debt strategy to identify alternative financing sources. Moreover, staff stressed that, to avoid introducing credit risk in the central bank balance sheet, more transparency would be required in the credit assessment of public corporations. The authorities indicated that, instead of being on-lent to public enterprises, part of the foreign reserves could be used to set up the envisaged fiscal fund. While the details would need to be worked out, the authorities stressed that the central bank would keep a strong reserve cushion, to ensure macroeconomic stability.

- **Reform of intergovernmental fiscal relations**. Due to the imbalances between revenue assignments and spending responsibilities—as most of the natural resource revenue is earmarked to sub-national levels of governments, with low spending responsibilities and execution capacity—the fiscal position of the central government [3] has deteriorated in recent years, while sub-national governments and public corporations (mainly YPFB, the oil holding company) remain in surplus. Addressing these imbalances is important to preserve the financial strength of the central government and its ability to implement counter-cyclical fiscal policy in adverse scenarios. The revision of revenue assignments and spending esponsibilities, in the context of the road map established by the decentralization law, will take time, due to the complexity of technical and political decisions. In the meantime, the authorities have been discussing ways to tap the surpluses of subnational governments on a voluntary basis, through the issuance of central government paper to municipalities and departments. Staff commended the authorities for the provisions in the

Bolivia: Fiscal Balances
(Percentage of GDP)



Source: IMF's staff estimates with official data.

[3] Including decentralized agencies and social security.

decentralization law that aim at a sustainable management of local public finances, and reaffirmed the need to avoid an increase in consolidated public spending as a result of decentralization.

- **Public enterprise reform.** Staff noted that the expansion of the number and activities of state-owned enterprises (SOEs) could lead to significant fiscal risks, if not complemented with greater transparency and accountability. In particular, staff recommended that SOEs minimize their quasi-fiscal operations, address existing constraints to investment execution, and be subject to independent audits. In addition, the Ministry of Economy and Public Finance should continue to develop technical expertise about the operations of the large firms, in particular YPFB, and expand the coverage of public sector accounts to include all SOEs. The authorities broadly agreed with these recommendations and indicated that they continue to work on a framework law for public corporations, which would provide the tools for effective management and governance.

- **Exchange rate/monetary policy regime.** Staff encouraged the authorities to move to a more flexible exchange rate regime over the medium term, to enhance the capacity to respond to external shocks, and to develop an independent monetary policy framework focused on keeping inflation at low levels. The authorities concurred that monetary policy should focus primarily on price stability, while allowing the exchange rate to adjust to changes in the external environment. They noted, however, that that further declines in dollarization and a deepening of domestic financial markets would, in their view, be preconditions to adopting a more flexible exchange rate regime.

C. Maintaining Financial Sector Soundness

22. **The FSAP-Update found an important improvement in the financial sector compared to 2003 (initial FSAP).** The favorable macroeconomic environment and strong growth performance of recent years have allowed banks to rebuild their capital buffers with respect to the period of distress in the early part of the decade. Capital ratios are strong and financial institutions appear broadly resilient to a range of shocks. Importantly, a significant reduction in the level of dollarization has lowered foreign-currency exposures in the financial and non-financial sectors. The banking sector was found to be fairly competitive and efficient, and profitable, despite recent declines in interest rates.

23. **Against this background, a number of issues would need to be addressed to protect macro-financial stability:**

- **Negative real interest rates are a source of macroeconomic risk.** If maintained, negative real interest rates are likely to lead to unsound credit growth and possibly credit bubbles.[4] Staff argued that credit portfolios could deteriorate rapidly when interest rates return to more sustainable levels, as Boliviano-denominated loans are generally extended at variable rates. In light of the new inflation environment, staff encouraged the authorities to manage a soft landing, by raising rates (through open market operations) gradually but consistently, while refraining from applying moral suasion on banks to expand credit. Staff also noted that, while aggregate liquidity is abundant, it is not evenly distributed across the financial sector. The authorities took note of the concern about interest rates, but reiterated their view that the rise in inflation was temporary. They also mentioned that the liquidity framework was being reassessed to ensure the maintenance of adequate cushions.

- **Although the regulatory framework has improved in various aspects, the use of prudential norms to pursue developmental objectives since 2009 could weaken the financial sector's ability to withstand shocks.** The authorities have lowered provisioning and reserve requirements to spur domestic currency loans to productive sectors of the economy, which has reduced bank buffers against distress. As the economy of Bolivia is very exposed to external shocks, staff highlighted the need to preserve buffers to prevent these shocks from translating into large economic fluctuations. Staff also indicated that development policies would be more appropriately supported through the budget. In the insurance sector, a modernization of the regulatory framework is needed to strengthen corporate governance rules, information disclosure, the calculation of reserves, and restructuring powers of the supervisors.

- **Banking supervision has been strengthened, including through the adoption of a more risk-oriented approach, resulting in improvements in compliance with Basel Core Principles.** Staff welcomed these developments. However, the expanded mandate of the supervisory authority (ASFI), including consumer protection and the supervision of exchange houses and other non-bank financial intermediaries will demand higher resources and institution building, including to maintain and adequate cycle of on-site inspections. The FSAP-Update noted the importance of preserving adequate independence and legal protection of staff at the central bank, ASFI, and the insurance and pensions regulator, and recommended reviewing their remuneration to avoid the

[4] Interest rates on deposits are negative, as the remuneration of 3-month deposits averages 0.5 percent in nominal terms; average bank loan rates are slightly above 10 percent.

emergence of large gaps with remunerations in supervised institutions.

- **A stronger crisis management framework would benefit macro-financial stability.** The central bank has effective mechanisms to provide liquidity, including in foreign currency, and the bank resolution framework is in line with best practices. However, the system still lacks a deposit insurance scheme that would protect small depositors in the event of liquidation. The authorities should also develop and monitor macroprudential indicators for systemic risk.

- **To preserve Bolivia's financial system integrity and its access to the international financial system, AML/CFT regulations and practices should comply with international norms.** A number of legal reforms have been passed to strenghen the anti-money laundering framework—making money laundering an autonomous crime and adding to the penal code a number of offenses related to corruption, smuggling, and other trafficking activities. A key pending action is the passage of a law that penalizes the financing of terrorism. The authorities are also considering steps to strengthen the financial intelligence unit.

- **Managing pension funds assets will require the establishment of a specialized agency with qualified personnel and investment norms.** The authorities are working on the implementing legislation of the pension law and noted that investment policies would be essentially unaltered, as the law specifies only minor changes in the intended allocation of the funds, to benefit small firms without credit ratings. Given that the funding of many banks is dependent on pension fund deposits, staff recommended carefully avoiding any abrupt change in asset allocation in the short run, while developing guidelines for the allocation of pension funds deposits across banks.

D. Enhancing Medium-Term Growth and Social Protection

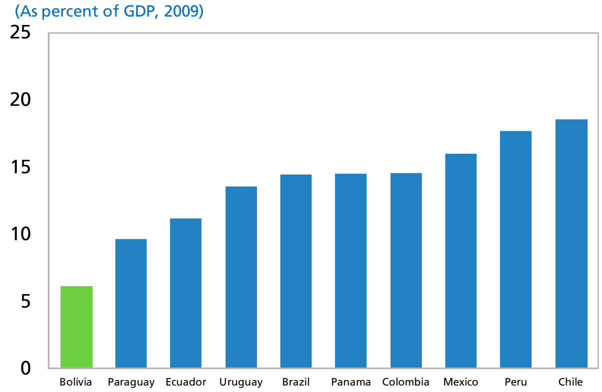
24. In recent years, the external environment has presented Bolivia with a unique opportunity to initiate a period of sustained growth above historical rates. To take advantage of this environment, key challenges need to be addressed:

- **Strengthening the business environment.** Low private investment reflects longstanding challenges in the business environment.[5] Weaknesses have been identified in institutional indicators and

[5] In the World Bank's Ease of Doing Business index, Bolivia fell from the 126th position in 2006 to the 161th position (out of 183 countries) in 2010. It ranks 108th (out of 139 countries) in the World Economic Forum's Global Competitiveness Index.

goods-and-labor-markets efficiency indices. While FDI rose in 2010 (including in the manufacturing and gas sectors—the latter associated with a new export contract signed with Argentina last year), non-FDI private capital flows remain negative. The authorities indicated that important progress was being achieved in developing micro-enterprises and were hopeful that this progress would soon be reflected in higher investment and growth statistics.

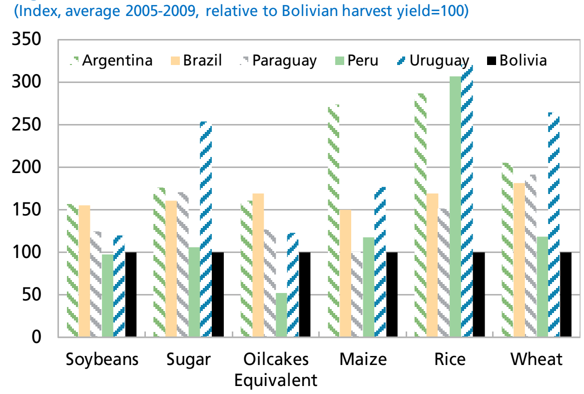
Private Investment
(As percent of GDP, 2009)



- **Spurring private exploration in the hydrocarbon sector and mining sectors.** With a few exceptions, investment in the exploration of gas, oil, and mining has declined sharply. This is explained mainly by still uncertain rules of the game for these activities, as their legal frameworks are under discussion. In the hydrocarbon sector, below-market fuel prices for domestic consumption limit the price paid to private upstream contractors to US$27 dollars a barrel; in addition, two royalties equivalent to 50 percent of the value of production further reduce the incentives to explore. As a result, private production is declining and the state-owned company need to import rising volumes of fuels (mainly diesel). While aware of the political and social restrictions, staff noted that a gradual increase in domestic fuel prices to market levels, with appropriate compensatory measures, would help provide additional fiscal space to pursue developmental and social objectives. Staff also suggested that the authorities consider revisiting taxation in the natural resources sector to spur exploration and production, particularly in smaller fields. The authorities noted that exploration activities by public corporations were ongoing, and expressed confidence that they would lead to a gradual increase in natural resources production. They noted that taxation in these sectors was unlikely to change in the near future.

Developing agricultural production. Staff noted that Bolivia still lags behind in agricultural productivity and that, as opposed of developments in neighboring countries, harvested areas have been stagnant throughout the food-price boom of recent years. Investment and access to credit remain constrained due to uncertainties about property rights, as legislation establishes harsh penalties—including seizure—in case of violations of social, labor, or use-of-land prescriptions. Staff argued for policies to facilitate the adoption of new technology to improve yields and eliminate uncertainties that prevent bank financing to the sector. Staff also noted that the prolonged use of food-price controls or agreements could adversely affect the domestic supply of goods, including by encouraging smuggling. The authorities explained that their strategy to expand agricultural production was rooted in empowering small farmers through the support of EMAPA, a public corporation that lends to farmers (mostly in kind, and at subsidized rates) and buys their production. They noted that while still small, this program was having great success in economic and social terms. At the same time, the authorities indicated that new loan programs by public banks (i.e., for sugar cane producers) would include incentives to increase productivity.

Agricultural Production Yield
(Index, average 2005-2009, relative to Bolivian harvest yield=100)



25. The government's social policies have allowed Bolivia to make important inroads toward achieving its Millennium Development Goals. The government cash-transfer programs—for the elderly, schooling, and pregnant mothers and early childhood—have been a pillar of this success. These are being complemented with plans to enhance the delivery of education and health services—a priority given the still high levels of infant mortality and child malnutrition. Staff commended the authorities for this success, while noting the need to ensure the sustainability of these plans in adverse scenarios.[6] Moreover, staff recommended developing capacity to enhance targeted social policies, which would facilitate the reduction of fuel subsidies and minimize the use of price controls in agriculture.

26. The pension reform introduces progressivity and could improve participation in the system, but also gives rise to a number of challenges. In the absence of actuarial calculations, staff was unable to judge the fiscal impact of the reform. In the short run, the new solidarity fund is expected to register a surplus, but over the medium-term there are actuarial risks, especially given the reduction in the retirement age. Staff noted that low income earners and workers close to retirement would have higher incentives to participate in the system in light of the new guaranteed pension. At the same time, higher contribution rates may reduce incentives for labor formalization overall. The authorities agreed that the medium-term challenge is to secure higher participation rates in the system, and explained that stronger penalties on evasion and the introduction of innovative modalities to facilitate contributions by self-employed workers would contribute to that objective.

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[6] For instance, *Renta Dignidad*, the noncontributory pension for the elderly, is funded with earmarks on hydrocarbon revenue.

STAFF APPRAISAL

27. **Despite adverse weather shocks, the Bolivian economy performed well in 2010.** Real GDP growth rose, supported by favorable terms-of-trade and higher hydrocarbon production and exports. The external current account and public sector balances remained in surplus, and net international reserves climbed to new record highs, providing strong protection to face external shocks. The financial sector remains sound, with low nonperforming loans and adequate provisioning.

28. **However, there has been a resurgence of inflation that will require policy adjustments to bring it back under control.** While higher international food prices have been a key driver of inflation, easy monetary conditions have contributed to more generalized price increases. With the fiscal impulse envisaged for 2011, the central bank should exit faster from the very strong monetary stimulus provided over the past two years. A more rapid appreciation of the currency, which is estimated to be moderately undervalued, would also help reduce external inflationary pressures.

29. **The growth outlook for 2011 is favorable.** Real GDP growth is expected to gather further momentum, reflecting the continued recovery of hydrocarbon production, higher public investment, and very favorable export prices. The external current account and the fiscal balance are expected to remain in surplus.

30. **Given the strength of public financial cushions and the favorable outlook for gas prices, there is fiscal space to undertake additional public investment, provided that efforts continue to boost its effectiveness.** Staff projects that, under current policies, public debt will be on a downward path over the next few years. As Bolivia's cushions are already strong, the authorities could take the opportunity to increase productive and social investment—while containing current expenditure—to address development needs. This will require stepping up efforts to ensure the effectiveness of public spending and enhancing implementation capacity across all levels of government.

31. **The authorities are encouraged to continue their reforms to the policy framework to improve policy responses to changing economic conditions.** Multi-year budgeting will strengthen fiscal policy and improve investment planning. The establishment of a fiscal savings fund should proceed expeditiously, as it would facilitate anti-cyclical fiscal policy. At the same time, it would limit risky fiscal claims on the central bank, which is an important precondition for credible and effective monetary policy. As lower dollarization becomes more entrenched and domestic financial markets develop further, the authorities should move towards greater exchange rate flexibility.

32. **The FSAP update has revealed important improvements in the financial sector, although further strengthening of macro-financial stability will require policy**

actions. The authorities need to manage a soft landing from historically-low interest rates while ensuring that appropriate levels of bank liquidity are maintained. Capital buffers need to be sustained through regulation focused on risks faced by banks rather than on developmental objectives. Further efforts are needed to align resources, capacity, and processes to the growing responsibilities of the financial sector supervisor, while ensuring its adequate independence. The central bank has effective mechanisms to provide liquidity and the bank the resolution framework is in line with best practices. However, the crisis management framework could be strengthened with a deposit insurance scheme to protect small depositors in the event of bank liquidation. AML/CFT regulations and practices should be strengthened to comply with international norms.

33. **Sustaining high and stable medium-term growth will require improvements in the investment climate.** Bolivia has yet to reverse the drop in private investment levels that began in the early 2000s. Key challenges include the adaptation of the legal framework for natural resources and private investment to the mandates of the Constitution in a way that ensures clear and stable rules of the game for the private sector.

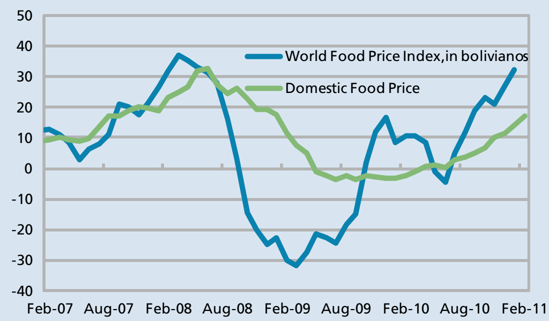
34. **Social policies have been effective and Bolivia has made inroads towards achieving MDGs.** Going forward, while strengthening current programs and enhancing the delivery of health and education services, there is a need to improve the targeting of transfer programs. In particular, success in removing generalized fuel subsidies and allowing prices signals to stimulate agricultural production will depend upon the ability of the state to deliver adequate compensatory measures to the most vulnerable groups.

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

Box 1 Bolivia: Recent Trends in Inflation and Inflation Expectations

Twelve-month inflation rose in recent months, to 10 percent in February. Measures of core and underlying inflation, at 9.8 percent and 8.4 percent respectively, are above the official inflation objective for 2011 (6 percent). To some extent, the current inflationary trend reflects global factors—the increase of food and commodity prices—and, as in many other emerging markets, the relatively large share of food products in the consumer basket. There have also been some one-off effects associated to supply shocks in agriculture, due to adverse weather, and social unrest, which led to temporary price hikes in certain regions.

Food Prices
(y/y percent change)



CPI Inflation
(By categories, annual change in percentage)

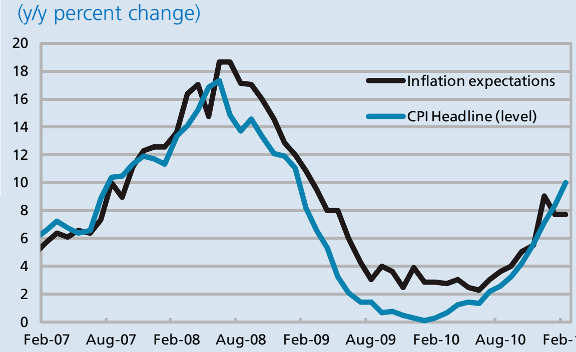
	Weight (percent of total)	Feb-10	Feb-11	Contribution to February 2011 Inflation
Headline Inflation	**100.00**	**0.3**	**10.0**	**100.0**
Food and Beverages	27.37	-2.2	17.0	48.0
Alcoholic Beverage and Tobacco	0.89	4.9	15.7	1.4
Apparel and Footwear	6.28	0.4	6.2	4.2
Housing & Basic Services	11.10	2.3	4.1	5.1
Furniture & Domestics Articles	6.71	2.2	6.8	4.9
Health	2.51	2.4	4.7	1.3
Transportation	12.51	0.2	5.5	7.5
Comunications	3.47	-0.6	-2.6	-0.7
Culture & Recreation	6.32	-0.8	4.4	3.1
Education	4.72	1.3	5.3	2.7
Restaurants & Hotels	11.07	2.8	15.2	17.4
Other Goods & Services	7.05	1.4	6.5	5.0

Source: *Instituto Nacional de Estadisticas de Bolivia* (INE)

The increase in inflation has been sharp and is becoming generalized. Monthly inflation averaged 1.4 percent during October-February, well above the monthly average for the first half of 2010 (0.1 percent). Food prices, which account for 27 percent of the CPI basket rose 17 percent year-over-year in February, explaining 48 percent of total inflation. While, historically, there has been a relatively small pass through from world to domestic food prices (20–25 percent), recent developments point to a faster and stronger impact, possibly explained by domestic demand conditions and supply shocks. Measures of inflation that exclude the impact of food, such as core (which excludes some food items and administratively set prices) and underlying inflation (which excludes the ten most volatile items of the CPI basket), also rose, indicating a somewhat generalized trend. Some sub-indices of the CPI (clothing, furniture and domestic articles, services, and restaurants and hotels, representing altogether 31 percent of the basket) have all risen above 6 percent in the last twelve months.

Inflation expectations have increased in tandem with actual inflation. While this is not a new development, since survey-based expectations have followed outturns for some time, it indicates that there is a risk of inflation becoming more entrenched in the coming months, requiring a more aggressive policy response than what would be the case otherwise.

Actual and Expected Inflation
(y/y percent change)



Box 2 Estimating fiscal impulses for Bolivia

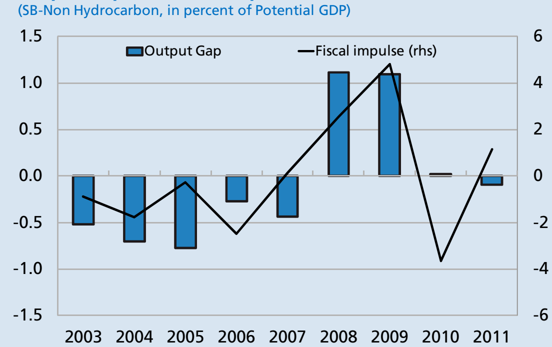
The Cyclically Adjusted Balance (CAB) and the Structural Balance (SB) are fiscal measures to assess a country's fiscal stance. By removing the effects of the economic cycle (the impact of automatic stabilizers), the CAB measures the direction and size of discretionary fiscal policies. The SB, which is an extension of the CAB, also seeks to gauge whether or not fiscal policies are becoming expansionary or contractionary. It is a more suitable indicator for commodity exporting countries, as it takes into account the impact of commodities on public sector accounts and on the economy as a whole. As Bolivia's economy and its fiscal position are greatly affected by the performance of hydrocarbon activities, public sector revenues and expenses have been adjusted by deducting hydrocarbon-related items (*tax collections on hydrocarbon production and the operating surplus of YPF, on the revenue side, and the investments undertaken by YPFB on the expenditure side).*

Estimating the CAB and the SB requires computing several key economic variables. These include: potential output–or the long run level of GDP, the output gap, and the elasticity of revenues and expenditures to potential output. For the SB, this means estimating non-hydrocarbon potential output and the output gap in non-hydrocarbon activities. The first step, however, is to adjust fiscal accounts by one-off items.

One-off items are non recurrent budgetary factors–expenditures or tax forgiveness programs which temporarily affect the fiscal position while at the same time have some limited impact on the domestic economy. *For Bolivia, spending was adjusted for the nationalization costs paid during 2007-2010.*

Potential output or the long run level of GDP can be estimated applying different statistical and economic methods. These include univariate filters and multivariate methods. The output gap is the difference between actual output and potential GDP. *In the case of Bolivia, the HP filter was used to calculate potential output. Over the last 22 years, potential growth has averaged around 4 percent.*

Output Gap and Fiscal Impulse
(SB-Non Hydrocarbon, in percent of Potential GDP)



Elasticities on budget components are required to estimate the level of structural revenues and expenditures. In line with OECD guidelines (2001), an aggregated revenue elasticity of 1 was applied; this means that revenues respond one-to-one with the business cycle. In addition, on the expenditure side, it was assumed that all spending is structural such that the elasticity of expenditure to output is zero.

The results show that fiscal policy contributed to sustain demand and GDP growth in 2008-09 even though non-hydrocarbon GDP was slightly above potential. Results also indicate a strong negative stimulus in 2010—mostly on account of underexecution of public investment—while for 2011, the fiscal impulse is estimated at about 1½ percent of GDP.

Box 3 Bolivia: Exchange Rate Assessment

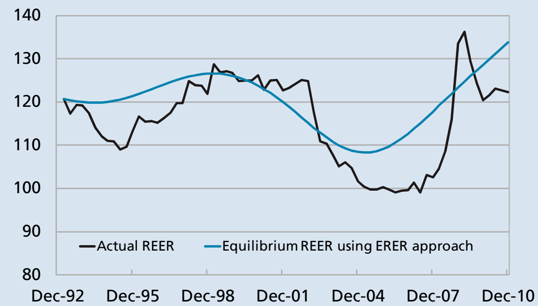
Staff estimates, based on CGER methodologies, suggest that the Boliviano is moderately undervalued when compared with fundamentals. There are however, uncertainties associated with the application of these methodologies to Bolivia, since: (a) they do not fully incorporate the implications of the exhaustion of natural resources within a predictable timeframe and the associated intergenerational considerations that may drive net assets accumulation in the near term; (b) current account volatility is particularly high because of commodity price fluctuations, which makes it difficult to separate underlying trends from temporary changes, complicating the estimation of the underlying current account balance; and (c) the Bolivian economy has experienced large structural changes in recent years and, hence, past values of fundamental variables may be poor guides of their future levels.

All three CGER approaches point to undervaluation of the Boliviano, averaging 8.5 percent:

- The ***Macroeconomic Balance*** (MB) approach indicates that an appreciation of Bolivia's real effective exchange rate (REER) of 4.6 percent would be needed to close the difference between the underlying current account balance (CAB) and the estimated equilibrium current account (current account norm). This result hinges on an underlying CAB of 4 percent of GDP and a current account norm estimated at 2.8 percent of GDP. The level of the current account norm reflects mainly relatively high petroleum trade balances and low old-age dependency ratios.
- The ***External Sustainability*** (ES) approach suggests that the Boliviano is undervalued by 12.3 percent. This assumes that Bolivia's net foreign assets would stabilize at their end-2009 level (18 percent of GDP), which would require a CAB of 0.9 percent of GDP.

The ***Equilibrium Real Exchange Rate*** (ERER) approach points to undervaluation of 8.6 percent. The model explains the REER on the basis of the terms of trade, net foreign assets, public expenditure, FDI, and relative productivity.

Actual and Equilibrium Real Effective Exchange Rate
(REER index 2005=100)



Source: IMF staff calculations.

Bolivia: ER Assessment

REER Deviation from Equilibrium 1/ (In percent)	
MB Approach	-4.6
ES Approach	-12.3
ERER Approach	-8.6
Average	-8.5

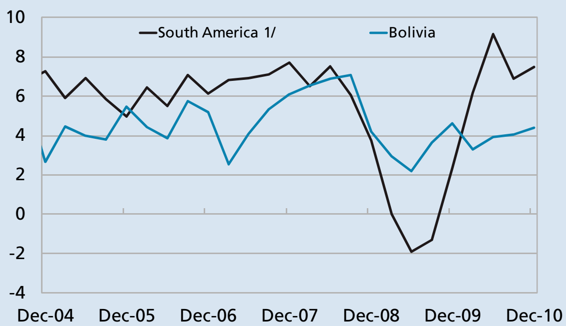
Source: Fund staff estimates.
1/ Undervaluation (-), Overvaluation (+)

Figure 1 Bolivia: Real Sector Developments

The Bolivian economy has emerged from last-year's slowdown, albeit at a slower pace than neighboring countries, with GDP growth estimated at 4.2 percent in 2010. Inflation has picked up significantly), reflecting higher food prices and easy monetary conditions.

Bolivia's economic activity recovered in 2010, albeit at lower pace than its neighbors, in part because the slowdown in 2009 was milder.

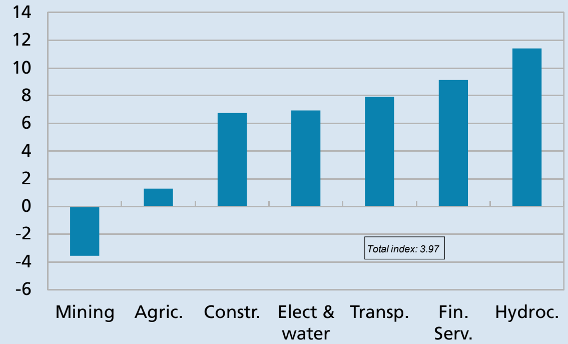
Real GDP Growth
(y/y percent change)



Note: 1/ Median of annual GDP growth for Argentina, Brazil, Chile, Colombia, Ecuador, Paraguay, Peru and Venezuela.

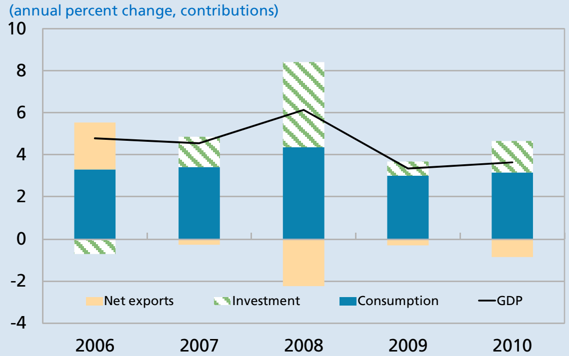
Growth in 2010 was mainly explained by hydrocarbons, construction, transportation, and financial services, while agriculture lagged and mining contracted.

Monthly Economic Activity Indicator
(Jan-Oct 2010, y/y percent change)



From the demand side, growth in 2010 has been driven mainly by private consumption...

Real GDP Growth
(annual percent change, contributions)

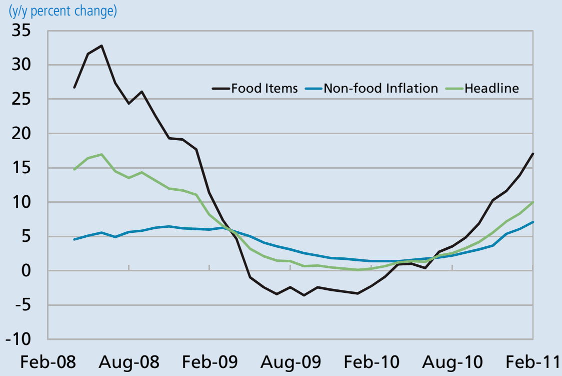


...with unemployment declining and real wages rising somewhat.

Labor Market Developments

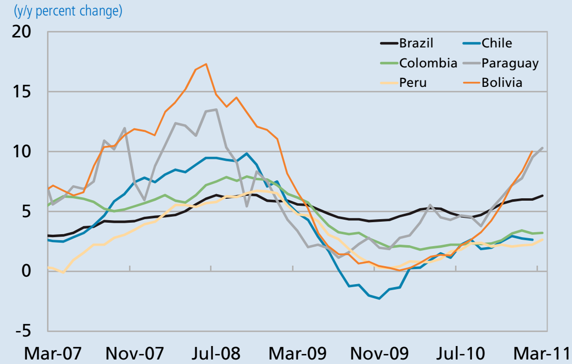
Inflation has picked up significantly, due to higher food prices and an expansionary monetary stance...

CPI Inflation
(y/y percent change)



...and price swings appear more volatile than in other countries in the region.

Headline Inflation
(y/y percent change)



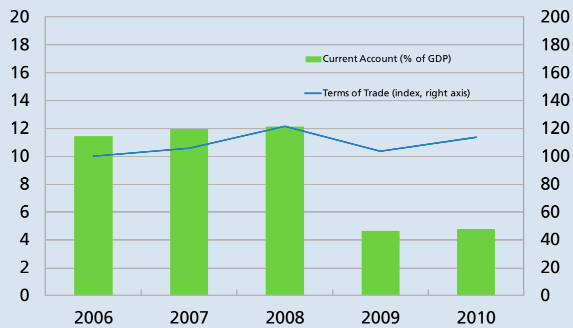
Sources: National Authorities and IMF staff calculations.

Figure 2 Bolivia: External Developments

Current account surplus reflected strong trade balance driven by higher exports. The capital account is driven by slightly increasing FDI while the rest of private capital flows remain negative. Central Bank's foreign reserves reached historic highs of 50 percent of the GDP.

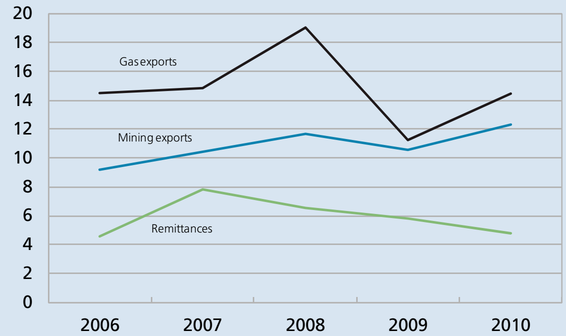
Current account remained in surplus on the backdrop of improving terms of trade

Current Account Balance and Terms of Trade
(Percent of GDP, index 2006=100)



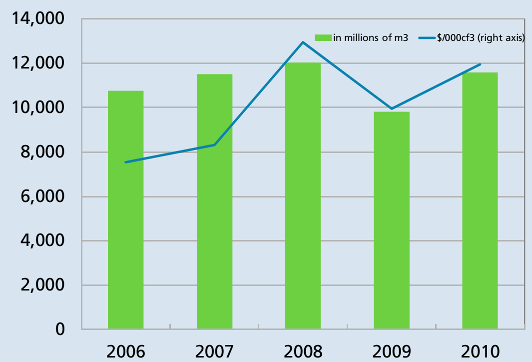
Higher gas and mining exports were partially off-set by lower remittances

Gas and Mining Exports and Remittances
(Percent of GDP)



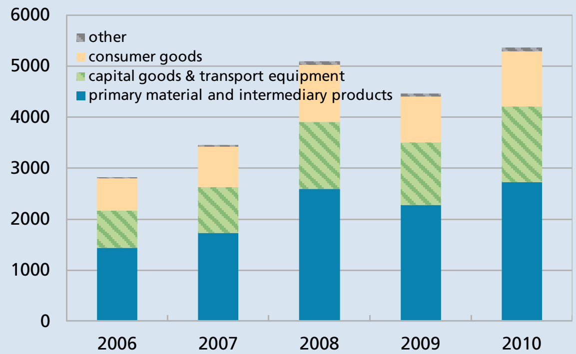
Increase in gas exports stems from an increase in both prices and volumes.

Export Volumes and Price of Gas



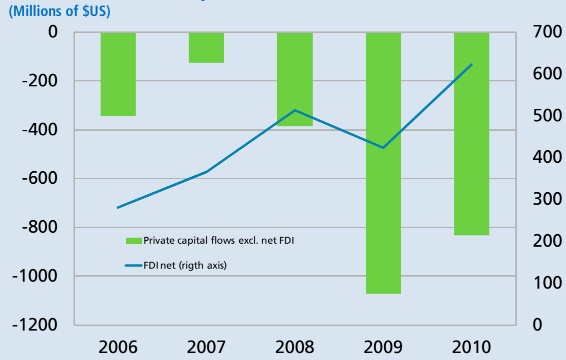
Imports increased by 20 percent with the largest increase in primary materials imports.

Imports Composition
(Millions of $US)



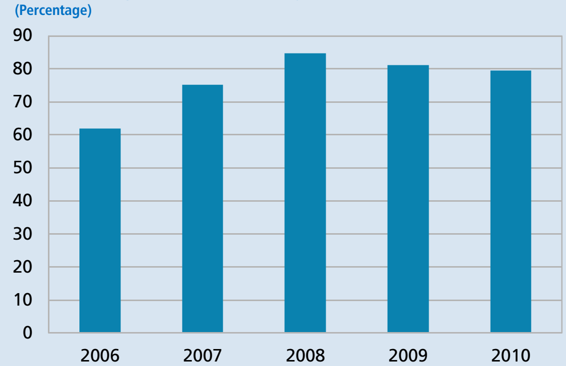
Private capital flows excluding FDI remained negative, while net FDI increased.

All Other Private Capital Flows
(Millions of $US)



High level of net international reserves provides ample coverage for broad money.

NIR Coverage of Broad Money
(Percentage)



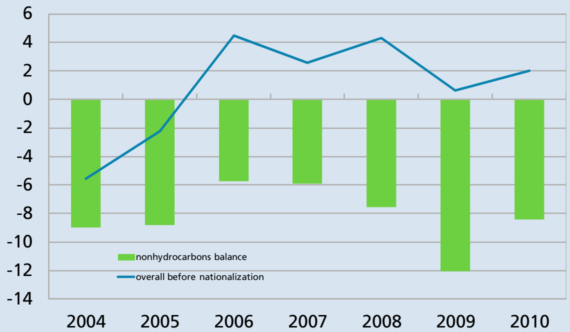
Sources: National Authorities and IMF staff calculations.

Figure 3 Bolivia: Fiscal Developments

The fiscal position strengthened in 2010 on the back of lower current and capital expenditures. Public sector debt resumed its downward trend and domestic debt vulnerabilities have been reduced.

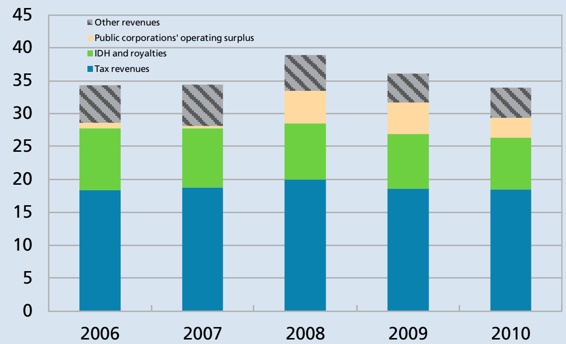
The 2010 fiscal surplus increased to 2 percent of GDP , amid a lower non-hydrocarbon balance.

Fiscal Balances
(Percent of GDP)



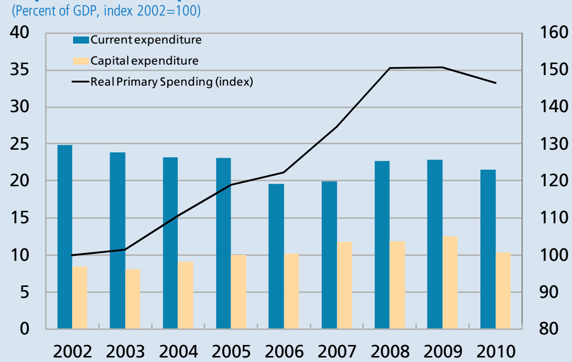
Tax revenues and hydrocarbon receipts remain strong.

Total Revenues Composition
(Percent of GDP)



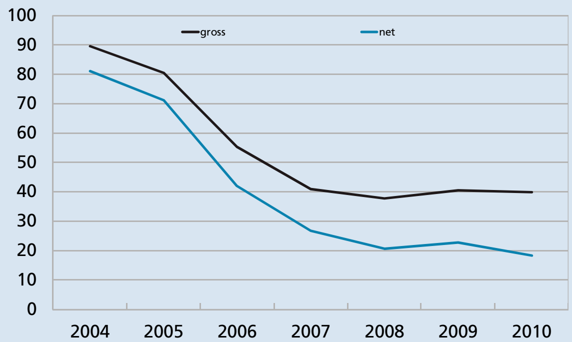
Real primary spending has declined in 2010, mainly due to lower investment.

Expenditure Composition
(Percent of GDP, index 2002=100)



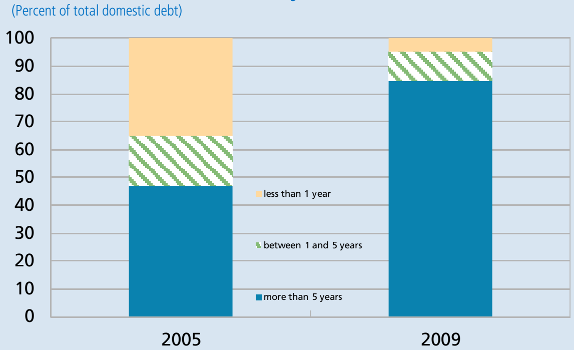
Sustained fiscal surpluses, together with debt relief, allowed for a significant reduction in public sector debt.

Public Sector Debt
(Percent of GDP)



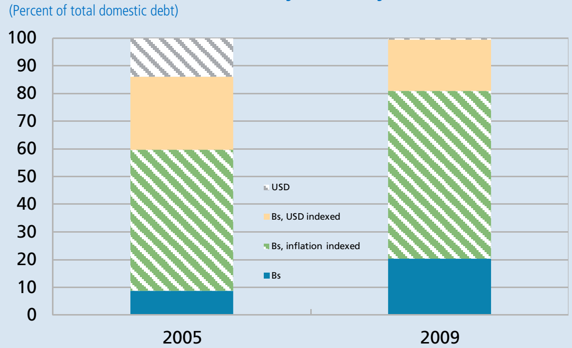
Domestic debt vulnerabilities have been reduced as maturities have been extended...

Domestic Debt Breakdown by Maturities
(Percent of total domestic debt)



...and foreign currency exposure has been reduced.

Domestic Debt Breakdown by Currency
(Percent of total domestic debt)



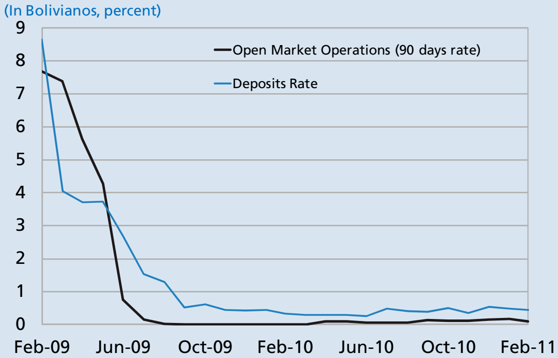
Sources: National Authorities and IMF staff calculations.

Figure 4 Bolivia: Monetary Developments

Monetary policy remains accommodating with short-term rates at virtually zero. Central bank resumed the appreciation adjustments of the Boliviano under the crawling peg.

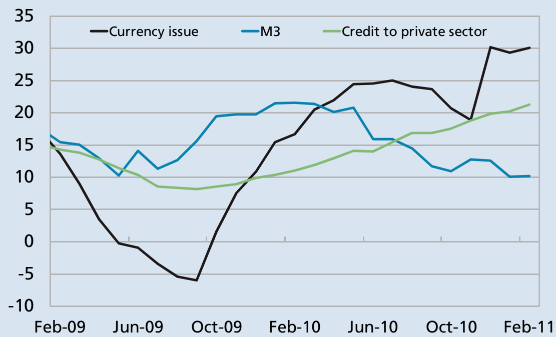
Monetary policy stance remains expansionary with short-term interest and deposit interest rates falling significantly.

Interest Rate
(In Bolivianos, percent)



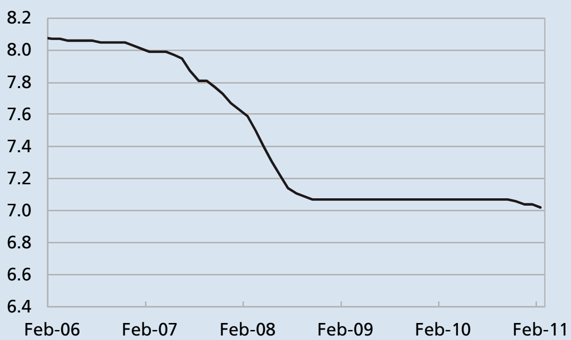
The growth of currency in circulation and credit has picked picked-up, with M3 slowing due to lower deposit growth.

Monetary Aggregates
(y/y percentage change)



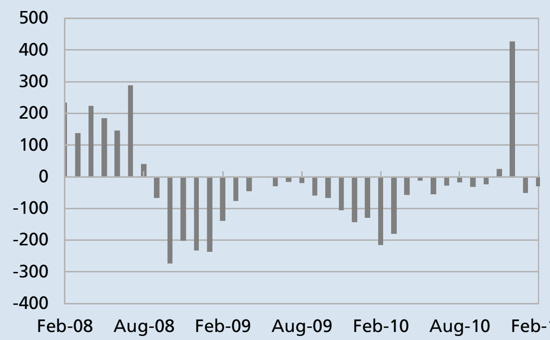
In November 2010, the central bank resumed the negative crawl of the Boliviano,...

Nominal Exchange Rate
(Bs/US$)



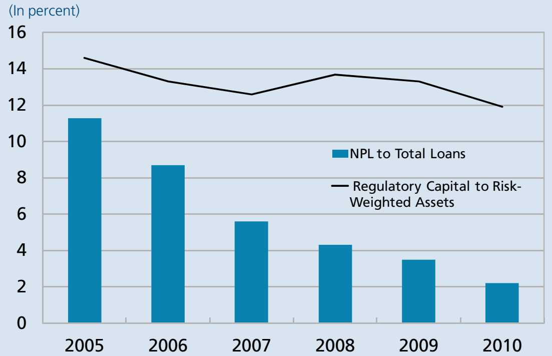
...leading to strong central bank purchases of FX in the market in December due to a rebalancing of portfolios.

FX Net Purchases
(Millions of US$)



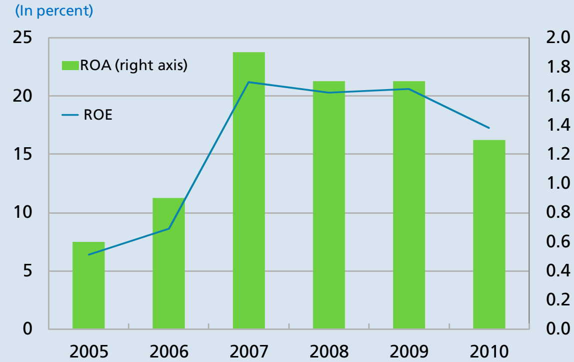
Banks' financial soundness indicators have improved with declining NPLs and adequate capital.

Financial Soundness Indicators
(In percent)



Banks' profitability has declined somewhat since 2007 amid some compression of spreads.

Financial Soundness Indicators (cont.)
(In percent)



Sources: National Authorities and IMF staff calculations.

Table 1 Bolivia: Selected Economic and Financial Indicators

				Prel.	Projections					
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
	(Annual percentage changes)									
Income and prices										
Real GDP	4.6	6.1	3.4	4.2	4.5	4.5	4.5	4.5	4.5	4.5
GDP deflator	7.4	10.4	-2.4	6.3	9.5	5.0	2.9	1.8	4.0	4.0
CPI inflation (period average)	8.7	14.0	3.3	2.5	10.4	5.4	4.5	4.0	4.0	4.0
CPI inflation (end-of-period)	11.7	11.8	0.3	7.2	7.9	5.0	4.0	4.0	4.0	4.0
	(In percent of GDP)									
Investment and savings										
Total investment	15.2	17.6	17.0	16.9	17.2	17.2	17.4	17.5	17.5	17.5
Public sector	9.4	9.8	11.6	9.8	10.1	10.1	10.2	10.2	10.2	10.3
Private sector	5.8	7.8	5.4	7.1	7.1	7.1	7.2	7.3	7.3	7.3
Gross national savings	28.6	29.0	22.9	23.3	22.6	23.2	23.0	22.0	21.5	22.0
Public sector	12.0	14.4	12.4	11.8	10.8	11.3	11.4	11.6	11.6	11.8
Private sector	16.5	14.6	10.4	11.5	11.8	11.8	11.6	10.4	9.9	10.1
Saving/investment balances 1/	13.4	11.5	5.9	6.4	5.4	6.0	5.7	4.5	4.0	4.4
Public sector	2.6	4.6	0.8	2.0	0.7	1.2	1.3	1.4	1.4	1.5
Private sector	10.8	6.8	5.1	4.4	4.7	4.8	4.4	3.1	2.6	2.9
Combined public sector										
Revenues and grants	34.4	38.9	36.1	33.9	34.8	35.2	35.7	36.4	36.6	36.6
Of which:										
Hydrocarbons related revenue	9.4	13.4	13.1	10.9	11.4	11.9	11.8	12.1	12.2	12.3
Expenditure	31.8	34.6	35.5	31.9	34.1	34.0	34.4	35.0	35.2	35.1
Current	20.0	22.7	22.9	21.6	22.3	22.4	22.7	23.3	23.4	23.3
Capital 2/	11.8	11.9	12.6	10.4	11.8	11.6	11.7	11.7	11.8	11.8
Overall balance after nationalization costs	1.7	2.8	0.3	2.0	0.7	1.2	1.3	1.4	1.4	1.5
Of which:										
Balance before nationalization costs	2.6	4.3	0.6	2.0	0.7	1.2	1.3	1.4	1.4	1.5
Non-hydrocarbons balance, before nationalization costs	-5.9	-7.5	-12.1	-8.4	-9.0	-9.1	-9.0	-9.4	-9.6	-9.5
Total net NFPS debt	26.8	20.6	22.8	18.3	15.5	13.1	11.6	10.2	9.0	7.8
Total gross NFPS debt	40.9	37.5	40.5	39.9	36.2	34.4	33.5	32.7	31.4	30.0
External sector										
Current account 1/	12.0	12.1	4.7	4.8	3.8	4.4	4.3	3.4	3.0	3.3
Merchandise exports	33.5	38.8	28.2	32.5	30.3	29.6	29.1	28.5	27.8	27.8
Of which: natural gas	14.8	19.0	11.3	14.4	14.3	14.3	14.1	14.5	14.3	14.8
Merchandise imports	26.0	30.0	25.4	27.7	26.3	25.7	26.0	26.7	26.5	26.3
Terms of trade index (percent change)	5.8	14.7	-14.6	9.5	-0.5	-0.9	-5.1	-6.5	-4.7	-3.7
Gross Central Bank foreign reserves 3/ 4/										
In millions of U.S. dollars	5,319	7,722	8,580	9,730	10,440	11,434	12,540	13,477	14,415	15,538
In percent of broad money	75.1	84.7	81.2	79.5	73.9	77.1	80.0	82.0	83.4	84.5
Exchange rates 5/										
Bolivianos/U.S. dollar (end-of-period)	7.57	6.97	6.97	6.95	…	…	…	…	…	…
REER, period average (percent change)	2.9	14.7	10.9	17.0	…	…	…	…	…	…
	(Changes in percent of broad money at the beginning of the period, unless otherwise specified)									
Money and credit										
NFA of the financial system	35.4	34.6	10.2	8.2	7.4	7.0	11.3	8.6	6.3	6.7
NDA of the financial system	-3.7	-12.5	6.6	6.0	2.3	1.7	-2.9	-1.3	1.0	1.8
Of which: credit to private sector (percent of GDP)	33.1	30.3	33.0	32.4	35.3	36.9	38.8	41.0	41.7	42.5
Broad money	31.7	22.2	16.8	14.2	9.7	8.7	8.4	7.3	7.3	8.5
Interest rates (percent, end-of-period)										
Deposits in local currency 61-90 days	3.7	5.7	0.4	0.5	…	…	…	…	…	…
Deposits in foreign currency 61-90 days	2.6	3.3	0.5	0.2	…	…	…	…	…	…
Memorandum items:										
Nominal GDP (in billions of U.S. dollars)	13.3	16.6	17.5	19.4	22.8	25.2	26.3	27.3	29.1	31.0
Oil prices (in US dollars per barrel)	71.1	97.0	61.8	79.0	107.2	108.0	105.5	104.5	105.0	106.0

Sources: Bolivian authorities; and Fund staff estimates and projections.

1/ The investment-savings balance, as measured in national accounts, differs from that in the balance of payments due to methodological differences.

2/ Includes nationalization costs and net lending.

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.

Table 2 Bolivia: Operations of the Combined Public Sector

(In percent of GDP)

	2006	2007	2008	Prel. 2009	Est. 2010	Proj. 2011
Total revenue and grants	**34.3**	**34.4**	**38.9**	**36.1**	**33.9**	**34.8**
Current revenue	30.9	31.1	31.5	30.1	29.9	30.6
Tax revenue	27.8	27.8	28.5	26.9	26.4	27.1
IDH and royalties	9.4	9.0	8.5	8.3	7.9	8.5
Other Taxes	18.4	18.8	20.0	18.6	18.5	18.6
Direct taxes	4.7	3.8	4.5	4.7	4.8	4.7
Of which: Corporate income tax	3.1	3.0	3.7	4.0	4.1	4.1
Indirect taxes	13.6	15.0	15.5	13.9	13.7	13.9
Of which: VAT	6.8	7.1	7.4	6.2	7.0	7.3
Of which: Excise taxes on fuel	2.2	2.3	2.1	1.5	1.2	1.2
Nontax revenue	3.1	3.3	3.0	3.2	3.5	3.5
Public enterprises operating balance	0.8	0.4	4.9	4.7	3.0	2.9
Central bank operating balance	0.7	1.3	1.2	0.1	-0.1	0.2
Grants	1.8	1.6	1.2	1.2	1.1	1.1
Total spending	**29.8**	**31.8**	**34.6**	**35.5**	**31.9**	**34.1**
Current expenditure	19.6	20.0	22.7	22.9	21.6	22.3
Wages and salaries 1/	7.9	9.2	8.7	10.2	9.7	10.0
Goods and services	1.8	2.0	2.2	2.6	2.2	2.2
Interest	2.5	2.5	2.0	1.6	1.4	1.4
Domestic	1.5	1.7	1.4	1.3	1.1	1.1
Foreign	1.0	0.8	0.6	0.4	0.3	0.3
Transfers	1.5	2.1	6.4	3.8	3.5	3.8
Pensions	3.6	3.4	3.1	3.5	3.4	3.4
Other	2.3	0.9	0.2	1.1	1.4	1.4
Capital expenditure	10.2	11.8	11.9	12.6	10.4	11.8
Overall balance before nationalization	**4.5**	**2.6**	**4.3**	**0.6**	**2.0**	**0.7**
Of which: non-hydrocarbon balance 2/	-5.7	-5.9	-7.5	-12.1	-8.4	-9.6
Nationalization cost	0.0	0.8	1.6	0.3	0.0	0.0
Overall balance after nationalization	**4.5**	**1.7**	**2.8**	**0.3**	**2.0**	**0.7**
Financing	**-4.5**	**-1.7**	**-2.8**	**-0.3**	**-2.0**	**-0.7**
External	0.4	1.0	1.3	1.0	1.1	1.3
Disbursements	2.9	3.2	3.5	3.1	3.8	2.6
Amortizations	-2.5	-2.1	-2.1	-2.1	-2.7	-1.3
Other External	-0.1	-0.1	0.0	0.0	0.0	0.0
Domestic	-4.9	-2.8	-4.1	-1.3	-3.1	-1.9
Of which: Central Bank	-6.2	-3.0	-5.0	-0.4	-5.0	-1.5
Memorandum Items:						
Overall balance of the central government 3/	1.8	-0.1	-2.2	-2.9	-2.0	…
Overall balance of the central administration	1.9	1.6	-0.3	-0.8	-0.2	…
Overall balance of subnational governments	1.9	1.1	0.5	-0.8	1.8	…
Prefectures	0.8	0.6	0.2	-0.4	0.6	…
Municipalities	1.1	0.6	0.3	-0.4	1.2	…
Hydrocarbon related revenue 4/	10.2	9.4	13.4	13.1	10.9	11.4
Hydrocarbon balance	10.2	8.5	13.4	11.9	10.4	10.3

Sources: Bolivian authorities and Fund staff estimates.

1/ In 2007 the expenditure on universities was reclassified from other spending into its functional classification, increasing wages and salaries in that year.

2/ Non-hydrocarbon revenue minus overall expenditure plus YPFB capital expenditure.

3/ IMF staff's definition.

4/ Hydrocarbon related revenues are defined as IDH, royalties, and the operating balance of YPFB.

Table 3 Bolivia: Operations of the Combined Public Sector

(In Millions of Bolivianos)

	2006	2007	2008	Est. 2009	Prel. 2010	Proj. 2011
Total revenue and grants	**31,473**	**35,428**	**46,953**	**43,925**	**45,755**	**53,710**
Current revenue	28,381	32,052	38,020	36,634	40,342	47,173
Tax revenue	25,524	28,659	34,414	32,799	35,595	41,800
IDH and royalties	8,645	9,266	10,249	10,161	10,632	13,108
Other Taxes	16,878	19,393	24,165	22,638	24,963	28,692
Direct taxes	4,357	3,901	5,414	5,750	6,530	7,203
Of which: Corporate income tax	2,884	3,141	4,468	4,913	5,473	6,265
Indirect taxes	12,522	15,492	18,751	16,888	18,433	21,489
Of which: VAT	6,252	7,274	8,919	7,514	9,372	11,221
Of which: Excise taxes on fuel	2,000	2,383	2,530	1,794	1,588	1,867
Nontax revenue	2,857	3,393	3,606	3,835	4,747	5,373
Public enterprises operating balance	732.2	384.5	5,969.7	5,769.1	4,052.6	4,515.6
Central bank operating balance	668	1,297	1,457	106	-177	323
Grants	1,692	1,695	1,505	1,416	1,538	1,698
Total spending	**27,372**	**32,767**	**41,754**	**43,182**	**43,040**	**52,667**
Current expenditure	18,000	20,594	27,402	27,893	29,067	34,390
Wages and salaries 1/	7,230	9,431	10,521	12,362	13,114	15,385
Goods and services	1,649	2,031	2,680	3,213	2,989	3,456
Interest	2,318	2,616	2,386	2,003	1,921	2,179
Domestic	1,358	1,749	1,681	1,525	1,549	1,741
Foreign	960	867	706	478	372	437
Transfers	1,396	2,132	7,717	4,666	4,677	5,876
Pensions	3,284	3,487	3,800	4,313	4,543	5,262
Other	2,123	897	297	1,337	1,822	2,232
Capital expenditure	9,372	12,173	14,352	15,288	13,974	18,278
Of which: Public Enterprises	…	1,066	2,388	1,410	1,184	3,221
Of which: net lending	…	…	981	0	…	…
Overall balance before nationalization	**4,101**	**2,661**	**5,199**	**744**	**2,715**	**1,042**
Of which: non-hydrocarbon balance 2/	-5,246	-6,100	-9,095	-14,693	-11,332	-14,803
Nationalization cost	0	868	1,872	420	0	0
Overall balance after nationalization	**4,101**	**1,793**	**3,327**	**324**	**2,715**	**1,042**
Financing	-4,101	-1,793	-3,327	-324	-2,715	-1,042
External	370	1,063	1,612	1,277	1,507	1,943
Disbursements	2,695	3,268	4,232	3,784	5,187	4,052
Amortizations	-2,249	-2,130	-2,571	-2,505	-3,645	-2,075
Other External	-75	-75	-50	-2	-35	-35
Domestic	-4,471	-2,856	-4,938	-1,601	-4,223	-2,985
Of which: Central Bank	-5,726	-3,081	-6,052	-501	-6,749	-2,354
Memorandum Items:						
Overall balance of the central government 3/	1,676	-110	-2,692	-3,517	-2,653	…
Overall balance of the central administration	1,764	1,633	-368	-1,011	-239	…
Overall balance of subnational government	1,757	1,154	633	-952	2,473	…
Prefectures	734	567	241	-518	856	…
Municipalities	1,023	587	393	-434	1,617	…
Hydrocarbon related revenue 4/	9,378	9,651	16,219	15,930	14,684	17,623
Hydrocarbon balance	9,347	8,761	16,166	14,426	14,047	15,845

Sources: Bolivian authorities, and Fund staff estimates.

1/ In 2007 the expenditure on universities was reclassified from other spending into its functional classification, increasing wages and salaries in that year.

2/ Non-hydrocarbon revenue minus overall expenditure plus YPFB capital expenditure.

3/ IMF staff's definition.

4/ Hydrocarbon related revenues are defined as IDH, royalties, and the operating balance of YPFB.

Table 4 Bolivia: Summary Balance of Payments, 2006–2016

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

					Projections					
	2007	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Current account	1,591	2,015	813	925	866	1,116	1,144	923	875	1,030
Trade balance	1,004	1,467	483	930	908	981	806	510	377	476
Exports, f.o.b.	4,458	6,448	4,918	6,291	6,891	7,460	7,645	7,802	8,082	8,609
Exports, c.i.f.	4,860	6,978	5,453	6,954	7,583	8,243	8,448	8,620	8,928	9,513
Natural gas	1,971	3,158	1,967	2,798	3,249	3,612	3,705	3,954	4,149	4,582
Of which: To Brazil	1,606	2,850	1,587	2,353	2,599	2,583	2,613	2,678	2,690	2,725
volume (mmm3 p/day)	26.9	30.5	22.2	26.9	28.4	28.0	29.0	30.0	30.0	30.1
price ($/000cf3)	4.6	7.2	5.5	6.8	7.1	7.2	7.0	6.9	7.0	7.0
To Argentina	326	307	380	445	650	1,029	1,092	1,276	1,459	1,857
volume (mmm3 p/day)	4.6	2.5	4.6	4.9	6.3	9.9	10.8	12.7	14.4	18.2
price ($/000cf3)	5.5	9.4	6.3	7.1	8.0	8.1	7.9	7.8	7.8	7.9
Mining	1,387	1,940	1,847	2,387	2,410	2,730	2,685	2,606	2,645	2,678
Soy - related	277	329	481	496	655	670	683	690	709	729
Other	1,225	1,552	1,157	1,274	1,269	1,232	1,375	1,370	1,424	1,524
Imports, c.i.f.	-3,455	-4,980	-4,435	-5,360	-5,983	-6,479	-6,839	-7,292	-7,704	-8,133
Services (net)	-189	-200	-209	-226	-230	-297	-312	-338	-335	-365
Income (net)	-489	-536	-674	-860	-830	-677	-730	-706	-704	-703
Transfers (net)	1,266	1,284	1,213	1,081	1,019	1,109	1,380	1,457	1,537	1,622
Capital and financial account	361	359	-267	-2	-156	-122	-38	14	63	93
Capital transfers 1/	1,180	10	111	-7	-8	0	0	0	0	0
Direct investment (net)	366	513	423	622	774	729	750	785	935	996
Gross investment	953	1,302	687	915	1,374	979	1,000	1,035	1,185	1,262
Disinvestment and investment abroad	-587	-789	-264	-293	-600	-250	-250	-250	-250	-266
Portfolio investment (net)	-30	-208	-154	90	-164	-255	-260	-265	-256	-256
Public sector	-1,049	231	382	209	268	370	379	350	379	349
Disbursements	446	588	546	755	614	649	670	659	711	711
Amortization	-1,495	-357	-385	-546	-346	-279	-292	-309	-332	-362
Other 2/	0	0	222	0	0	0	0	0	0	0
Fin system net foreign assets, excl. liquid asset requireme	127	0	-285	125	141	-50	10	60	-80	80
Nonbank private sector loans	-52	-21	-88	-213	-60	-60	-60	-60	-60	-60
Other, including errors and omissions	-159	-160	-659	-856	-856	-856	-856	-856	-856	-856
Other	-49	-141	-200	-56	-56	-56	-56	-56	-56	-56
Errors and omissions	-111	-19	-459	-801	-801	-801	-801	-801	-801	-801
Overall balance	1,952	2,374	547	923	710	994	1,106	937	938	1,123
Financing	-1,952	-2,374	-547	-923	-710	-994	-1,106	-937	-938	-1,123
Memorandum items:										
Current account (percent of GDP)	12.0	12.1	4.7	4.8	3.8	4.4	4.3	3.4	3.0	3.3
Merchandise exports (percent of GDP)	33.5	38.8	28.2	32.5	30.3	29.6	29.1	28.5	27.8	27.8
Merchandise imports (percent of GDP)	-26.0	-30.0	-25.4	-27.7	-26.3	-25.7	-26.0	-26.7	-26.5	-26.3
Gross official reserves (end-of-period)	5,319	7,722	8,580	9,730	10,440	11,434	12,540	13,477	14,415	15,538
(In months of imports of goods and services)	18.5	18.6	23.2	21.8	20.9	21.2	22.0	22.2	22.5	22.9
Foreign Direct Investment (percent of GDP)	2.7	3.1	2.4	3.2	3.4	2.9	2.9	2.9	3.2	3.2
GDP (in millions of U.S. dollars)	13,292	16,602	17,464	19,373	22,778	25,222	26,309	27,333	29,080	30,969

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

1/ In 2006 includes effect of MDRI debt relief from the IMF and the World Bank equivalent to US$ 1804.3 million.

In 2007 includes effect of MDRI relief from IADB equivalent to US$ 1099 million.

2/ Includes SRD allocation in 2009.

Table 5 Bolivia: Central Bank of Bolivia 1/

	2006	2007	2008	2009	2010	Proj. 2011
(Flows in millions of Bolivianos, unless otherwise indicated)						
Net international reserves	10,270	15,491	17,449	2,266	6,433	4,811
(Flows in millions of U.S. dollars)	1,289	1,999	2,400	325	923	710
Net domestic assets	-7,676	-10,162	-14,711	-417	-698	-1,065
Net credit to the nonfinancial public sector	-5,725	-2,993	-6,055	-501	-6,957	-3,000
Net credit to financial intermediaries	-1,620	-6,131	-8,974	-586	2,951	1,108
Of which: Open market operations (increase -)	-1,171	-5,397	-6,745	5,101	2,790	-1,150
Net medium- and long-term foreign liabilities (increase -)	5	6	-12	6	7	5
Other items (net)	-336	-1,044	329	663	3,301	822
Currency issue	2,594	5,329	2,940	1,849	5,693	3,789
(Stocks in millions of Bolivianos, unless otherwise indicated)						
Net international reserves	24,291	40,705	56,215	57,091	66,874	71,685
Net domestic assets	-15,517	-26,602	-39,172	-38,199	-42,246	-43,311
Net credit to the nonfinancial public sector	-6,952	-9,337	-14,096	-12,076	-19,033	-22,033
Net credit to financial intermediaries	-1,455	-7,906	-17,461	-19,679	-16,727	-15,618
Of which: Open market operations	-1,868	-7,290	-14,469	-10,857	-8,064	-9,214
Net medium- and long-term foreign liabilities	-212	-207	-214	-1,969	-199	-194
Other items (net)	-6,898	-9,152	-7,401	-4,474	-6,287	-5,465
Currency issue	8,774	14,103	17,043	18,892	24,585	28,374
(Changes in percent of beginning-of-period currency issue)						
Net international reserves	166.2	176.6	123.7	13.3	34.1	19.6
Net domestic assets	-124.2	-115.8	-104.3	-2.4	-3.7	-4.3
Net credit to the nonfinancial public sector	-92.6	-34.1	-42.9	-2.9	-36.8	-12.2
Net credit to financial private sector	-26.2	-69.9	-63.6	-3.4	15.6	4.5
Of which: Open market operations (increase -)	-19.0	-61.5	-47.8	29.9	14.8	-4.7
Net medium- and long-term foreign liabilities (increase -)	0.1	0.1	-0.1	0.0	0.0	0.0
Other items (net)	-5.4	-11.9	2.3	3.9	17.5	3.3
Currency issue	42.0	60.7	20.9	10.8	30.1	15.4
Memorandum items:						
Currency issue (average stock in percent of GDP)	7.1	9.8	12.7	13.0	14.4	17.2
Net international reserves	3,178	5,319	7,722	8,580	9,730	10,440
NIR coverage of broad money (percent)	61.9	75.1	84.7	80.4	79.5	73.9

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

Table 6 Bolivia: Financial System Survey 1/ 2/

						Proj.
	2006	2007	2008	2009	2010	2011
(Flows in millions of Bolivianos, unless otherwise indicated)						
Net short-term foreign assets	10,892	14,415	18,556	6,287	6,080	6,304
(Flows in millions of U.S. dollars)	1,368	1,860	2,552	902	1,010	970
Net domestic assets	-4,469	-1,502	-6,682	5,064	4,468	1,949
Net credit to the public sector	-5,760	-3,482	-6,675	558	-7,278	-3,000
Credit to the private sector	1,958	4,400	4,783	3,683	8,556	9,155
Net medium- and long-term foreign liabilities (increase -)	-105	359	-661	207	-116	0
Other items (net)	-562	-2,779	-4,128	615	3,306	-4,206
Broad money	6,423	12,913	11,875	11,351	10,548	8,254
Liabilities in domestic currency	5,578	11,511	10,382	6,567	12,719	8,415
Foreign currency deposits	845	1,402	1,493	4,784	-2,171	-161
(Stocks in millions of Bolivianos, unless otherwise indicated)						
Net short-term foreign assets	31,494	46,823	62,959	67,508	76,982	83,286
(Stocks in millions of U.S. dollars)	3,954	6,042	8,660	9,685	11,182	12,152
Net domestic assets	9,212	6,765	564	6,829	8,031	9,980
Net credit to the public sector	-4,884	-7,760	-13,181	-10,082	-17,360	-20,360
Credit to the private sector	32,171	36,537	38,926	41,214	49,883	59,039
Net medium- and long-term foreign liabilities	-3,368	-3,006	-3,491	-4,908	-3,273	-3,304
Other items (net)	-14,707	-19,007	-21,689	-19,395	-21,220	-25,395
Broad money	40,706	53,588	63,523	74,337	85,013	93,266
Liabilities in domestic currency	15,784	27,295	38,411	44,724	57,505	66,616
Foreign currency deposits	24,922	26,293	25,112	29,612	27,508	26,650
(Changes in percent of deposits at the beginning of the period)						
Net short-term foreign assets	31.3	35.4	34.6	9.9	8.2	7.4
Net domestic assets	-12.9	-3.7	-12.5	8.0	6.0	2.3
Net credit to the public sector	-16.6	-8.6	-12.5	0.9	-9.8	-3.5
Credit to the private sector	5.6	10.8	8.9	5.8	11.5	10.8
Net medium- and long-term foreign liabilities (increase -)	-0.3	0.9	-1.2	0.3	-0.2	0.0
Other items (net)	-1.6	-6.8	-7.7	1.0	4.4	-4.9
Broad money	18.5	31.7	22.2	17.9	14.2	9.7
Liabilities in domestic currency	16.0	28.3	19.4	10.3	17.1	9.9
Foreign currency deposits	2.4	3.4	2.8	7.5	-2.9	-0.2
Memorandum items:						
Broad money (average stock in percent of GDP)	38.7	45.2	48.2	57.7	54.7	57.8
Credit to private sector (annual percentage change))	4.5	13.6	6.5	5.9	21.0	18.4
Credit to private sector (average stock in percent of GDP)	33.9	33.1	30.3	31.8	32.4	35.3
Financial system NFA coverage of deposits (percent)	96.3	115.7	131.9	114.9	122.6	123.2
Dollarization (end-period stocks)						
Foreign currency and dollar-indexed deposits	76.2	65.0	52.6	51.7	43.8	39.4
Foreign currency and dollar indexed credit	86.9	79.1	66.3	63.6	45.9	44.9

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

1/ The financial system comprises the central bank; commercial banks and nonbanks; and the National Financial Institution of Bolivia and FONDESIF, which are state-owned second-tier banks.

Table 7 Bolivia: Consolidated Commercial Banks and Non-bank Depository Institutions

	2006	2007	2008	2009	2010	Proj. 2011
(Flows in millions of Bolivianos, unless otherwise indicated)						
Net short-term foreign assets	622	-1,076	1,107	4,021	-354	768
(Flow in millions of U.S. dollars)	78	-139	152	577	-49	158
Net domestic assets	3,383	8,884	8,077	7,537	5,760	4,061
Net credit to the public sector	-35	-490	-619	1,059	-321	0
Credit to the private sector	1,958	4,400	4,783	3,823	8,417	9,155
Net position with the central bank	1,842	4,753	5,973	1,946	-2,225	-1,044
Net medium- and long-term foreign liabilities (increase -)	-110	354	-650	201	-123	-308
Other items (net)	-272	-134	-1,409	508	12	-3,742
Deposits	4,005	7,808	9,185	11,558	5,406	4,829
Local currency deposits	3,160	6,406	7,692	5,610	7,577	5,686
Foreign currency deposits	845	1,402	1,493	5,948	-2,171	-858
(Stocks in millions of Bolivianos, unless otherwise indicated)						
Net short-term foreign assets	7,203	6,118	6,744	10,416	10,108	11,601
(Stock in millions of U.S. dollars)	904	789	928	1,494	1,452	1,712
Net domestic assets	25,491	34,352	40,972	48,320	52,683	56,019
Net credit to the public sector	2,068	1,577	914	1,994	1,673	1,673
Credit to the private sector	32,171	36,537	38,926	41,353	49,883	59,039
Net position with the central bank	2,128	6,883	13,137	16,002	13,775	12,730
Net medium- and long-term foreign liabilities	-3,156	-2,798	-3,277	-2,940	-3,073	-3,109
Other items (net)	-7,721	-7,846	-8,729	-8,090	-9,575	-14,314
Deposits	32,694	40,470	47,715	58,736	62,791	67,620
Local currency deposits	7,771	14,177	22,604	27,959	35,283	40,969
Foreign currency deposits	24,922	26,293	25,112	30,777	27,508	26,650
(Changes in percent of deposits at the beginning of the period)						
Net short-term foreign assets	2.1	-3.3	2.7	8.4	-0.6	1.2
Net domestic assets	11.6	27.2	20.0	15.8	9.8	6.5
Net credit to the public sector	-0.1	-1.5	-1.5	2.2	-0.5	0.0
Credit to the private sector	6.7	13.5	11.8	8.0	14.3	14.6
Net position with the central bank	6.3	14.5	14.8	4.1	-3.8	-1.7
Net medium- and long-term foreign liabilities (increase -)	-0.4	1.1	-1.6	0.4	-0.2	-0.5
Other items (net)	-0.9	-0.4	-3.5	1.1	0.0	-6.0
Deposits	13.7	23.9	22.7	24.2	9.2	7.7
Local currency deposits	10.8	19.6	19.0	11.8	12.9	9.1
Foreign currency deposits	2.9	4.3	3.7	12.5	-3.7	-1.4
Memorandum items:						
Credit to private sector (average stock in percent of GDP)	33.9	33.1	30.3	31.8	32.4	35.3
NFA coverage of dollar deposits (percent)	22.0	15.1	14.1	17.7	16.1	17.2
U.S. dollar and dollar-indexed deposits (in percent of total depo	76.2	65.0	52.6	51.7	43.8	39.4
U.S. dollar and dollar indexed credit (in percent of total credit)	86.9	79.1	66.3	63.6	45.9	44.9

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

Table 8 Bolivia: Selected Vulnerability Indicators

	2006	2007	2008	2009	2010
Reserve adequacy	**(In US$ million, unless otherwise indicated)**				
Net international reserves	3,050	5,252	7,732	8,191	9,730
NIR coverage, in percent of:					
Dollar deposits	97.5	154.8	223.9	192.8	246.2
Total deposits	74.3	100.6	117.8	99.7	107.9
Broad money	59.4	74.2	98.3	76.8	79.5
In months of imports of goods and services	10.6	12.7	21.2	18.7	20.3
Net foreign assets of the financial system	3,954	6,042	8,660	9,685	11,182
NFA coverage, in percent of:					
Dollar deposits	126.4	178.1	250.7	228.0	279.9
Total deposits	96.3	115.7	131.9	114.9	122.6
Broad money	77.4	87.4	99.1	90.8	90.6
Debt ratios	**(In percent of GDP)**				
Total gross NFPS debt	55.2	40.9	37.5	40.5	39.9
Domestic	27.1	24.9	23.2	25.4	24.9
External	28.2	16.1	14.3	15.0	15.0
Total net NFPS debt	41.9	26.8	20.6	25.4	27.7
Private external debt	10.2	9.3	7.7	5.3	4.7
Net International Investment Position	-31.4	-5.2	9.3	18.1	17.4
Commodity dependency					
Hydrocarbon revenue (in percent of total revenues)1/	27.2	20.6	34.5	36.3	32.1
Non-hydrocarbon fiscal balance (in percent of GDP)1/	-5.7	-5.9	-7.5	-12.1	-8.4
Gas exports (in percent of total exports)	43.1	44.2	49.0	40.0	44.5
Mining exports (in percent of total exports)	27.4	31.1	30.1	37.6	37.9
Banking sector indicators					
Nonperforming loans (in percent of total loans)	8.7	5.6	4.3	3.5	2.2
Restructured loans (in percent of total loans)	16.2	10.7	7.1	6.4	3.6
Nonperforming and restructured loans (in percent of total loans)	24.9	16.3	11.4	9.9	5.8
Capital adequacy ratio	13.3	12.6	13.7	13.3	11.9
Profits after tax (in percent of equity)	13.3	21.2	20.3	19.9	17.2
Cash and short-term investments as percent of total assets	33.9	35.2	43.4	48.0	39.0
Composition of bank deposits	**(In percent)**				
Dollar deposits	76.2	65.0	52.6	51.7	43.8
Local currency deposits	23.8	35.0	47.4	48.8	56.2
Memorandum items:					
Fiscal balance (in percent of GDP)	4.5	1.7	2.8	0.3	2.0
Total financial system deposits (US$ million)	4,105	5,222	6,563	8,215	9,022

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

Table 9 Bolivia: Millennium Development Goals

	First Observation	2004	2005	2006	2007	2008	2009	Target 2015
Goal 1. Eradicate Extreme Poverty and Hunger								
Target 1: Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day.								
Population below US$1 a day (in percent)	41.2 (1990)	…	36.7	37.7	37.7	32.7	26.1	**24.1**
Target 2: Halve, between 1990 and 2015, the proportion of people suffering hunger								
Prevalence of child malnutrition (percent of children under 3)	38.3 (1990)	25.5	…	…	…	20.3	…	**19.0**
Goal 2. Achieve Universal Primary Education								
Target 3. Ensure that, by 2015, children will be able to complete a full course of primary schoolin								
Net primary enrollment ratio (percent of relevant age group)		94.0	94.1	92.7	91.8	90.0	…	**100.0**
Percentage of cohort reaching grade 8	55.4 (1992)	79.5	77.8	75.6	74.7	77.3	…	**100.0**
Goal 3. Promote Gender Equality and Empower Women								
Target 4. Eliminate gender disparity in primary and secondary education preferably by 2005 and to all levels of education by 2015.								
Gender disparities at completion of primary education (percent)	6.6 (1992)	…	0.3	-0.6	…	-1.8	…	**0.0**
Gender disparities at completion of secondary education (percent)	3.4 (1992)	…	-0.4	-1.5	…	-1.4	…	**0.0**
Goal 4. Reduce Child Mortality								
Target 5. Reduce by two-thirds, between 1990 and 2015, the under five mortality rate								
Infant mortality rate (per 1,000 live births)	89 (1990)	…	…	…	47.6	50.0	…	**30.0**
Immunization against measles (percent of children under 12-months)	68 (1994)	…	84.5	82.6	83.0	84.0	84.5	**95.0**
Goal 5. Improve Maternal Health								
Target 6. Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio.								
Maternal mortality ratio (modeled estimate, per 100,000 live births)	416 (1990)	…	290	…	…	…	…	**104**
Proportion of births attended by skilled health personnel (percent)	27 (1995)	59.6	61.9	65.2	63.9	65.0	67.0	**70.0**
Goal 6. Combat HIV/AIDS, Malaria, and Other Diseases								
Target 7. Halt by 2015, and begin to reverse, the spread of HIV/AIDS								
HIV prevalence, total (percent ages 15-24)	1.8 (1990)	13.4	19.3	19.2	…	…	…	**13.0**
Target 8. Halt by 2015, and begin to reverse, the incidence of malaria and other major diseases								
Incidence of malaria (per 1,000 people)	7.5 (1990)	4.1	5.5	5.2	…	…	2.8	**2.0**
Incidence of tuberculosis cases cured (percent of diagnosed)	52.6 (1995)	80.3	78.5	82.9	84.9	81.5	…	**95.0**
Target 10. halve by 2015 proportion of people without access to safe drinking water								
Access to potable water (percent of population)	57.5 (1992)	72.3	71.7	73.1	75.5	74.6	…	**78.5**
Access to improved sanitation facilities (percent of population)	28 (1992)	41.6	43.5	55.7		48.4	…	**64.0**
Goal 8. Develop a global Partnership for Development								
Target 18. Make available new technologies, especially information and communications								
Mobile and fixed-line telephone subscribers (per 100 people)	2.7 (1990)	26.9	33.4	37.9	41.3	…	47.7	**…**
Internet users (per 100 people)	0.1 (1995)	4.4	5.2	6.2	10.5	31.2	…	**…**

Sources: Bolivian Authorities; and World Bank Development Indicators.

ANNEX I. KEY PROVISIONS OF THE DECENTRALIZATION LAW

The *Law on Autonomies and Decentralization*, approved in July 2010, is the first step toward putting into operation the political and economic decentralization envisaged in the New Constitution of Bolivia.

The law enables subnational governments to obtain political and fiscal autonomy; provides for the creation of new autonomous territories for the indigenous populations; allows departments and municipalities to create a new intermediate level of government—the region; and opens up new functions (competencies) for the subnational governments to assume, including education and health. The law also establishes the features of the political administration of subnational governments, typically an executive power and a legislature.

The law requires that the departments and municipalities prepare statutes or organic charters that define the competencies they wish to assume, and provides assurances that adequate resources will be appropriated to finance the proposed changes. The decentralization may differ in breadth and velocity across subnational governments (asymmetrical decentralization).

The competencies will then be costed, to ensure that adequate resources are transferred along with functions and responsibilities. The institutional capacity of subnational governments aiming to assume new responsibilities, provide new services, and manage the related financial resources, will also be assessed.

A new State Office (Autonomies Service, SEA) will be established to cost competencies, assess capacities, and provide technical assistance on a number of aspects of the decentralization process, including clarifying the limits of the pertinent competencies.

At the political level, coordination will be carried out by the Autonomies Council (CAN), led by the president, the ministers of Planning, Presidency, and Autonomies, the governors of all nine departments, and representatives from municipalities and indigenous communities.

A specific timeline for the implementation of the transfer of competencies and changes to revenue sharing agreements is absent, but the authorities envisage that the process will be gradual and take several years. Full implementation of the law will require a redistribution of revenue across jurisdictions—through an agreement referred to as Fiscal Pact—which in turn requires the completion of the national population census, to start towards the first quarter of 2012.

Statutes/organic charters

Subnational governments will prepare statutes or organic charters setting their basic institutional and political organization. After approval by subnational legislatures, statutes will be assessed by the Constitutional Tribunal—which has not been established yet—as regards their compatibility with constitutional provisions, and then approved by referendum in the respective jurisdiction (only some departments in the eastern part of the country had approved their statutes before the new constitution).

The timing for the transfer of spending responsibilities will be agreed upon later, in a more flexible agreement among the levels of government involved in the transfer of competencies. Any conflict in this process will be settled by conciliation with SEA and, as a last resort, by the Constitutional Tribunal. Steps to set up the SEA service are fairly advanced, and operations could start as soon as its budget is approved. Table AI.1 shows preliminary estimates of the current distribution of responsibilities, put together by the authorities.

Table AI. 1 Bolivia: Breakdown of Public Spending by Level of Government

(Percent of cash collections)

	Provinces	**Municipalities**	**Universities**	**Central Government**	**Total**
General Public Services	0.8%	1.9%	0.0%	15.2%	18%
Defense	0.0%	0.0%		3.8%	4%
Public Security	0.1%	0.2%	0.0%	4.5%	5%
Economic Affairs	5.5%	5.7%	0.1%	13.5%	25%
Environment	0.3%	1.3%		0.3%	2%
Housing and Comunal Services	0.3%	4.4%		0.5%	5%
Health	0.3%	2.4%	0.1%	6.9%	10%
Recreation Activities, Culture and Religion	0.2%	1.7%	0.0%	0.2%	2%
Education	0.7%	3.5%	3.3%	9.8%	17%
Social Protection	0.6%	0.5%	0.2%	10.5%	12%
Total	8.8%	21.6%	3.8%	65.2%	100%

Source: Authorities' estimates

Sources and distribution of revenue

The law defines the tax domains and revenue sources at the municipal, provincial, and national level, without meaningful changes with respect to the current situation. Revenue sharing provisions also are consistent with the arrangements that existed before the approval of the law (see Table AI. 2).[1]

[1] The law does not make any reference to the distribution of royalties—on minerals or hydrocarbon production—but current arrangements have been added for completeness.

Table AI.2 Bolivia: Revenue Sharing Arrangements

(Percent of cash collections)

	Municipalities	Provinces	Universities	Pensions (Renta Dignidad)	Central Government	Total
National taxes 1/ 2/	20	0	5	0	75	100
Financial transaction tax	0	0	0	0	100	100
Local taxes 3/	100	0	0	0	0	100
IEHD 4/	0	35	0	0	65	100
Mining royalties	15	85	0	0	0	100
Hydrocarbon royalties 5/	0	67	0	0	33	100
IDH 6/	31	9.8	5.3	25.3	28.6	100

Source: Authorities and staff estimates

1/ VAT, VAT-complementary regime, corporate income tax, transaction tax, excises, custom tarifs, gift tax, exit tax.

2/ Secondary distribution across municipalities and provinces based on population.

3/ Property tax, automobile patents, tax on transfers of property and automobiles.

4/ Corresponds to 10 percentage points of the Provincial Compensatory Fund, for those provinces that receive below-average per-capita royalties, and 25 percentage points distributed across provinces: equally (50 percent) and according to population (50 percent).

6/ Distributed as follows: 61 percentage points for producing provinces, and 6 percentage points for non-producing provinces.

7/ See chart; central government share is heavily earmarked.

Fiscal responsibility

Subnational governments will have the ability to contract debt subject to an analysis of repayment, (they could contract external debt only if authorized by congress). Domestic debt issuance will require authorization from the central government, which will not guarantee it.

The law also establishes that the central government cannot finance the deficits of autonomous territories. If fiscal sustainability is at risk, subnational governments could request an agreement with the Ministry of Finance to establish targets and policies to control indebtedness and improve fiscal performance.

Finally, the law indicates that Congress will need to pass legislation on *Public Indebtedness*, to rule on procedures for contracting credit and public debt administration by all public entities, and on *Rules and Principles of Fiscal Responsibility*, for national and subnational governments.

Hydrocarbon fund

The law calls Congress to pass legislation on a *Productive Development and Solidarity Fund*, to finance strategic projects and provide for more homogeneous geographical development. The Fund will be fed with resources from the IDH—a royalty on hydrocarbon production—in excess of budget projections due to higher prices (there are no references to differences in volumes of production). The implementing law will set parameters to establish budget prices. The fund will have three functions:

- ***Solidarity***: to contribute to financing of less developed territories;
- ***Savings and stabilization***: to accumulate resources when prices are high, and use them when tax collections are low; and

- ***Productive development***: to finance strategic projects; investments would favor departments with lower degree of socioeconomic development. Funds could be used to rebuild infrastructure and other spending needed to overcome natural disasters.

ANNEX II. MAIN FEATURES OF THE PENSION SYSTEM REFORM

Congress approved a reform of the pension system in late 2010. The new Pensions Law reforming the system replaces a law from 1996 that had introduced a system with individual capitalization accounts and private administration in Bolivia. The 2010 reform was enacted after a widespread consultative process. The law is effective immediately but allows for a short transition period to finalize operational issues.

Before the reform, the system was based on individual accounts and capitalization. Lately, about half of the 1.2 million registered contributors have made payments regularly. This system was administered by two private pension fund administrators. It collected contributions for about US$450 million per year and accumulated total assets for US$5.5 billion by end 2010.[1]

The key elements of the reform are the following:

- Nationalization of the administration of the system's assets: a newly created Public Pension Funds Administration (PPFA) will take over the two existing private administrators.
- Establishment of a semi-contributive system: employees with minimum years of contributions and whose savings in the capitalization system imply pensions below certain thresholds, will receive an additional payment (solidarity pension).
- Reduction of the statutory retirement age from 65 to 58 years, with further reductions for specific groups: Miners will be able to retire at 56 years of age; those working under unhealthy conditions at 51; and women at 55, and will be entitled to advance their retirement age by one year for each child born alive, up to three years.
- After the reform, the pension system will be constituted by three subsystems (or regimes): contributive, semi-contributive, and non-contributive.
- The **contributive subsystem** continues to be based on individual accounts. In it, workers will contribute 10 percent of their salaries to their accounts. Pensions will have no ceiling and continue to be computed according to the amount saved in the personal accounts.

[1] The legislation establishes all amounts in Bolivianos, converted here at the prevailing exchange rate.

Table AII.1 Bolivia: Pension Payments

		2005	2006	2007	2008	2009	2010
Total	Payments, US$ million	358.6	418.8	452.1	539.3	647.0	657.8
Pay-as-you-go System	Beneficiaries	134,677	132,833	130,851	128,216	125,366	122,862
	Payments, US$ million	335.3	346.6	361.4	415.4	476.2	483.5
Military pensions	Beneficiaries	n.a.	7,094	6,943	6,780	6,637	6,508
	Payments, US$ million	n.a.	36.6	38.0	47.7	53.6	54.4
Compensatory Fund (PAYG-Capitalization)	Beneficiaries	4,950	10,179	15,163	20,439	25,450	30,314
	Payments, US$ million	15.7	32.3	49.7	73.0	114.1	116.2
Anticipated Rent Payment (PRA)	Population	1,622	332	66	n.a.	n.a.	n.a.
	Payments	35	10	2	n.a.	n.a.	n.a.
Minimum monthly payment (PMM)	Beneficiaries	680	1,201	1,611	1,835	2,075	2,316
	Payments, US$ million	0.3	0.8	1.3	1.8	2.4	2.8
Other	Beneficiaries	3,905	1,470	1,063	877	447	602
	Payments, US$ million	7.3	2.5	1.5	1.5	0.7	1.0

Source: Ministry of Economy and Public Finance

Table AII.2 Bolivia: Pension Funds Assets

(Stocks in US$ millions)

Instrument	December 2007	December 2008	December 2009	December 2010
Treasury bills	2,106	2,662	2,899	3,091
Financial system	460	721	1,129	1,473
Investment funds	30	42	55	78
Other	237	313	322	574
Foreign investment	65	-	-	-
Private Trust Funds	12	148	222	251
Total	**2,910**	**3,885**	**4,626**	**5,468**

Source: *Autoridad de Fiscalización y Control Social de Pensiones*

- The **semi-contributive subsystem** – solidarity pensions – complements the contributive pensions when they are lower than a certain threshold. For each participant, this threshold is defined as the earnings base[2] times a replacement rate that increases with the years of contributions, subject to maximum and minimum bounds (Table 3). The solidarity pension is the necessary transfer (if any) to meet the threshold, and is available to all participants with a minimum of 10 years of contributions. This new pillar will be fully financed by higher contribution rates that the new Law introduces (see below).

[2] The new Law sets the earnings base as the average monthly salary during the last 2 years of contributions. Before the reform, the earnings base for the PAYG system was the average of the last 5 years of contributions.

The **non-contributive subsystem** remains unchanged. The Dignity Bond *(Bono Dignidad*), a universal transfer to the population above 60 years of age, was instituted by the government in 2007. Every beneficiary receives US$340 a year if not receiving any other pension, andUS$255 a year otherwise. The Dignity

Table AII.3 Bolivia: Solidarity Pension Allowances

Years of Contributions	10 - 15	16	20	25	30	35
Replacement Rate		56%	60%	65%	70%	70%
Min. Solidarity Limit US$	68 - 97	103	127	157	171	186
Max. Solidarity Limit US$		122	220	314	343	371

Notes: Values may be revised every 5 years. Effective replacement rates are higher for miners.
Replacement rates and limits increase linearly with years of contributions above 16.
Source: Pensions Law (Nr. 65).

Bond is funded by a fraction of the hydrocarbons tax (about 25 percent of the collections of IDH, which is a 32 percent royalty on hydrocarbon production). According to staff estimates, this is sufficient to finance the outlays of this subsystem, which stand about US$250 million a year.

To finance the solidarity pensions, the new regime introduces additional contributions from workers and employers. While contributions to the capitalization system remain unchanged, the law creates the Solidarity Fund (SF) to support the pensions of those favored by the semi-contributive regime. The SF will be funded with contributions coming from: (i) employers; (ii) high income individuals; and (iii) all individual contributors. Employers will contribute the equivalent to 3 percent of the salaries of all public and private employees.[3] High income individuals will contribute according to a progressive schedule of charges ranging from 1-10 percent of the monthly income in excess of US$1,850. Finally, 0.5 percent of the monthly contributions by every individual will be devoted to the SF. In addition, the SF will also receive 20 percent of the premia paid to cover pensions arising from illnesses and accidents.

Investment guidelines for the capitalization funds have not suffered important changes. The Public Pension Administration will be allowed to invest up to 5 percent of the funds in bonds from unrated small and medium enterprises, with an investment committee assessing the prospects for these companies. The rest of the guidelines for investment have not suffered important changes. Financial instruments acquired by the pension funds need to be authorized to trade in securities markets and should have a risk rating (with the exception of SMEs).

[3] A similar contribution existed prior to 1996, equivalent to 5 percent of salaries.

Table AII.4 Bolivia: Pension Contributions

(Percentage of wages)

	Employee		Independent	
	Old System	New System	Old System	New System
Worker's contribution				
Contribution to individual Account	10%	10%	10%	10%
Administration fee	0.5%	0.5%	0.5%	0.5%
Non-work related death and illness insurance 1/	1.71%	1.71%	1.71%	1.71%
Work related death and illness insurance	-		1.71%	1.71%
Contribution to the Solidarity Fund	-	0.5%	-	0.5%
Additional contribution from high income workers 2/	-	1–10%	-	1–10%
Total worker's contribution (mínimum)	***12.21%***	***12.71%***	***13.92%***	***14.42%***
Employer's contribution				
Seguro de invalidez y muerte por riesgo profesional	1.71%	1.71%	-	-
Contribution to Solidarity Fund 3/	-	3%	-	-
Total Employer's contribution 3/	***1.71%***	***4.71%***	-	-

1/ In the new system, 20 percent of this contribution will fund the SF.
2/ 1%, 5% and 10% for wages in excess of US$1850, US$3570 and US$5000, respectively.
3/ The contribution rate in the new system is 2% higher for the mining sector

Guidelines for investment 1/	
On a single issuer	Max. 10% of administered funds
On a single issuance	Max. 60% of issuance
On unrated small and medium enterprises	Max. 5% of administered funds
On a single corporation	Max. 20% of the corporate capital
On foreign instruments	Max. 50% of administered funds

1/ Investments in central bank and treasury paper will not be subject to the limits presented in the table.

The authorities expect to raise US$130 million for the Solidarity Fund in 2011. According to their estimates, this total is broken down as follows: 67 percent from the employer's contribution, 11 percent from the workers' contribution; 16 percent from pension risk; and 6 percent from high income individuals. In 2011, the SF will also receive, in a one-off transfer, about US$85 million that are currently in the Basic Pension Account—an account that was used to finance minimum pensions in the old pay-as-you-go regime.

The authorities estimate that US$30 million would be spent from the Solidarity Fund in the first year. The Ministry of Finance estimated that 40,000 people would retire in the first year of the program, 30,000 of them under a solidarity pension. Over time, they also estimate that 80 percent of workers would benefit from the solidarity pension.[4]

[4] The authorities have not yet published their actuarial analysis. They claim that the system will have a positive cash flow in the next 25 years and that its sustainability can be assured for the next 30 years.

INTERNATIONAL MONETARY FUND

BOLIVIA

STAFF REPORT FOR THE 2011 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

April 28, 2011

Prepared By: The Western Hemisphere Department (In collaboration with other departments)

CONTENTS

ANNEX 1. BOLIVIA: FUND RELATIONS

(As of April 11, 2011)

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

II. General Resources Account

	SDR Million	Percent of Quota
Quota	171.50	100.00
Fund holdings of currency	162.64	94.83
Reserve position in Fund	8.87	5.17

III. SDR Department

	SDR Million	Percent of Allocation
Net cumulative allocation	164.13	100.00
Holdings	164.91	100.48

IV. Outstanding Purchases and Loans: None.

V. Financial Arrangements

Type	Approval date	Expiration date	Amount approved (SDR million)	Amount drawn (SDR million)
Stand-By	4/02/03	3/31/06	145.78	111.50
ECF 1/	9/18/98	6/07/02	100.96	63.86
ECF 1/	12/19/94	9/09/98	100.96	100.96

1/ Formerly PRGF

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

	Forthcoming			
	2011	**2012**	**2013**	**2014**
Principal				
Charges/Interest	0.00	0.00	0.00	0.00
Total	**0.00**	**0.00**	**0.00**	**0.00**

VII. 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)[1/]	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[2/]	...	3.09	3.09
Total disbursements	**21.25**	**44.23**	**65.48**
Implementation of MDRI Assistance			
Total debt relief (SDR Million)[3/]			160.93
Of which: MDRI			154.82
HIPC			6.11
Debt relief by facility (SDR Million)			

[1/] 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 can not be added.

[2/] 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.

[3/] The Multilateral Debt Relief Initiative (MDRI) provides 100 percent debt relief to eligible member countries that are qualified for the assistance. The debt relief covers the full stock of debt owed to the Fund as of end-2004 which remains outstanding at the time the member qualifies for such debt relief. The MDRI is financed by bilateral contributions and the Fund's own resources, as well as the resources already disbursed to the member under the HIPC Initiative (see Section VII above).

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

VIII. Safeguards Assessment: Under the Fund’s safeguards assessment policy, the Central Bank of Bolivia (CBB) 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 CBB’s safeguards were identified, uncertainties were expressed about the de facto lack of 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, CBB is not subject to the policy.

IX. Exchange Arrangement: The Bolivian currency is the Boliviano and the exchange rate regime is a stabilized arrangement against the U.S. dollar. [1] However, the authorities indicate that the *de jure* regime is a crawling peg. Since November 2010, the authorities resumed the negative crawling peg and the official selling rate has appreciated from Bs7.07 per U.S. dollar to Bs7.00.

X. Article IV Consultation. The last Article IV consultation was completed by the Executive Board on January 15, 2010 (Country Report No. 10/27). Bolivia is on a standard 12-month consultation cycle.

XI. Technical Assistance, 2006–11

Department	Purpose	Date
STA	Monetary statistics	March 2006
FAD	Public finance information system	December 2006
STA	ROSC Data Module	January 2007
MCM	Inflation targeting	June 2007
STA	National accounts	September 2007
FAD	Tax policy	March 2008
STA	National accounts	August 2008
FAD	Treasury operations, cash and debt management	November 2008
FAD	Expenditure policy (fiscal and distributional implications of petroleum product pricing)	March 2009
FAD	Public financial management (intergovernmental fiscal relations)	July/August 2009
FAD	Tax policy (tax reform and taxation of natural resources)	July/August 2009
STA	National accounts	October 2009
FAD	Tax system under the new constitutional framework	October 2009
FAD	Decentralized autonomies with fiscal stability	December 2009
FAD	Treasury management and sub national debt control	May 2010
FAD	Development of a medium-term macro fiscal framework	May 2010
FAD	Institutional strengthening of tax and customs administration	June 2010
FAD	Integration of tax and customs administrations	January 2011

XII. Resident Representative: Mr. Luis Breuer took over the post of IMF resident representative in June 2009.

[1] See Habermeier, et al., *Revised System for the Classification of Exchange Rate Arrangements*, WP/09/211.

ANNEX 2. BOLIVIA: RELATIONS WITH THE WORLD BANK AND BANK-FUND COLLABORATION UNDER THE JMAP

A. Relations with the World Bank[1]

1. The Interim Strategy Note (ISN) that defines the World Bank Group's support to Bolivia for fiscal years 2010 and 2011 is being implemented. The ISN, which will expire in June 2011, has a total envelope of US$151 million of concessional resources from the International Development Association (IDA) that have been allocated to two investment operations: (i) the Strengthening of the Statistical Capacity Project for US $50 million, approved by the Board in January 2011, which will finance the population and agricultural censuses, and the enhancement of the household survey; and (ii) the National Roads and Airport Infrastructure Project for US$100 million, expected to be approved in May 2011, that will support the development of the northern region of La Paz through the improvement of the San Buenaventura–Ixiamas national road and the upgrading of the Rurrenabaque airport. The strategy has implemented the principles of selectivity—by supporting a smaller number of projects for larger amounts—and flexibility—by rapidly responding to government's emerging requirements.

The ISN has also supported the smooth implementation of the existing portfolio. The current portfolio comprises 12 investment projects for US$353 million, of which US$206 million remain undisbursed (Table 1), and two trust funds/global programs for US$6.7 million (Global Partnership on Output Based-Aid and Pilot Program for Climate Resilience). The portfolio is aligned to the pillars of the ISN: (i) productive development and support to

Table 1 Bolivia: World Bank Portfolio (as of February 2011)

Project	Commitment (US$ million)	Disbursed (US$ million)	Undisbursed *(US$ million)	Closing Date
Decentralized Infrastructure for Rural Transformation	20.0	13.1	10.0	May 2011
Road Rehabilitation and Maintenance	77.0	73.5	19.1	June 2011
Urban Infrastructure	30.0	25.9	5.8	August 2011
Secondary Education Transformation	10.0	5.8	4.3	September 2012
Land for Agricultural Development	15.0	3.9	11.3	June 2012
Emergency Recovery and Disaster Management	16.9	4.6	12.1	June 2012
Participatory Rural Investment II	20.0	6.9	12.8	March 2013
Lake Titicaca Local Sustainable Development	20.0	2.1	17.8	June 2013
Investing in Children and Youth	17.0	1.7	15.1	December 2013
Expanding Access to Reduce Health Inequalities	18.5	1.1	17.2	January 2014
Strengthening of the Statistical Capacity	50.0	0.0	49.4	June 2015
Rural Alliances	58.4	29.1	30.6	March 2014
Total	**352.8**	**167.7**	**205.5**	

*Undisbursed balances differ from the difference between committed and disbursed amounts due to variations in the exchange rates between SDRs and U.S. dollars.

[1]Prepared by World Bank staff.

production, (ii) sustainable development, (iii) human development, and (iv) governance and support to the public sector The execution and quality of the portfolio have significantly improved during the ISN period, having approached Bank-wide benchmarks; the country risk flag has also been removed.

2. The World Bank support to Bolivia also includes a comprehensive package of analytical and advisory activities. Under the umbrella of the current ISN core pieces of Economic and Sector Work (ESW) were delivered, including the Public Expenditure and Financial Accountability (PEFA) and the Distributional Impact of Food Inflation. An additional set of ESW is ready for delivery, including the Agricultural Public Expenditure Review, the Municipal and Service Finance Review, and the Financial Sector Review. A comprehensive package of non-lending technical assistance was also provided including: Urban Alliances, Water-related Adaptation to Climate Change and Variability, Multi-Dimensional Poverty, South-South Experience Exchange, Social Safety Nets IV, Public Sector Governance, and Support to the Ministry of Education.

3. The Bank has started discussions with the Government regarding the development of a medium term strategy. Over the last years the Bank has supported Bolivia through two consecutive ISNs (FY07-08 and FY10-11) allowing the Bank to continue supporting the development of the country during a period of political, economic and institutional transition. Considering the development of the sociopolitical and economic context, the government has requested Bank support through a longer term engagement tool. In this context, the Bank started the development of a Country Partnership Strategy (CPS) for the following four years. The indicative envelope is still unknown, though it is expected that Bolivia would receive an IDA allocation similar to the current one; IDA hardened terms will be applied as Bolivia's GNI per capita has remained above the operational cut-off for more than three consecutive years. In addition, access to non-conditional lending from the International Bank for Reconstruction and Development (IBRD) would be considered during the mid-point of the CPS timeframe.

4. The Bank and the Government are already working on the design of new investment projects that will be included under the umbrella of the upcoming strategy. The tentative lending program for the next two years includes projects that had already been identified in the ongoing ISN but were slipped due to the government's prioritization. These include: the Agricultural Innovation and Services, the Rural Investment in Rural Areas and the Decentralized Infrastructure for Rural Transformation II.

B. IMF-Relations with the World Bank Under JMAP

5. The World Bank and IMF teams met in September 2010 to coordinate the work-plan on Bolivia for the next 12 months. The following priorities were identified:

- **Strengthening of the fiscal framework,** in particular the reform of intergovernmental relations, transparent management of the hydrocarbon-related revenue and reinforcement of the multi-annual budget process. The public sector has weak capacity also on public sector management and procurement.

- **Maintaining adequate financial sector supervision**. The financial sector is liquid and solvent. The current challenge is to gradually increase its depth, while strengthening supervision to maintain the health of the loan portfolios, and to fully develop a financial sector safety net.

- **Improving the business climate to bolster investment**. Bolivia's private investment rate remains significantly below the levels observed in the past decade and well be low the regional average. There is also th e challenge to reconcile the need to maintain the role of the private sector with t he government intention to increase the role of the st ate in the economy.

- **Reducing poverty**. Significant challenges remain in the area of hum an development, including access to quality basic education and health, employability of low in come youth and so cial protection network.

6. It was agreed that the teams continue with the following division of labor:

- **Tax policy and administration.** The **Fund** will continue to have the lead in collaborating with the au thorities in this area.

- **Fiscal federalism.** The **Fund** has been providing TA on the fiscal implications of the draft law on Administrative Autonomies and De centralization. Further, the **Bank** is providing advice on public investment management and coordination among di fferent levels of government in the provision of pub lic services.

- **Governance and budget framework.** The **Bank**, in collabo ration with the Ministry of Finance, and the IADB, has prepared an evaluation of Public Financial Management, following PEFA methodology. The assessment provides the basis for the government to prioritize and measure progress, and identify critical areas where refo rms might be needed.

- **Social protection:** The **Bank** will continue assisting the gov ernment in the area of soc ial protection, health a nd education. The Bank is also providing technical assistance on poverty, to help both diagnosis and targeting of population that fails to reach minimum standards of multidimensional welfare.

- **Private sector development:** The **Bank** will continue its anal ytical work and financing in the area of agricultural productivity, food security, support to small urban producers, rural development and community driven development.

- **Financial sector surveillance.** The **Fund** will continue with the surveill ance of the financial sector developments. In addition, the **Bank** will work with the Supervision Authority co nduct analytical work on financial sector issues. An FSAP update took place in early 2011, covering financial stability and development issues.

ANNEX 3. BOLIVIA: RELATIONS WIT THE INTER-AMERICAN DEVELOPMENT BANK

1. **As of December 31, 2010, the Inter-American Development Bank (IDB) had approved loans to Bolivia amounting to US$4.41 billion, with disbursements totaling US$3.45 billion**. Bolivia's outstanding debt to the IDB was approximately US$629.4 millions with undisbursed approved funds for US$668.5 millions. During the year net cash flows to the country were positive for second year in a row, a trend expected to con tinue in the base scenario to 2015. At the end of 2007, the IDB unilaterally joined the IMF-WB MDRI initiative, by writing off a tot al of US$741.1 million in pr incipal payments and US$307.3 millions of future interest payments, ge nerating an estimated annual fiscal space of more than US$18.0 millions on average.

2. **After the last round of debt relief, the IDB is implemented a new criteria of allocation of concessional lending** which is consistent with the application of th e Debt Sustainability Framework. The IDB lending to Bolivia will follow the operational guidelines for concessional funds under the Fund of Special Operations performance-based allocation system. Parallel lending operations, modality that blends ordinary and concessiona l funding, will be the preferred lending instrument up to 2015.

3. **The IDB and Bolivia are in the final phase of drafting a new country strategy covering the period from 2011-2015**. Under the new country strategy, the IDB has decided to increase financial flows t o Bolivia. Beginning 2011, Bolivia will b e allocated 25 per cent of concessional element under IDB's blended financial conditions, instead of the 30 p ercent approved up to 2010. The new country strategy included provisions and triggers for considering a new increase in the financial envelope trough an additional decrease in the concessional component element up to 20 percent. During 2010 Bolivia enjoyed an annual allocation of US$200.3 millions for 2010 , the base scenario for the period 2011-2015 is the approval of new loans US$252.0 millions per year.

4. **Under the draft of the 2011-2015 Bank's country strategy with Bolivia, the government and the IDB have agreed on making sustainable growth and poverty-inequality reduction as main objectives of their strategic engagement**. In pursuit of this objective, the Bank will align its actions with those on B olivia's National Development Plan. The country strategy will target its interventions in the following sectors: (i) Transport; (ii) Water and sanitation; (iii) Ener gy; (iv) Early Childhood Development (ECD); (v) Health; (vi) Education; and (vii) I nstitutional and Sustainability Strengthening. As transversal sectors, the IDB will focus on climate change and indigenous population/diversity issues.

5. **As of December 31, 2010 the portfolio of executing sovereign guaranteed operations in Bolivia consists of 30 loans, totaling US$1.18 billion, o which 49 percent has already been disbursed**. The current executing port folio supports mostly transport, water and sa nitation and energy infrastructure interventions. The undisbursed sovereign portfolio is c oncentrated (83 p ercent) in the abovementioned sectors. The non-sovereign guaranteed executing portfolio consists of 5 loans totaling US$128.0 million, o f which 91.8 percent has already been disbursed. The Bank's 2011 operative program contains a portfolio of s overeign guaranteed operations of 7 loans for a total amount of US$252.0 millions for the year, including US$62,0 million for programmatic budget supp ort. The rest of the approvals will be conc entrated in water and sanitation, energy, health and ECD secto rs. Nine additional loans for US$285.0 millions have been identified and are already in the Bank 's lending pipeline for the 2011 cycle.

6. The conditions for the strategy's implementation remain complex, with important institutional, social and political definitions yet to be clarified thus representing direct and indirect risks to the fulfillment of the strategy objectives. In the draft of the new country strategy several macroeconomics, institutional and regulatory risks are identify to pose direct and indirect challenges to the implementation scenarios of the Bank's strategic engagement. Particularly relevant for the new country strategy are the financial implications of the country's excessive dependence on oil revenues; the weak policy implementation and institutional capacity affecting the public investments programs; and the problematic regulatory environment that keeps downgrading the investment climate of the country.

ANNEX 4. BOLIVIA: STATISTICAL ISSUES

(As of April 11, 2011)

A. Assessment of Data Adequacy for Surveillance

General: Data provision has some shortcomings, but is broadly adequate for surveillance.

National Accounts: The National Institute of Statistics (INE) is revising the national accounts statistics, including the updating of the base year (currently dating from 1990) and an intensified implementation of the *System of National Accounts 1993 (SNA 1993)*.

Labor market: The quality of the household and employment surveys has deteriorated in the last few years, due mainly to financial constraints. The quarterly employment survey was discontinued in 2003, leading to a lack of quarterly information on unemployment, employment and wages. Yearly information on wages is still compiled by INE.

Prices statistics: Industrial producer price indices and external trade unit values are compiled by INE, but are in need of revision as regards concepts and definitions consistent with *SNA 1993*, as well as treatment of seasonal products, missing items, quality changes, and introduction of new products.

Government finance statistics: Annual data on the operations of the consolidated central government do not cover all operations of decentralized agencies and operations channeled through special funds. The ongoing implementation of a comprehensive financial management system, with funding from the IADB/WB, will help ensure proper monitoring of public sector financial operations including subnational fiscal operations, debt and social spending. It will also be important to improve on the reporting of the operations and debt of public enterprises.

Balance of payments: Despite recent improvements in the coverage of private capital flows and positions, as noted by the January 2007 Data ROSC mission, the coverage of certain services and financial transactions in the balance of payments needs to be expanded.

B. Data Standards and Quality

Bolivia has participated in the General Data Dissemination System (GDDS) since November 2002. Data ROSC published on August 13, 2007.

Bolivia: Indicators Required for Surveillance (As of April 12, 2011)

	Date of latest observation	Date received	Frequency of Data[1]	Frequency of Reporting[1]	Frequency of publication[1]	Memo Items: Data Quality–Methodological soundness[10]	Memo Items: Data Quality–Accuracy and reliability[11]
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	Feb. 2011	Mar. 2011	M	M	M	O, LO, LO, O	O, O, O, O, O
Broad Money	Feb. 2011	Mar. 2011	M	M	M		
Central Bank Balance Sheet	Feb. 2011	Mar. 2011	M	M	M		
Consolidated Balance Sheet of the Banking System	Feb. 2011	Mar. 2011	M	M	M		
Interest Rates[3]	Feb. 2011	Mar. 2011	W	W	M		
Consumer Price Index	Feb. 2011	Mar. 2011	M	M	M	LO, O, LO, O	O, LO, LNO, O, LO
Revenue, Expenditure, Balance and Composition of Financing[4] – General Government[5]	Dec. 2010	Mar. 2011	M	M	M	LO, LO, LNO, LO	LO, O, O, O, LO
Revenue, Expenditure, Balance and Composition of Financing[4]– Central Government[6]	Dec. 2010	Mar. 2011	M	M	M		
Stock of Central Government and Central Government-Guaranteed Debt[7]	Dec. 2010	Mar. 2011	M	M	M		
External Current Account Balance	Q4 2010	Mar. 2011	Q	Q	Q	O, LO, LO, LO	LO, O, LO, O, LO
Exports and Imports of Goods and Services[8]	Q4 2010	Mar. 2011	Q	Q	Q		
GDP/GNP	Q4 2010	Mar. 2011	Q	Q	Q	LO, LO, LO, O	LNO, LO, LNO, O, LO
Gross External Debt	Q4 2010	Mar. 2011	M	M	M		
International Investment Position[9]	Q4 2010	Mar. 2011	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.

[10] Reflects the assessment provided in the data ROSC (published on August 13, 2007, and based on the findings of the mission that took place during January 24–February 7, 2007) for the dataset corresponding to the variable in each row. The assessment indicates whether international standards concerning concepts and definitions, scope, classification/sectorization, and basis for recording are fully observed (O); largely observed (LO); largely not observed (LNO); not observed (NO); and not available (NA).

[11] Same as footnote 10, except referring to international standards concerning (respectively) source data, assessment of source data, statistical techniques, assessment and validation of intermediate data and statistical outputs, and revision studies.

INTERNATIONAL MONETARY FUND

BOLIVIA

External and Public Debt Sustainability Analysis

May 23, 2011

Prepared By	The Staff of the International Monetary Fund in jointly with the State of Bolivia[1]
Approved By	Gilbert Terrier and Jan Kees Martijn

CONTENTS

[1] Since Bolivia is an IDA blend country, this DSA was not conducted jointly with the World Bank. Staff consulted with the World Bank during the preparation of the DSA, shared preliminary results, and incorporated comments received.

Bolivia's public debt sustainability has continued to improve as a result of fiscal surpluses. Debt ratios continue to display ample margins with respect to risk thresholds and are expected to decline further under the baseline scenario. Debt service is projected to remain low, reflecting predominantly long maturities of remaining stocks of both domestic and foreign debt. The path of debt ratios would deteriorate somewhat under standard stress tests, but would remain within manageable bounds over the medium- and long run. Therefore, the risk of debt distress is assessed to be low.

BACKGROUND

1. **Bolivia's gross public debt (domestic and external) has fallen significantly over the last years, benefiting from MDRI and fiscal surpluses.** Between 2003 and 2010, gross debt has fallen from 96 to 40 percent of GDP, while external public debt has declined from 66 to 15 percent of GDP, with MDRI accounting for 2.9 billion dollars in 2006 and 2007.

2. **Bolivia's changing debt structure and the accumulation of significant deposits have further reduced debt vulnerabilities.** Since 2005, average maturities have been successfully extended and foreign currency exposure has been reduced. Moreover, with the accumulation of net deposits of the non-financial public sector at the Central Bank—amounting to about 21 percent of GDP at present—the solvency of the public sector measured by the net public debt (i.e., gross debt minus those deposits) has improved even more significantly as net debt has declined from 71 percent in 2005 to 18 percent of GDP in 2010. On account of declining gross debt, debt ratios would reach very low levels during the projection period. The average maturity of the outstanding external public debt remains longer than 20 years at year-end 2010 (with 65 percent of the total debt concentrated between 11 to 30 years and 32 percent beyond 31 years). Effective average interest rate of the total public debt was about 3.6 percent at year end 2010.

BASELINE SCENARIO

3. **The main assumptions of the baseline scenario for the period 2011-2031 are:**

- ***Average annual real GDP growth***: 4.5 percent until 2016 and 4 percent until 2031.
- ***Inflation***: 5.0 percent in 2012 and 4.0 percent between 2013 and 2031.
- ***Export and import growth***: in line with the medium-term staff projections and the assumption of stable import and export ratios to GDP over the long term. Net FDI is assumed to remain broadly stable in real terms of GDP, mainly influenced by the operations of foreign companies operating in the natural resource sector.

- ***Financing strategy:*** commercial debt is expected to remain nil, with CAF expected to remain as the main source of financing. Until distribution of revenues and responsibilities among different levels of government is clarified, central government will continue relying on domestic financing. The excess funds at the level of the non-financial sector will continue to be accumulated as deposits.
- ***Average concessionality of the public sector borrowing***: projected to be around 15 percent, in the medium-term, based on projected disbursements of official loans and the concessional financing conditions (grace period of about 7 years and interest rates below market rates).

4. **Bolivia's public and external debt is expected to remain sustainable throughout the projection period and the risk of debt distress is low.** Bolivia is classified as a medium performer in terms of its policy and institutional capacity, measured by the three-year average of the World Bank's Country Policy and Institutional Assessment (CPIA) scores.[1] All the debt burden indicators for Bolivia are well below the specific indicative thresholds for medium performers. Hence, Bolivia's risk of debt distress is low – an assessment that would hold even under significant stress tests[2].

5. **Under the baseline scenario, Bolivia's indebtedness and debt service levels would remain well manageable.** Specifically, the gross non-financial sector public debt-to-GDP ratio—40 percent in 2010—is projected to decline gradually to 30 percent by 2016, and to 16 percent in 2031. The total stock of external debt (public and private) is projected to fall to 19.5 percent of GDP by 2016, and to stabilize at 12.6 percent of GDP by 2031. Consequently, Bolivia's risk of debt distress is very low—an assessment that would hold even under significant stress tests.[3]

[1] The World Bank's three-year average IDA Resource Allocation Index (IRAI) classifies Bolivia as a medium performer with respect to the overall quality of its macroeconomic policies.

[2] Remittances constitute a significant inflow of foreign exchange for Bolivia, representing about 5 percent of GDP. Without taking remittances into account there are no breaches of thresholds under the baseline or stress tests in the DSA; the modified debt burden indicators (including remittances) are still significantly lower than the thresholds, and inclusion of remittances does not cause a change in the risk rating, which remains low.

[3] The high levels of residuals in the external DSA are explained by the accumulation of foreign exchange reserves over the projection period, which is consistent with the projected fiscal stance that would lead to further accumulation of public sector deposits at the central bank.

STRESS TESTS

6. **Standard stress tests suggest that Bolivia's low public and external indebtedness is resilient to a series of shocks**. Under the most extreme stress test to external debt—a combined shock to debt concessionality, GDP growth, export growth, and external inflation—the ratio of the NPV of debt to GDP deteriorates somewhat and eventually returns to a downward trajectory. In all cases, it would remain well below risky levels. Flow indicators also remain manageable under all stress tests. For public debt, the biggest risk stems from a temporary or permanently lower GDP growth, however, tests indicate that ratios remain within manageable levels. Assuming an adverse scenario where oil prices decline by 30 percent in 2012-16, Bolivia's non-interest current account would move from a surplus of about 4 percent of GDP to a nearly balanced position. This would mean that, with the same levels of projected external debt, net international reserves would remain broadly stable and decline gradually in terms of GDP, to about 35 percent of GDP in 2016; this level is judged to be still strong and external debt indicators would remain below the thresholds.

7. **Bolivian authorities agree with the assessment of low risk of debt distress.** Staff discussed the assumptions with the authorities, as well as the strong dependence of the external and fiscal positions on hydrocarbon revenues. The authorities see upside risks to growth in the medium-term and are confident that their policies (i.e., industrialization of minerals and hydrocarbons) will result in more stable external and fiscal positions, making them less vulnerable to terms of trade shocks.

Table 1a Bolivia: Public Sector Debt Sustainability Framework, Baseline Scenario, 2008–2031

(In percent of GDP, unless otherwise indicated)

	Actual					Estimate	Projections								
	2008	2009	2010	Average[5/]	Standard Deviation[5/]	2011	2012	2013	2014	2015	2016	2011-16 Average	2021	2031	2017-31 Average
Public sector debt 1/	37.5	40.5	39.9			36.1	34.4	33.4	32.7	31.4	30.0		24.7	16.3	
o/w foreign-currency denominated	23.0	23.4	22.6			21.0	20.6	20.6	20.6	20.3	19.9		16.8	12.5	
Change in public sector debt	-3.5	3.0	-0.5			-3.8	-1.7	-1.0	-0.7	-1.3	-1.4		-1.0	-0.7	
Identified debt-creating flows	-10.5	-0.6	-6.0			-6.7	-3.7	-3.1	-2.9	-3.6	-3.6		-3.0	-2.3	
Primary deficit	-6.3	-2.3	-3.5	-0.4	5.3	-2.1	-2.4	-2.4	-2.4	-2.3	-2.3	-2.3	-2.0	-1.5	-1.9
Revenue and grants	38.9	36.1	33.9			34.8	35.2	35.7	36.4	36.6	36.6		34.8	31.5	
of which: grants	1.2	1.2	1.1			0.0	0.0	0.1	0.1	0.1	0.1		0.1	0.1	
Primary (noninterest) expenditure	32.6	33.8	30.4			32.7	32.8	33.3	34.0	34.3	34.3		32.8	30.0	
Automatic debt dynamics	-5.8	1.4	-2.5			-4.6	-1.3	-0.8	-0.5	-1.3	-1.3		-1.0	-0.7	
Contribution from interest rate/growth differential	-2.2	0.4	-1.5			-2.1	-1.4	-1.1	-1.0	-1.3	-1.3		-1.0	-0.7	
of which: contribution from average real interest rate	0.2	1.7	0.1			-0.4	0.2	0.4	0.4	0.1	0.1		0.0	-0.1	
of which: contribution from real GDP growth	-2.4	-1.2	-1.6			-1.7	-1.6	-1.5	-1.4	-1.4	-1.3		-1.0	-0.7	
Contribution from real exchange rate depreciation	-3.6	0.9	-1.0			-2.5	0.1	0.3	0.5	0.0	0.0		...	...	
Other identified debt-creating flows	1.6	0.3	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Privatization receipts (negative)	1.6	0.3	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Recognition of implicit or contingent liabilities	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Debt relief (HIPC and other)	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Other (specify, e.g. bank recapitalization)	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Residual, including asset changes	7.1	3.5	5.5			2.9	2.0	2.2	2.2	2.3	2.2		2.0	1.6	
Other Sustainability Indicators															
PV of public sector debt	23.2	25.4	31.9			29.7	29.5	30.1	30.8	30.8	30.7		29.6	18.2	
o/w foreign-currency denominated	8.8	8.4	14.5			14.6	15.7	17.2	18.8	19.8	20.5		21.7	14.4	
o/w external	...	...	7.0			8.0	9.7	11.6	13.5	14.9	15.9		18.3	12.7	
PV of contingent liabilities (not included in public sector debt)	...	...	...			...	...	...	...	...	...		...	...	
Gross financing need 2/	-0.8	2.9	1.6			2.6	1.9	1.8	1.7	1.5	1.3		0.5	-0.2	
PV of public sector debt-to-revenue and grants ratio (in percent)	59.7	70.4	94.0			85.5	83.8	84.4	84.7	84.2	83.7		85.1	57.7	
PV of public sector debt-to-revenue ratio (in percent)	61.7	72.8	97.3			85.5	83.8	84.5	84.9	84.3	83.8		85.3	57.8	
o/w external 3/	...	...	21.3			22.9	27.6	32.7	37.2	40.7	43.6		52.7	40.5	
Debt service-to-revenue and grants ratio (in percent) 4/	10.4	6.1	6.7			6.1	5.5	5.1	4.5	4.2	3.8		2.2	1.0	
Debt service-to-revenue ratio (in percent) 4/	10.8	6.3	6.9			6.1	5.5	5.1	4.6	4.2	3.8		2.2	1.0	
Primary deficit that stabilizes the debt-to-GDP ratio	-2.8	-5.2	-3.0			1.7	-0.7	-1.4	-1.6	-1.0	-0.9		-1.0	-0.8	
Key macroeconomic and fiscal assumptions															
Real GDP growth (in percent)	6.1	3.4	4.2	3.9	1.3	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.0	4.0	4.0
Average nominal interest rate on forex debt (in percent)	2.9	1.9	1.8	2.1	0.4	1.5	1.2	0.9	0.8	0.6	0.5	0.9	0.2	0.0	0.2
Average real interest rate on domestic debt (in percent)	0.9	11.4	1.1	3.6	4.4	-1.9	2.2	4.4	5.4	3.2	3.3	2.8	3.2	3.2	3.2
Real exchange rate depreciation (in percent, + indicates depreciation)	-14.5	4.1	-4.4	-2.3	7.6	-11.6	...	...	...	...	...	...	...	...	...
Inflation rate (GDP deflator, in percent)	10.4	-2.4	6.3	6.0	4.5	9.5	5.0	2.9	1.8	4.0	4.0	4.5	4.0	4.0	4.0
Growth of real primary spending (deflated by GDP deflator, in percent)	0.2	0.1	-0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0
Grant element of new external borrowing (in percent)	...	...	...	...	...	15.8	17.2	15.1	14.5	13.9	13.8	15.1	13.0	12.0	...

Sources: Country authorities; and staff estimates and projections.

1/ Non financial public sector gross debt.

2/ Gross financing need is defined as the primary deficit plus debt service plus the stock of short-term debt at the end of the last period.

3/ Revenues excluding grants.

4/ Debt service is defined as the sum of interest and amortization of medium and long-term debt.

5/ Historical averages and standard deviations are generally derived over the past 10 years, subject to data availability.

Table 2a Bolivia: Sensitivity Analysis for Key Indicators of Public Debt 2011–2031

		Projections						
	2011	2012	2013	2014	2015	2016	2021	2031
PV of Debt-to-GDP Ratio								
Baseline	30	30	30	31	31	31	30	18
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	30	32	34	37	40	41	49	48
A2. Primary balance is unchanged from 2011	30	30	31	32	32	32	31	16
A3. Permanently lower GDP growth 1/	30	30	31	32	32	33	36	37
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2012-2013	30	31	33	35	37	38	43	42
B2. Primary balance is at historical average minus one standard deviations in 2012-2013	30	37	44	45	45	45	43	29
B3. Combination of B1-B2 using one half standard deviation shocks	30	35	40	42	43	43	46	40
B4. One-time 30 percent real depreciation in 2012	30	36	37	39	39	39	38	24
B5. 10 percent of GDP increase in other debt-creating flows in 2012	30	40	40	41	41	40	38	26
PV of Debt-to-Revenue Ratio 2/								
Baseline	85	84	84	85	84	84	85	58
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	85	90	97	103	108	113	139	152
A2. Primary balance is unchanged from 2011	85	85	86	87	87	87	89	51
A3. Permanently lower GDP growth 1/	85	84	86	87	88	89	102	119
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2012-2013	85	87	93	97	100	104	124	132
B2. Primary balance is at historical average minus one standard deviations in 2012-2013	85	104	125	124	123	122	122	93
B3. Combination of B1-B2 using one half standard deviation shocks	85	98	113	115	116	118	131	126
B4. One-time 30 percent real depreciation in 2012	85	103	105	106	106	106	110	76
B5. 10 percent of GDP increase in other debt-creating flows in 2012	85	112	112	112	111	110	111	82
Debt Service-to-Revenue Ratio 2/								
Baseline	6	5	5	5	4	4	2	1
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	6	6	5	7	7	7	8	12
A2. Primary balance is unchanged from 2011	6	5	5	5	5	4	3	0
A3. Permanently lower GDP growth 1/	6	5	5	5	4	4	4	8
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2012-2013	6	6	5	6	6	6	6	10
B2. Primary balance is at historical average minus one standard deviations in 2012-2013	6	5	6	12	12	9	6	6
B3. Combination of B1-B2 using one half standard deviation shocks	6	6	6	9	10	8	7	9
B4. One-time 30 percent real depreciation in 2012	6	6	6	6	5	5	3	2
B5. 10 percent of GDP increase in other debt-creating flows in 2012	6	5	7	13	7	7	5	4

Sources: Bolivian authorities; and staff estimates and projections.
1/ Assumes that real GDP growth is at baseline minus one standard deviation divided by the square root of the length of the projection period.
2/ Revenues are defined inclusive of grants.

Table 3a External Debt Sustainability Framework, Baseline Scenario, 2008–2031 1/

(In percent of GDP, unless otherwise indicated)

	Actual			Historical 6/ Average	Standard 6/ Deviation	Projections						2011-2016			2017-2031
	2008	2009	2010			2011	2012	2013	2014	2015	2016	Average	2021	2031	Average
External debt (nominal) 1/	**22.0**	**22.4**	**21.6**			**20.0**	**19.7**	**19.9**	**20.1**	**19.9**	**19.5**		**16.5**	**12.6**	
o/w public and publicly guaranteed (PPG)	14.3	15.0	15.0			14.4	14.6	15.0	15.4	15.4	15.3		13.4	10.8	
Change in external debt	-3.3	0.4	-0.8			-1.6	-0.4	0.2	0.2	-0.2	-0.4		-0.5	-0.3	
Identified net debt-creating flows	-20.2	-8.1	-10.1			-8.0	-8.1	-8.0	-7.1	-7.1	-7.4		-6.7	-5.9	
Non-interest current account deficit	**-12.7**	**-5.0**	**-5.1**	**-5.8**	**5.8**	**-4.1**	**-4.6**	**-4.5**	**-3.5**	**-3.1**	**-3.4**		**-2.9**	**-2.2**	-2.6
Deficit in balance of goods and services	-8.8	-2.8	-4.8			-4.0	-3.9	-3.1	-1.9	-1.3	-1.5		-2.0	-1.8	
Exports	38.8	28.2	32.5			30.3	29.6	29.1	28.5	27.8	27.8		27.9	27.9	
Imports	30.0	25.4	27.7			26.3	25.7	26.0	26.7	26.5	26.3		26.0	26.0	
Net current transfers (negative = inflow)	-7.7	-6.9	-5.6	-6.4	1.5	-4.5	-4.4	-5.2	-5.3	-5.3	-5.2		-4.5	-3.5	-4.2
o/w official	-1.2	-1.1	-0.8			-0.2	-0.4	-1.2	-1.3	-1.3	-1.3		-0.9	-0.5	
Other current account flows (negative = net inflow)	3.9	4.7	5.3			4.4	3.7	3.8	3.7	3.5	3.4		3.5	3.1	
Net FDI (negative = inflow)	**-3.1**	**-2.4**	**-3.2**	**-3.1**	**3.3**	**-3.4**	**-2.9**	**-2.9**	**-2.9**	**-3.2**	**-3.2**		**-3.2**	**-3.2**	-3.2
Endogenous debt dynamics 2/	**-4.4**	**-0.7**	**-1.8**			**-0.5**	**-0.6**	**-0.7**	**-0.7**	**-0.7**	**-0.7**		**-0.6**	**-0.5**	
Contribution from nominal interest rate	0.7	0.4	0.4			0.3	0.2	0.2	0.2	0.1	0.1		0.0	0.0	
Contribution from real GDP growth	-1.2	-0.7	-0.8			-0.8	-0.8	-0.8	-0.9	-0.9	-0.8		-0.6	-0.5	
Contribution from price and exchange rate changes	-3.8	-0.4	-1.4			…	…	…	…	…	…		…	…	
Residual (3-4) 3/	**16.9**	**8.5**	**9.4**			**6.4**	**7.8**	**8.2**	**7.3**	**6.9**	**7.0**		**6.2**	**5.6**	
o/w exceptional financing	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
PV of external debt 4/	...	...	13.6			13.6	14.8	16.5	18.2	19.3	20.1		21.4	14.5	
In percent of exports	...	...	42.0			45.0	50.1	56.9	63.8	69.4	72.3		76.8	52.0	
PV of PPG external debt	**...**	**...**	**7.0**			**8.0**	**9.7**	**11.6**	**13.5**	**14.9**	**15.9**		**18.3**	**12.7**	
In percent of exports	**...**	**...**	**21.5**			**26.4**	**32.8**	**40.1**	**47.3**	**53.5**	**57.4**		**65.6**	**45.7**	
In percent of government revenues	**...**	**...**	**21.3**			**22.9**	**27.6**	**32.7**	**37.2**	**40.7**	**43.6**		**52.7**	**40.5**	
Debt service-to-exports ratio (in percent)	**8.3**	**5.2**	**4.9**			**4.6**	**4.3**	**4.2**	**3.9**	**3.7**	**3.4**		**1.5**	**0.6**	
PPG debt service-to-exports ratio (in percent)	**6.9**	**3.3**	**3.4**			**3.3**	**3.1**	**3.0**	**2.7**	**2.5**	**2.3**		**0.7**	**0.1**	
PPG debt service-to-revenue ratio (in percent)	**7.1**	**2.7**	**3.4**			**2.9**	**2.6**	**2.4**	**2.1**	**1.9**	**1.8**		**0.6**	**0.1**	
Total gross financing need (Billions of U.S. dollars)	-1.7	-0.6	-0.8			-0.9	-1.1	-1.1	-0.9	-0.9	-1.1		-1.7	-3.1	
Non-interest current account deficit that stabilizes debt ratio	-9.4	-5.4	-4.4			-2.4	-4.3	-4.7	-3.7	-2.9	-3.0		-2.4	-1.9	
Key macroeconomic assumptions															
Real GDP growth (in percent)	6.1	3.4	4.2	3.9	1.3	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.0	4.0	4.0
GDP deflator in US dollar terms (change in percent)	17.7	1.8	6.5	5.0	7.6	12.5	5.9	-0.2	-0.6	1.8	1.9	3.6	1.8	1.8	1.8
Effective interest rate (percent) 5/	3.2	2.1	2.0	2.4	0.5	1.6	1.3	1.0	0.8	0.7	0.6	1.0	0.2	0.0	0.2
Growth of exports of G&S (US dollar terms, in percent)	44.6	-23.7	27.9	17.4	20.4	9.5	8.3	2.5	2.0	3.6	6.5	5.4	6.1	6.1	5.9
Growth of imports of G&S (US dollar terms, in percent)	44.2	-11.0	20.9	11.0	16.6	11.6	8.3	5.6	6.6	5.7	5.6	7.2	5.9	5.9	5.8
Grant element of new public sector borrowing (in percent)	...	...	...	...	...	15.8	17.2	15.1	14.5	13.9	13.8	15.1	13.0	12.0	12.7
Government revenues (excluding grants, in percent of GDP)	37.7	34.9	32.8			34.8	35.2	35.6	36.3	36.6	36.6		34.8	31.4	33.8
Aid flows (in Billions of US dollars) 7/	0.3	0.3	0.3			0.1	0.1	0.1	0.1	0.2	0.2		0.1	0.1	
o/w Grants	0.2	0.2	0.2			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
o/w Concessional loans	0.1	0.0	0.1			0.1	0.1	0.1	0.1	0.2	0.2		0.1	0.1	
Grant-equivalent financing (in percent of GDP) 8/	...	...	...			0.5	0.5	0.5	0.5	0.5	0.4		0.3	0.2	0.3
Grant-equivalent financing (in percent of external financing) 8/	...	...	...			15.8	17.5	16.9	16.4	15.9	15.9		15.7	15.8	15.9
Memorandum items:															
Nominal GDP (Billions of US dollars)	16.6	17.5	19.4			22.8	25.2	26.3	27.3	29.1	31.0		41.2	73.2	
Nominal dollar GDP growth	24.9	5.2	10.9			17.6	10.7	4.3	3.9	6.4	6.5	8.2	5.9	5.9	5.9
PV of PPG external debt (in Billions of US dollars)			1.4			1.9	2.4	3.0	3.7	4.3	4.9		7.5	9.2	
(PVt-PVt-1)/GDPt-1 (in percent)						2.6	2.4	2.4	2.4	2.3	2.1	2.4	1.0	0.1	0.7
Gross workers' remittances (Billions of US dollars)	1.1	1.0	0.9			1.0	1.0	1.1	1.1	1.2	1.2		1.5	2.2	
PV of PPG external debt (in percent of GDP + remittances)	...	...	6.7			7.7	9.3	11.2	13.0	14.3	15.4		17.7	12.4	
PV of PPG external debt (in percent of exports + remittances)	...	...	18.8			23.1	28.9	35.2	41.4	46.8	50.3		58.2	41.3	
Debt service of PPG external debt (in percent of exports + remittances)	...	...	3.0			2.9	2.7	2.6	2.4	2.2	2.0		0.6	0.1	

Sources: Country authorities; and staff estimates and projections.

1/ Includes both public and private sector external debt.

2/ Derived as [r - g - ρ(1+g)]/(1+g+ρ+gρ) times previous period debt ratio, with r = nominal interest rate; g = real GDP growth rate, and ρ = growth rate of GDP deflator in U.S. dollar terms.

3/ Includes exceptional financing (i.e., changes in arrears and debt relief); changes in gross foreign assets; and valuation adjustments. For projections also includes contribution from price and exchange rate changes.

4/ Assumes that PV of private sector debt is equivalent to its face value.

5/ Current-year interest payments divided by previous period debt stock.

6/ Historical averages and standard deviations are generally derived over the past 10 years, subject to data availability.

7/ Defined as grants, concessional loans, and debt relief.

8/ Grant-equivalent financing includes grants provided directly to the government and through new borrowing (difference between the face value and the PV of new debt).

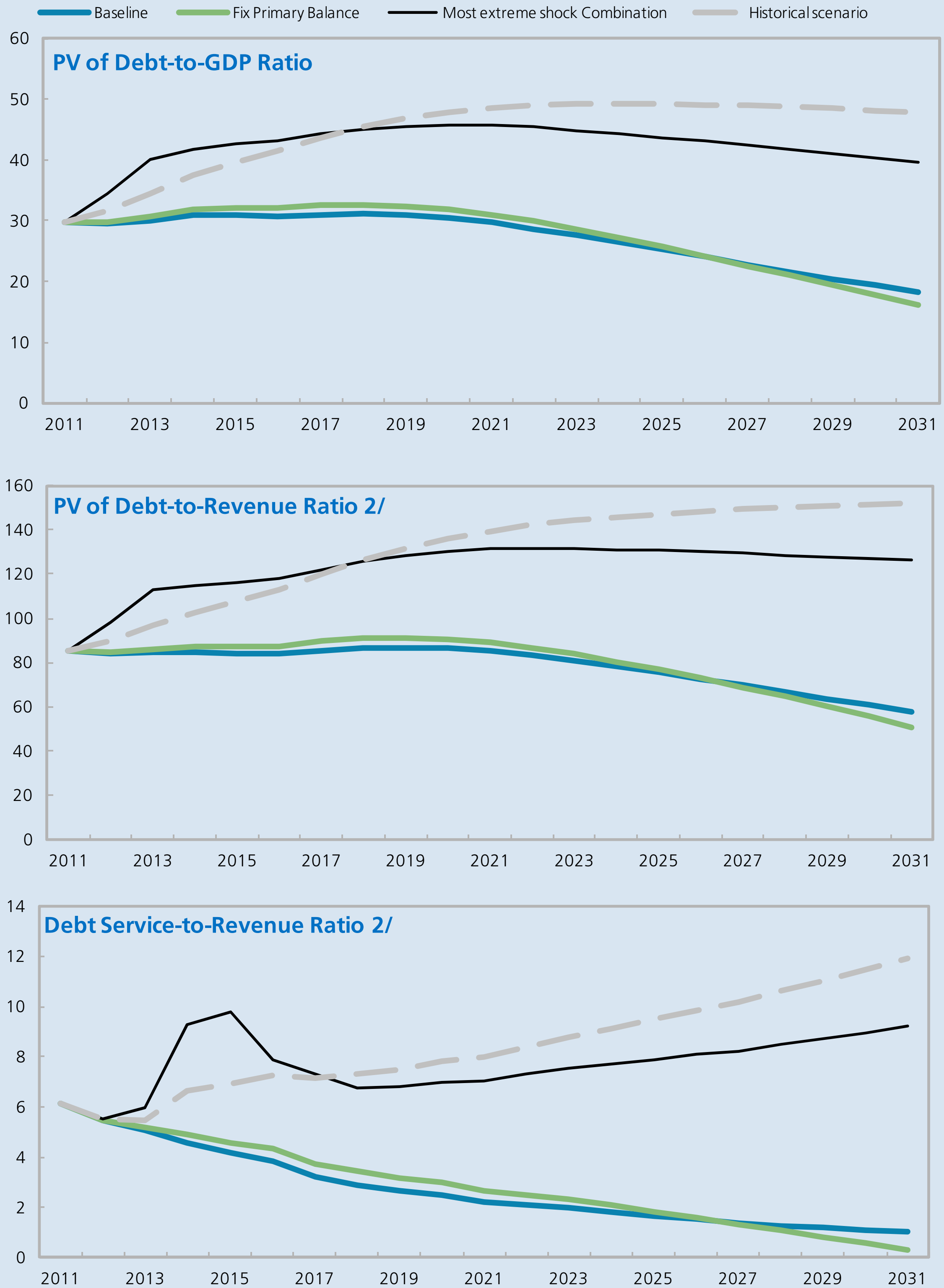
Table 3b Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2001–2031

(In percent)

				Projections				
	2011	**2012**	**2013**	**2014**	**2015**	**2016**	**2021**	**2031**
PV of debt-to-GDP+remittances ratio								
Baseline	8	9	11	13	14	15	**18**	12
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2011-2031 1/	8	8	8	7	6	5	**-3**	-20
A2. New public sector loans on less favorable terms in 2011-2031 2	8	10	13	15	17	19	**23**	21
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2012-2013	8	9	11	13	15	16	**18**	13
B2. Export value growth at historical average minus one standard deviation in 2012-2013 3/	8	12	18	19	21	22	**22**	14
B3. US dollar GDP deflator at historical average minus one standard deviation in 2012-2013	8	10	12	14	16	17	**19**	14
B4. Net non-debt creating flows at historical average minus one standard deviation in 2012-2013 4/	8	11	16	18	19	20	**21**	13
B5. Combination of B1-B4 using one-half standard deviation shocks	8	10	13	15	16	17	**19**	13
B6. One-time 30 percent nominal depreciation relative to the baseline in 2012 5/	8	13	15	18	19	21	**24**	17
PV of debt-to-exports+remittances ratio								
Baseline	23	29	35	41	47	50	**58**	41
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2011-2031 1/	23	25	26	24	21	18	**-11**	-69
A2. New public sector loans on less favorable terms in 2011-2031 2	23	31	40	48	56	61	**77**	71
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2012-2013	23	28	35	41	46	50	**57**	41
B2. Export value growth at historical average minus one standard deviation in 2012-2013 3/	23	41	64	72	78	81	**84**	53
B3. US dollar GDP deflator at historical average minus one standard deviation in 2012-2013	23	28	35	41	46	50	**57**	41
B4. Net non-debt creating flows at historical average minus one standard deviation in 2012-2013 4/	23	35	52	58	63	66	**70**	45
B5. Combination of B1-B4 using one-half standard deviation shocks	23	30	37	43	48	51	**58**	40
B6. One-time 30 percent nominal depreciation relative to the baseline in 2012 5/	23	28	35	41	46	50	**57**	41
PV of debt-to-revenue ratio								
Baseline	23	28	33	37	41	44	**53**	41
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2011-2031 1/	23	24	24	21	18	15	**-10**	-65
A2. New public sector loans on less favorable terms in 2011-2031 2	23	30	37	43	48	53	**70**	69
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2012-2013	23	28	33	38	42	45	**54**	41
B2. Export value growth at historical average minus one standard deviation in 2012-2013 3/	23	35	52	56	59	61	**66**	45
B3. US dollar GDP deflator at historical average minus one standard deviation in 2012-2013	23	29	36	41	45	48	**58**	45
B4. Net non-debt creating flows at historical average minus one standard deviation in 2012-2013 4/	23	34	48	52	55	57	**63**	44
B5. Combination of B1-B4 using one-half standard deviation shocks	23	31	38	42	46	49	**57**	43
B6. One-time 30 percent nominal depreciation relative to the baseline in 2012 5/	23	38	45	51	56	60	**72**	56
Debt service-to-exports+remittances ratio								
Baseline	3	3	3	2	2	2	**1**	0
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2011-2031 1/	3	7	6	6	6	6	**4**	-2
A2. New public sector loans on less favorable terms in 2011-2031 2	3	7	7	7	8	8	**9**	9
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2012-2013	3	7	7	7	7	8	**9**	7
B2. Export value growth at historical average minus one standard deviation in 2012-2013 3/	3	7	8	9	9	10	**12**	10
B3. US dollar GDP deflator at historical average minus one standard deviation in 2012-2013	3	7	7	7	7	8	**9**	7
B4. Net non-debt creating flows at historical average minus one standard deviation in 2012-2013 4/	3	7	7	8	8	8	**10**	8
B5. Combination of B1-B4 using one-half standard deviation shocks	3	7	7	7	7	7	**9**	7
B6. One-time 30 percent nominal depreciation relative to the baseline in 2012 5/	3	7	7	7	7	8	**9**	7
Debt service-to-revenue ratio								
Baseline	3	3	2	2	2	2	**1**	0
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2011-2031 1/	3	6	6	6	5	5	**4**	-2
A2. New public sector loans on less favorable terms in 2011-2031 2	3	6	6	6	7	7	**8**	9
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2012-2013	3	7	6	7	7	7	**8**	7
B2. Export value growth at historical average minus one standard deviation in 2012-2013 3/	3	6	7	7	7	7	**9**	8
B3. US dollar GDP deflator at historical average minus one standard deviation in 2012-2013	3	7	7	7	7	7	**9**	8
B4. Net non-debt creating flows at historical average minus one standard deviation in 2012-2013 4/	3	6	6	7	7	7	**9**	8
B5. Combination of B1-B4 using one-half standard deviation shocks	3	7	7	7	7	7	**9**	8
B6. One-time 30 percent nominal depreciation relative to the baseline in 2012 5/	3	9	9	9	9	9	**11**	10
Memorandum item:								
Grant element assumed on residual financing (i.e., financing required above baseline) 6/	7	7	7	7	7	7	**7**	7

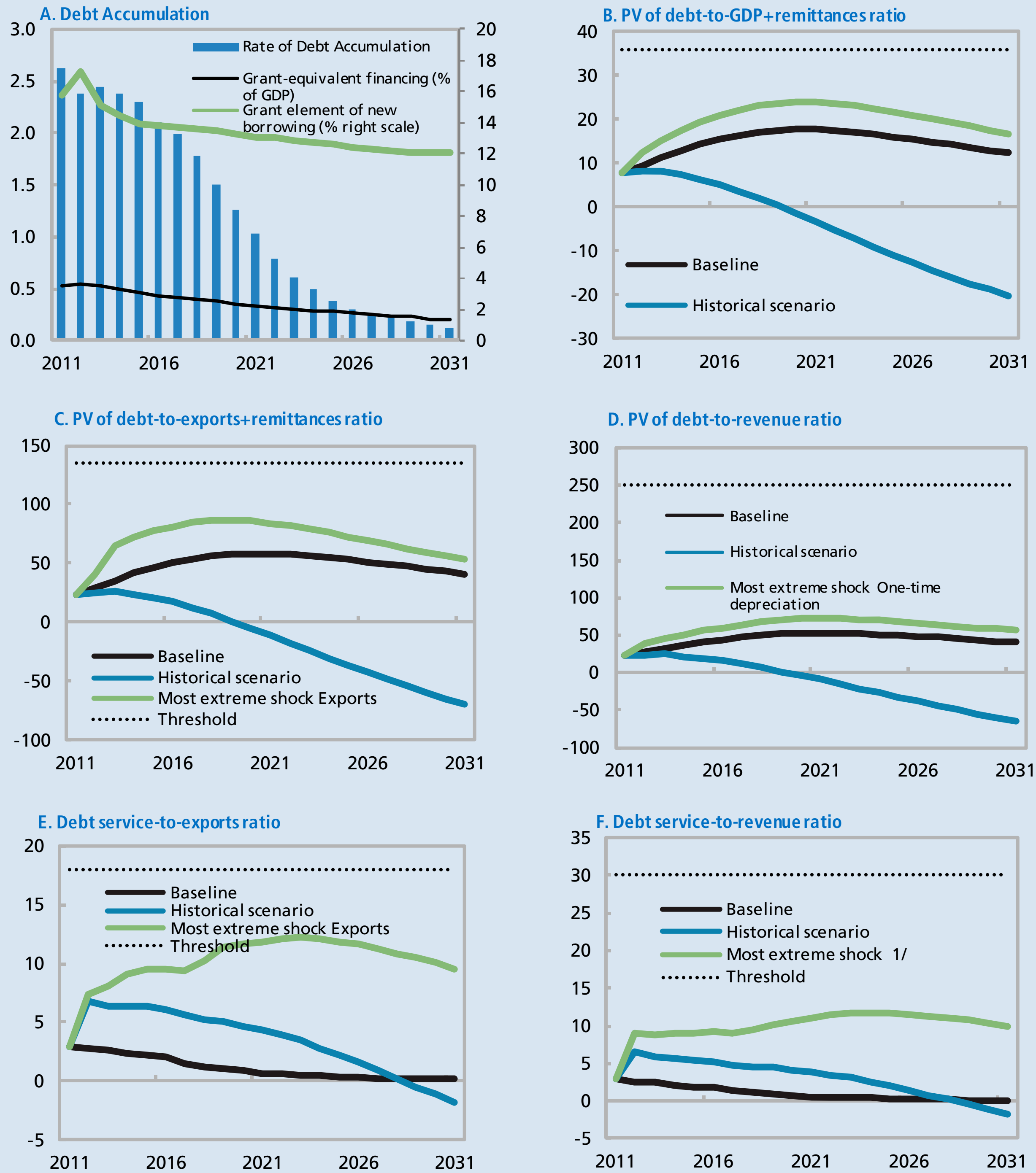
Sources: Country authorities; and staff estimates and projections.
1/ Variables include real GDP growth, growth of GDP deflator (in U.S. dollar terms), non-interest current account in percent of GDP, and non-debt creating flows.
2/ Assumes that the interest rate on new borrowing is by 2 percentage points higher than in the baseline., while grace and maturity periods are the same as in the baseline.
3/ Exports values are assumed to remain permanently at the lower level, but the current account as a share of GDP is assumed to return to its baseline level after the shock (implicitly assuming an offsetting adjustment in import levels).
4/ Includes official and private transfers and FDI.
5/ Depreciation is defined as percentage decline in dollar/local currency rate, such that it never exceeds 100 percent.
6/ Applies to all stress scenarios except for A2 (less favorable financing) in which the terms on all new financing are as specified in footnote 2.

Figure 1 Bolivia: Indicators of Public Debt Under Alternative Scenarios 1/



Sources: Bolivian authorities; and staff estimates and projections.
1/ The most extreme stress test is the test that yields the highest ratio in 2021.
2/ Revenues are defined inclusive of grants.

Figure 2 Bolivia: Indicators of Public and Publicly Guaranteed External Debt under Alternatives Scenarios 1/



Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio in 2021. In figure b. it corresponds to a One-time depreciation shock; in c. to a Exports shock; in d. to a One-time depreciation shock; in e. to a Exports shock and in figure f. to a One-time depreciation shock.

Statement by the Staff Representative on Bolivia
May 23, 2011

1. This statement provides additional information that has become available since the issuance of the staff report. It does not alter the thrust of the staff appraisal.

2. **Monthly inflation declined to 0.02 percent in April 2011, down from 0.8 percent in March, bringing the 12-month inflation rate to 11 percent.** This outcome is largely explained by a large drop in food prices (0.9 percent). Monthly non-food inflation, albeit positive, also declined, from 1 percent in March to 0.4 percent in April. Official GDP figures were released, indicating growth of 4.1 percent for 2010, broadly in line with earlier estimates (4.2 percent).

3. **Excess liquidity in the banking sector declined to 4 percent of deposits by end-April.** The central bank stepped up open market operations at slightly higher rates. Net international reserves have risen to US$10.6 billion, while the exchange rate (B$6.89−6.99 per dollar) has remained broadly unchanged.

4. **The authorities have reported that a draft law criminalizing the financing of terrorism will be submitted to congress in the first half of 2011.**

INTERNATIONAL MONETARY FUND
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FOR IMMEDIATE RELEASE
May 27, 2011

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

IMF Executive Board Concludes 2011 Article IV Consultation with Bolivia

On May 23, 2009 the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation with Bolivia.[1]

Background

Bolivia has posted a solid macroeconomic performance in recent years, on the back of strong terms of trade and prudent macroeconomic policies. Increased export volumes and prices led to a doubling of export receipts between 2005 and 2010, while real GDP growth rose from 3.1 percent in the first half of the past decade to 4.6 percent in the second half. The strength of the external and fiscal positions in recent years has allowed Bolivia to build a strong reserves cushion which has reduced macroeconomic vulnerability. While poverty and income inequality are still high, progress has been made on improving social inclusion and income distribution, as cash transfer programs have been successful in reducing extreme poverty, from about 30 percent in 2008 to 26 percent in 2009.

In 2010, real GDP grew by 4.2 percent on account of higher hydrocarbons production, with high terms of trade supporting domestic demand, and despite adverse weather shocks. The external current account surplus rose to 4.8 percent of GDP, and net international reserves currently stand at 50 percent of GDP and 80 percent of broad money. At the same time, inflation rose sharply, to 7.2 percent in December and 11 percent in March 2011, on the back of higher food commodity prices, some de-anchoring of expectations following an attempt at raising fuel prices

[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. 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.

last December, and amid ample liquidity in the banking sector. The overall public sector surplus rose to 2.0 percent of GDP in 2010, from 0.3 percent in 2009.

With the pickup in inflation, interest rates have become sharply negative in real terms. In the context of higher credit growth, banks are profitable, well capitalized, and their nonperforming loan ratios are low. Progress on the de-dollarization of balance sheets has continued, with Boliviano-denominated credit and deposits standing at about 55 percent of the total.

Congress has approved a road map for fiscal decentralization and a reform of the pension system. The decentralization law sets the stage for a discussion of revenue assignments and spending responsibilities across different levels of government. The pension reform creates a semi-contributory regime with stepped up benefits for low-income households, funded with higher contributions from employers and employees. It also introduces a lower retirement age and nationalizes the administration of the pension funds.

Executive Board Assessment

Executive Directors welcomed Bolivia's strong economic performance, underpinned by prudent macroeconomic policies. The external current account and overall public sector balances remain in surplus, and record-high net international reserves provide strong protection against external shocks. Directors noted that the economy is expected to gather further momentum on the back of a continued recovery of hydrocarbon production, higher public investment, and favorable export prices. They highlighted that a short-term priority is to contain inflation, and that meeting development needs and making inroads into poverty reduction remain medium-term objectives.

While recognizing that higher international food prices have been a key driver of inflation, Directors saw a need for a faster exit from the monetary stimulus. They noted that a moderate appreciation of the currency would also help reduce inflationary pressures. Over the medium term, as de-dollarization and domestic financial market development continues, allowing greater exchange rate flexibility would enhance the economy's capacity to respond to external shocks.

Directors agreed that the available fiscal space allows for additional productive and social investment to address development needs. In this regard, further efforts are needed to enhance the effectiveness of public spending and implementation capacity across all levels of government. Directors welcomed plans to introduce multi-year budgeting and a fiscal savings fund to facilitate anti-cyclical fiscal policy. They encouraged the authorities to limit fiscal claims on the central bank and enhance the transparency and accountability of state-owned enterprises.

Directors welcomed improvements in the financial sector, as highlighted by the FSAP update. In order to preserve macro-financial stability, it will be important to ensure appropriate levels of banks' liquidity and capital buffers, avoid using interest rate policy and prudential rules for development purposes, and improve financial sector supervision more broadly. Directors considered a deposit insurance scheme as a useful element of the crisis management framework.

Directors stressed the need to improve the investment climate, particularly through further reforms of the legal framework in a way that ensures clear and stable rules of the game for the private sector. They commended the authorities for putting in place effective social policies and enhancing the delivery of health and education services. Directors called for continued efforts to improve the targeting of transfer programs, to facilitate the reduction of fuel subsidies and free price setting in agriculture.

Bolivia: Selected Economic Indicators

		2007	2008	2009	Prel. 2010	Proj. 2011
(Annual percentage changes)						
Income and prices						
Real GDP	...	4.6	6.1	3.4	4.2	4.5
GDP deflator	...	7.4	10.4	-2.4	6.3	9.5
CPI inflation (period average)	...	8.7	14.0	3.3	2.5	10.4
CPI inflation (end-of-period)	...	11.7	11.8	0.3	7.2	7.9
(In percent of GDP)						
Combined public sector						
Revenues and grants		34.4	38.9	36.1	33.9	34.8
Of which:						
Hydrocarbons related revenue		9.4	13.4	13.1	10.9	11.4
Expenditure		31.8	34.6	35.5	31.9	34.1
Overall balance		1.7	2.8	0.3	2.0	0.7
Total gross public debt		40.9	37.5	40.5	39.9	36.2
External sector						
Current account		12.0	12.1	4.7	4.8	3.8
Merchandise exports		33.5	38.8	28.2	32.5	30.3
Of which: Natural gas		14.8	19.0	11.3	14.4	14.3
Merchandise imports		26.0	30.0	25.4	27.7	26.3
Gross international reserves						
In millions of U.S. dollars		5,319	7,722	8,580	9,730	10,440
In percent of broad money		75	85	81	80	74
(Changes in percent of broad money at the beginning of the period)						
Money and credit						
NFA of the banking system		35.4	34.6	10.2	8.2	7.4
NDA of the banking system		-3.7	-12.5	6.6	6.0	2.3
Of which: Credit to the private sector (in percent of GDP)		33.1	30.3	33.0	32.4	35.3
Broad money		31.7	22.2	16.8	14.2	9.7
Interest rates (percent, end-of-period)						
Deposits in local currency 61-90 days		3.7	5.7	0.4	0.5	...
Deposits in foreign currency 61-90 days		2.6	3.3	0.5	0.2	...

Sources: Bolivian authorities; and Fund staff estimates and projections.

Statement by Alfredo Mac Laughlin, Executive Director for Bolivia
and Victor Hugo De la Barra, Advisor to the Executive Director
May 23, 2011

Background

Bolivia, in developing its domestic policies, considers transparency important. Even though the authorities may not share the IMF's recommendations and conclusions, they consent to the publication of the surveillance reports. The authorities regret that the institution has not given the necessary attention to the authorities' claims regarding the effect that IMF surveillance reports may have on the Bolivian economy, especially regarding inflation projections. The Bolivian authorities have repeatedly expressed that expectations are very sensitive in Bolivia, as economic agents do not internalize projections appropriately, because they are very often manipulated and mishandled by the media and political opposition. The authorities would like the staff to give this issue deeper consideration in the future.

Economic Overview

Bolivia's economy showed a satisfactory performance in 2010. In fact, the GDP growth rate was 4.2 percent, greater than envisaged (4 percent), notwithstanding the extensive drought, subsequent wildfires and an unusually cold June and July which affected harvests and farm output in eastern parts of the country. Notably, there was also an outstanding flow of foreign investment. In addition, Bolivian balance of payments broadly reached positive results, with increases in exports exceeding imports; the current account again showed a positive stance of 4.6 percent of GDP. International reserves are also at a very comfortable level, reaching almost 50 percent of GDP. In the fiscal sector, Bolivia's economy continued to manage a positive result (2 GDP percentage points) mainly due to lower expenditure. The authorities are considering a growth rate of 5 percent in 2011, which is supported by growth at that rate in the first quarter of the year.

Fiscal Policy: Macroeconomic Equilibrium and Fostering Production Base

The fiscal surplus in 2010, as in the previous four years confirms a strong fiscal position, even though social programs still continue as part of the main objective of economic policy: income redistribution. Revenues grew faster than expenditure, coming from almost all sectors but particularly from hydrocarbons and minerals. State-Owned Enterprises (SOEs) are expanding operations leading to the implemention of important projects for enhancing the production base. Investment in sub-national administration was not as good as in 2009, but the authorities expect a strong recovery in 2011.

In 2011, the authorities will again apply a fiscal stimulus through an ample program of public investment, since there is still fiscal space coming from public savings in previous years.

Therefore, this impulse should not affect inflation and, on the contrary, widening the production base would help to anchor expectations. Fiscal impulse is still necessary since large segments of population still live in poverty and extreme poverty, although important progress has been made in recent years because of social programs and building social safety nets. The authorities are keen to keep macroeconomic equilibrium but public investment has to be done at this juncture, when the economy is gaining momentum as international markets for Bolivian commodities are favorable. Incurring a small fiscal deficit because of public investment would be worthwhile for the sake of building a stronger GDP base for future generations.

In paragraph 4, the staff asserts that a low level of private investment would be a result of uncertainties about the legal framework on strategic sectors. There are no actions that induce uncertainties from the authorities' side, since the main legal framework is already set up, and adjustments are made in compliance of the Constitution. In strategic sectors, most operating companies—whose main partner is the State—have signed contracts.
The government has plans for public investment to reach around US$ 2.4 billion in 2011 (around 10 .8 percent of GDP), with a significant part financed by fiscal savings. Public investment will be allocated in infrastructure, as well as in public enterprises, following the strategy of investing in partnerships with private entrepreneurs (50 percent respectively). As part of the objective of increasing growth through public investment, the oil and electricity state companies plan to engage in an ambitious investment program financed in part by loans from the Central Bank of Bolivia (CBB). Among these projects are the exploration of hydrocarbons, hydroelectric plants and major road constructions, as well as enhancing infrastructure for education and health, which are part of central government responsibilities.

In paragraph 21, the staff notes that SOEs may pose fiscal risks if they do not show enough transparency and accountability. SOEs are included in the budget and their governing laws already require annual external audits and ex-post control from the subsequent control agency.

The State Company to Support Food Production (EMAPA), which was originally founded to assist with loans for medium- and small-sized farms in order to ensure domestic food security, will be reformed to produce main food grains, such as soy, rice, wheat and corn, which are essential to food security. Moreover, by doing so, the authorities believe that EMAPA will contribute to tackling inflationary pressures coming from shortcomings in food supply. The Production Law under preparation will set up provisions for enhancing production across the board. The staff's concerns about prolonged price controls on certain goods and their effects on domestic supply are not technically supported, since market prices are still well above production costs. Meeting domestic demand, particularly for poor people, is a priority for the authorities. EMAPA may also export after covering domestic demand.

In paragraph 25, the staff talks again about fuel subsidies; this is an issue which is no longer on the 2011 policy agenda. Fuel subsidies will remain in place until a consensus with social movements is reached, as President Morales asserted immediately after the attempted removal of such subsidies back in December 2010.

Expenses for health care and education will still be among the main components of public expenditure in 2010. Social expenditure will be maintained, as well as the conditional cash-transfers to keep elementary school students on track and to entice pregnant women to attend regular pre-natal and pediatric checkups. The non-conditional cash transfer for the elderly will also continue as a universal retirement pension. These programs aim to enhance domestic demand and create a market for new public and private enterprises expected to be created as part of the development plan. This plan is also linked to the strategy to reduce poverty, since the authorities are not comfortable with the prevalent level of poverty and intend to reduce it further by expanding the social safety net and improving access to basic infrastructure. To this end, the authorities will continue to implement the Extreme Poverty Eradication Plan which started in 2009.

Reducing Inflation: Monetary, Exchange Rate and Complementary Policies

In paragraph 7, the staff comments on the important pick-up in inflation by the end of 2010 (7.2 percent) and it projects inflation for 2011 to be 7.9 percent. The 2010 inflation rate was highly influenced by speculation in the domestic goods market after the authorities attempted to correct fuel prices by cutting subsidies for gasoline and diesel in late December 2010. Analysis on speculation as an explaining factor for inflation in 2010 is not adequately covered in the staff report.

Speculation was spread by political opposition activists along with certain media sources spreading false rumors about the exchange rate policy and goods availability, which artificially raised prices and caused inflationary expectations. The authorities had projected an inflation rate of 4 percent for 2010, supported by the accumulated inflation in June 2010. In September, this level reached 2.9 percent. However, in the last week of December 2010, prices went up, driving accumulated inflation up to 7.2 percent.

While the IMF staff projects an inflation rate of 7.9 percent by the end of 2011, the authorities envisage an inflation rate of 6 percent because the upturn in inflation in 2010 is not transmitting to 2011. Even though inflation expectations affected prices in January and February, it is a not signal of overheating in the economy, since public expenditure is completely under control and credit is expanding at reasonable rates.

Paragraph 8 of the staff report affirms that monetary policy remained accommodative in 2010. An accommodative monetary policy attempts to avoid growth falling at a price of higher inflation. This is not the case for Bolivia. In fact, after reaching the highest GDP growth rate in South America in 2009, the CBB decided to gradually remove the monetary impulse applied in 2008-2009, by increasing open market operations (OMO). Starting in the first quarter of 2010, the CBB sold larger amounts of securities in each auction. Additionally, there were increases in reserve requirements and more dynamic OMO for individuals at higher interest rates, meaning that banking institutions are not allowed access to these types of transactions. While the CBB was in the middle of implementing such policies, the IMF staff revised the 2010 inflation projection for Bolivia from 4 to 3.5 percent.

The recent upturn in inflation does not come from demand pressures but mainly from a change in relative prices. The staff does not consider the statistical effect derived from a low inflation in the first semester of 2010 (0.4 percent) compared to the second semester, which implies a lower year-on-year inflation in the following months. The pace of OMO observed in the first quarter of 2011 triples the liquidity withdrawn vís-a-vís what the Fund's estimates appropriate for the whole year. Moreover, this liquidity withdrawal was executed although there was a fiscal surplus in the first quarter of 2011.

The staff recommends tightening monetary conditions through increasing the policy interest rate as a means to combat inflation; however, it is important to take into account the way monetary policy is instrumented in Bolivia. The CBB auctions a certain amount of securities and participants bid interest rates, which reflect their expectations of the trend in commercial rates and prices. Increasing the policy rate at this time would cause more harm than good to the economy. The CBB, according to pre-established quantitative targets, has contracted liquidity without substantially increasing the policy rate, but gradually.

There is no reason to believe that the credit growth is excessive, whether considering past records or in comparison with neighboring countries. It cannot be said that Bolivia's GDP growth is above potential, so there is no overheating in the economy, as in economies with demand-driven high inflation. M1 growth (around 20 percent) has been influenced by changes in currency preference in favor of the domestic currency because of the de-dollarization process that is taking place in Bolivia. In fact, M3 (which includes foreign-denominated operations) currently shows an increase of only 11 percent year-on-year.

Regarding the staff's concern about high liquidity, the ratio of "excess liquidity/deposits" is around 5 percent (April 2011), lower than the staff's calculations (8 percent), which has shown a systematic decreasing trend from 19 percent in early 2010, precisely due to the monetary policy, as explained above.

Real interest rates in Bolivia are currently negative, but this is a temporary issue which is not going to induce worries, since inflation is not demand-driven. Inflation is decreasing, as in 2008-2009, after a temporary pick up. As a matter of fact, monthly inflation for April was 0.02 percent (the lowest in 2011), while inflation for the same month year-on-year (11.04

percent) is lower than March's year-on-year figure (11.1 percent) which signals a downward trend.

In paragraph 21, the staff recommends that monetary policy should focus on price stability while the exchange rate should move toward a more flexible regime. This in an orthodox approach which was questioned even in advanced economies with flexible exchange rates, which have heavily intervened in their exchange rate markets and introduced capital controls. Bolivia's monetary policy is not orthodox and has a counter-cyclical orientation. It uses several instruments in addition to sterilization: limits on long positions for balance sheets in foreign currency; regulation on liquidity avoiding significant increases in interest rates; and credit policies for public entities. Furthermore, the CBB, in coordination with ASFI (Authority for Financial Institution Supervision) and the Ministry of Economy and Finance, implemented measures to limit excessive spreads between loan and deposit rates; regulated commissions and fund transfers to other countries; and put limits on financial investments in foreign markets carried out by commercial banks, pension administrators, and insurance companies.

The exchange rate policy has kept its objective of controlling excessive volatility without neglecting undervaluation or overvaluation over time. Following this objective, the CBB has kept the widened spread between buying and selling exchange rate for the agents internalized dollarization costs, while at the same time putting a limit on profit margins for exchange rate operations. The authorities disagree on the level of misalignment of the exchange rate, although they agree with the direction of the exchange rate policy in the following months, which will contribute to anchoring expectation and mitigating inflationary pressures. The exchange rate regime (crawling peg) has been reaffirmed with small nominal appreciations since November 2010, which aimed to moderate external inflationary pressures at a gradual pace, suitable for partially-dollarized economies such Bolivia's. Sudden movements in the exchange rate may affect balance sheets of households, as well as financial entities', risking the de-dollarization process also praised by the IMF staff.

In paragraph 21 of the report, the staff mentions that the use of international reserves for financing SOEs may affect confidence in public policies and monetary policy independence, while increasing external vulnerability. The staff does not relate its analysis to the high level of international reserves (almost 50 percent of GDP), which ranks high in the world and are above the optimum level according to research conducted both in Bolivia and by the IMF. It is important to note that the Bolivian authorities are engaged in expanding the GDP base to tackle key social concerns such as poverty, inequality and ultimately unemployment. Therefore, they have decided to finance key SOEs investment projects in electricity and hydrocarbons, which are pivotal for the Bolivian economy. External financing for such projects is not available at this time and financially it is more convenient, given the current low yields for international reserves investments. Regarding transparency for the use of these resources, the CBB authorities have already laid down rules for handling credits to SOEs. In addition, the fiscal authorities approved a procedure for credit to SOEs within the budget framework; thus, this issue has been duly addressed considering necessary safeguards (financial, legal, and economic). Besides, a law for public enterprises is being drafted for strengthening these safeguards and establishing a more streamlined legal framework for their operations. It will include a supervisory body for fiscal supervision and accountability.

The staff also recommends creating a fund with excess international reserves, which was already included in the 2006 National Development Plan. In fact, this plan envisages the creation of a Fund for Stabilization and Development for: i) preserving fiscal sustainability and macroeconomic stability, ii) reducing volatility and uncertainty about international reserves, iii) ensuring better income distribution, iv) taking care of intergenerational equity, and v) promoting the development of production base and labor mobility.

In paragraph 23, the staff mentions that criminalizing the financing of terrorism is a pending action. It is worth mentioning that the authorities have made important progress in drafting and internally discussing this legal provision. Introducing new crimes implies a process that involves the Executive, its agencies, the Judiciary and the National Assembly. An initial provision for introducing this crime was included in the Anticorruption Law Draft, but the National Assembly decided to put it in a separate law. The Minister of Finance attended the 2010 FAFT Plenary and has made a commitment to send a new draft in the first semester of 2011.

Development Policies and Social Issues

The staff considers that there are still disputes between sub-national and central governments, as well as social tensions, but these tensions have actually calmed down substantially. Normally, negotiations with unions, social movements and regions imply certain methods of exercising pressure but they do not infer economic or politic risk.

In paragraph 3, the staff states that in Bolivia, poverty, infant mortality, and other social indicators are above average in Latin America. This assessment is incomplete and out of context, since Bolivia is a poor country with still poor infrastructure and thus progress on social indicators is hard to achieve. Despite these difficulties, in the last five years the present Administration has made more progress than ever before, thanks to an unprecedented level of social expenditure and the development of social safety nets.

The Bolivian authorities highlight the need to attain greater equality, transparency, and accountability underpinned by cautious macroeconomic policies. They are assigning an important role in mining and hydrocarbons activities to finance the improvement of education, health, and sanitation that will help reduce poverty and inequality and strengthen infrastructure. The authorities are aware that private investment is also important for growth and job creation, thus the legal framework is straightforward and imposes no restrictions for investment. On the contrary, some regions are subject to special incentives for private investment. In this vein, the Bolivian government attaches great importance to the diversification of the economy to gradually reduce, in the future, the high dependence on the hydrocarbon and mining sectors and, consequently, lessen the economy's vulnerability to external shocks.

Recently—and after many years of discussion with the unions—the new Pension Law was passed in the National Assembly. This reform implies a step forward towards reaching more equal income redistribution, since it creates a solidarity pension fund for those affiliates that cannot retire due to the lack of sufficient funding in their individual accounts. This solidarity pension—which is complementary to the regular pension—is financed by a small increase in the basic workers' contribution, the reinstatement of the employers' contribution that was unfairly cut off in 1997, and an additional progressive contribution from workers with high income. The new pension law also sets up the minimum retirement age at 58, since life expectancy is still low in Bolivia. The law also establishes a special retirement age for miners and mothers. No fiscal impact is expected in the medium and long term, since MEFP's actuarial projections render financial sustainability for the following 30 years, although the provisions of the law anticipate assessments every five years.

Agriculture output is likely to increase as the harvest should be good, given that there were no severe weather conditions in the agricultural year. It is important to note that growth has been driven by the impulse applied to domestic demand since 2006, through transfers to municipalities (for financing small infrastructure projects that cannot be executed because of a lack of financing in their budgets), and conditional and non-conditional transfers to individuals. This policy boosted consumption, but not only for goods such as food, but also for basic services like water and electricity, which also lead to positive spillover effects across the economy.

The need to balance accumulation of financial savings for intergenerational equity and the more urgent demands for economic and social infrastructure are also of concern for the authorities. In this regard, the authorities are engaged in making operative the fund established in the Autonomy Law, which would be used for stabilization—in case fiscal revenue falls short of the amount budgeted—and development, for financing public investment going forward. The authorities expect that this sovereign fund will be expeditiously considered in 2011. In the meantime, the considerable amount of international reserves accumulated since 2006 may be used as a financing cushion for public investment, a key driver for growth and employment in Bolivia.