

**IMMEDIATE  
ATTENTION**

SM/11/85\*

April 29, 2011

To: Members of the Executive Board

From: The Secretary

Subject: **Bolivia—Staff Report for the 2011 Article IV Consultation**

Attached for consideration by the Executive Directors is the staff report for the 2011 Article IV consultation with Bolivia, which meets the criteria for consideration on a lapse of time basis. This staff report has been prepared using the new format for Article IV staff reports.

In the absence of a request by an Executive Director by **noon on Wednesday, May 11, 2011**, that this matter be brought to the agenda of the Executive Board, the consultation will be deemed approved on Friday, May 13, 2011, by the Executive Board and the following decision will be recorded in the minutes of the next meeting thereafter:

The Executive Board endorses the thrust of the staff appraisal in the report for the 2011 Article IV Consultation with Bolivia (SM/11/85, 4/29/11).

It is expected that the next Article IV consultation with Bolivia will take place on the standard 12-month cycle.

If an Executive Director requests that the matter be taken up at a Board meeting, the item will be tentatively scheduled for discussion on Friday, May 13, 2011.

At the time of circulation of this paper to the Board, the authorities of Bolivia have indicated that they need more time to consider whether they will consent to the Fund's publication of this paper. Publication will only proceed upon the receipt by the Fund of the member's explicit consent. Any requests for modifications for publication are expected to be received two days before the Board concludes its consideration.

If there is no request for a Board discussion, the Executive Board Assessment section of the Public Information Notice will be based on the staff appraisal.

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\*Being recirculated on May 3, 2011 to correct printing error.

Questions may be referred to Mr. Lopetegui (ext. 39688), Mr. Rosales (ext. 38688), and Ms. Sulla (ext. 38766) in WHD.

Unless the Documents Section (ext. 36760) is otherwise notified, the document will be transmitted, in accordance with the procedures approved by the Executive Board and with the appropriate deletions, to the WTO Secretariat on Monday, May 9, 2011; and to the European Commission, the European Investment Bank, and the Inter-American Development Bank, following its consideration by the Executive Board.

This document, together with a supplement providing an informational annex, will shortly be posted on the extranet, a secure website for Executive Directors and member country authorities. The supplement, which is not being distributed in hard copy, will also be available in the Institutional Repository; a link can be found in the daily list (<http://www-int.imf.org/depts/sec/services/eb/dailydocumentsfull.htm>) for the issuance date shown above.

Att: (1)

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Department Heads



# 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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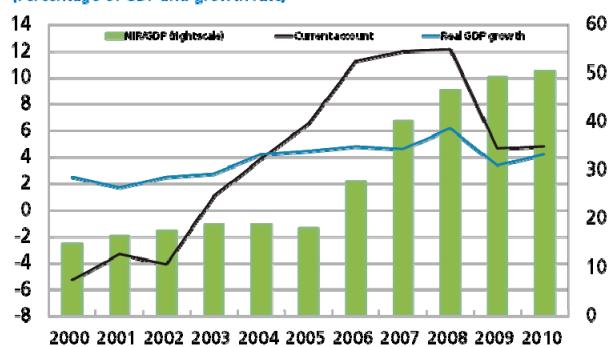
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## BACKGROUND

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.

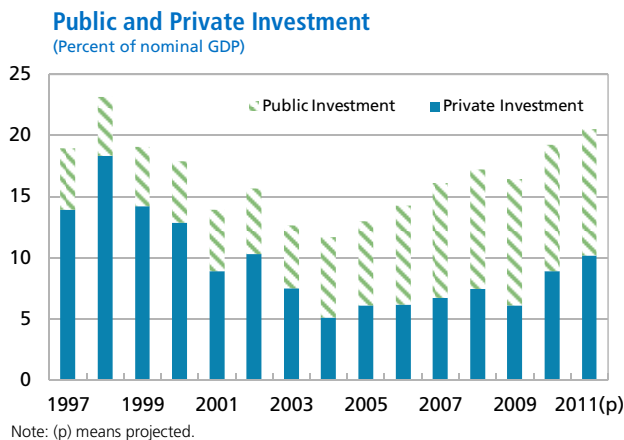
2. **At the same time, deep political and social changes have been taking place.** The election of president Morales in 2006 initiated a period of strengthening of social policies and a broader role of the state in economic affairs. The new constitution (2009) is leading to profound changes in the country's 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.



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 Dissemination 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.<sup>1</sup>

**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.

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<sup>1</sup> 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**

## 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,

**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).

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**

	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
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
<i>Of which:</i> 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.<sup>2</sup> 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

<sup>2</sup> 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 framework, 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.**

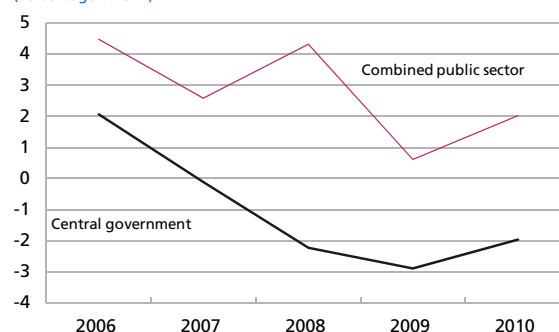
While the authorities have shown restraint in the use of central bank financing to date, the 2011 Budget authorizes the central bank to provide large credits to SOEs (up to 30 percent of net international reserves), in addition to US\$2 billion already committed in previous years (equivalent to 20 percent 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<sup>3</sup> 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 responsibilities, 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

#### Bolivia: Fiscal Balances

(Percentage of GDP)



Source: IMF's staff estimates with official data.

central government paper to municipalities and departments. Staff commended the authorities for the provisions in the

<sup>3</sup> 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 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.<sup>4</sup> 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 an 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

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<sup>4</sup> 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 strengthen 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.<sup>5</sup> Weaknesses have been identified in institutional indicators and

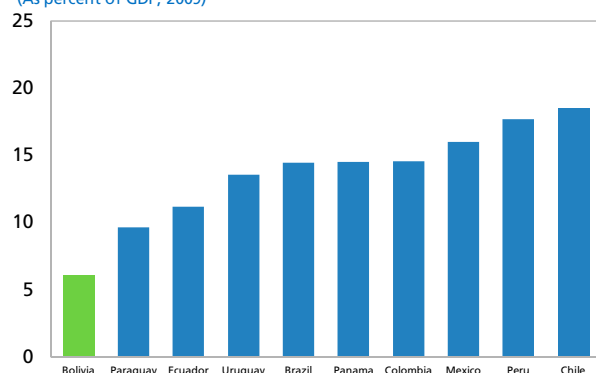
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<sup>5</sup> In the World Bank's Ease of Doing Business index, Bolivia fell from the 126<sup>th</sup> position in 2006 to the 161<sup>th</sup> position (out of 183 countries) in 2010. It ranks 108<sup>th</sup> (out of 139 countries) in the World Economic 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

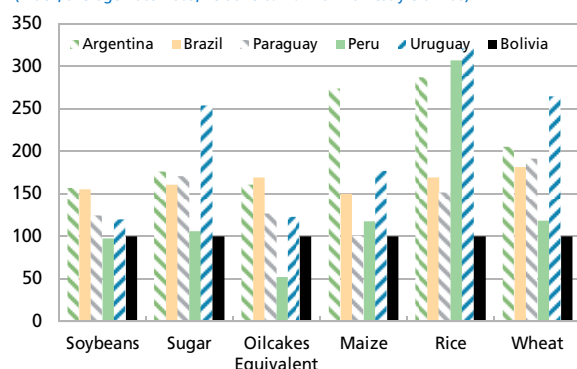
further reduce the incentives to explore. As a result, private production is declining and the state-owned company need to import rising volumes of fuels (mainly diesel). While aware of the political and social restrictions, staff noted that a gradual increase in domestic fuel prices to market levels, 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.<sup>6</sup> 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.

<sup>6</sup> 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

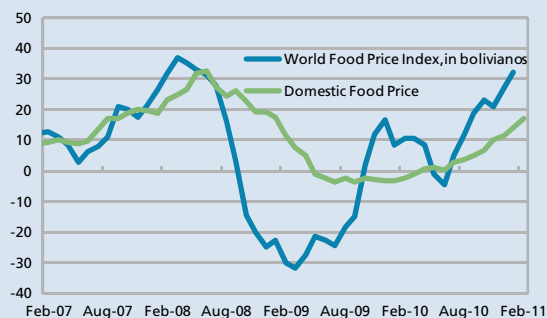
## Bolivia: Recent Trends in Inflation and Inflation Expectations

**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)

**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.

**CPI Inflation**

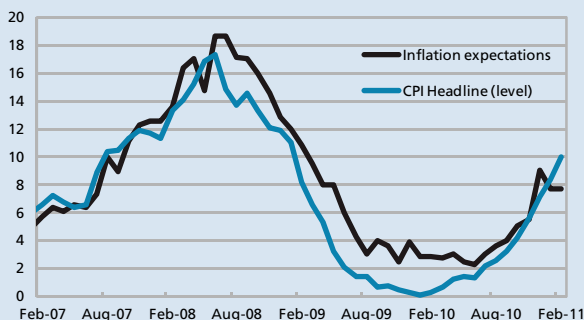
(By categories, annual change in percentage)

	Weight (percent of total)	Feb-10	Feb-11	Contribution to February 2011 Inflation
<b>Headline Inflation</b>	<b>100.00</b>	<b>0.3</b>	<b>10.0</b>	<b>100.0</b>
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 & Domestic 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
Communications	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 Estadísticas de Bolivia (INE)

**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*).

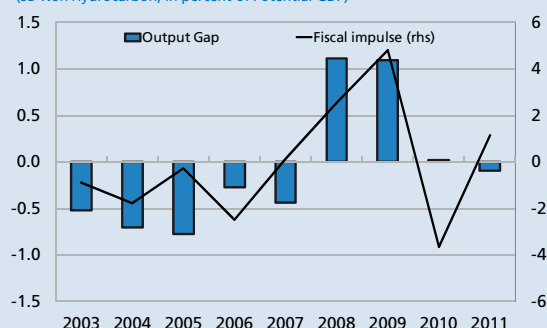
**Estimating the CAB and the SB requires computing several key economic variables.**

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.

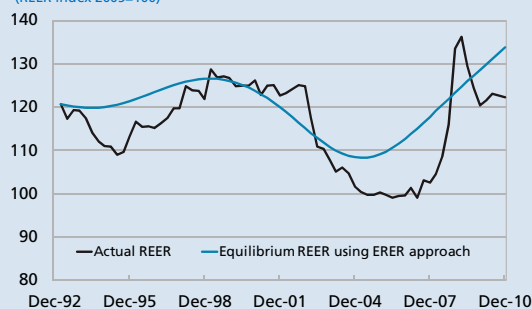
**All three CGER approaches point to undervaluation of the Boliviano, averaging 8.5 percent:**

- 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 (+)



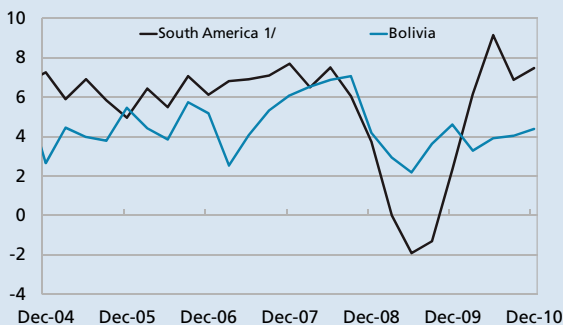
**Figure 1** Bolivia: Real Sector Developments

*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**

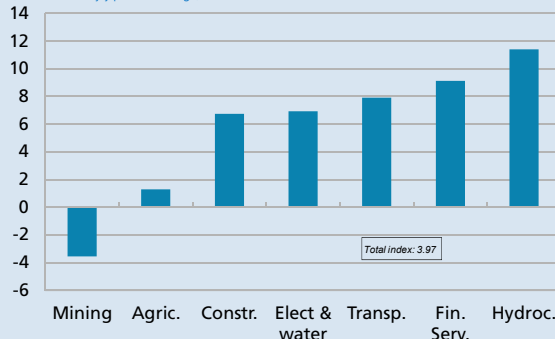
(y/y percent change)



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

**Monthly Economic Activity Indicator**

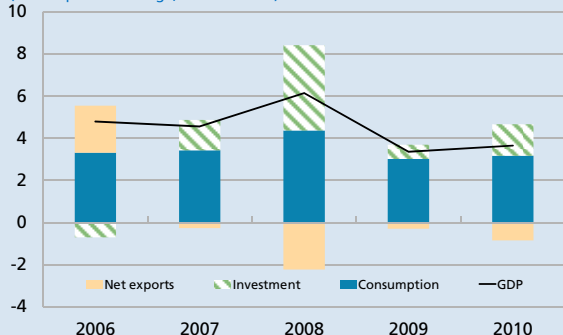
(Jan-Oct 2010, y/y percent change)



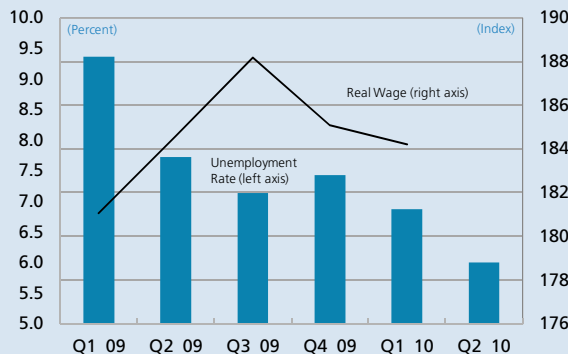
*From the demand side, growth in 2010 has been driven mainly by private consumption...*

**Real GDP Growth**

(annual percent change, contributions)



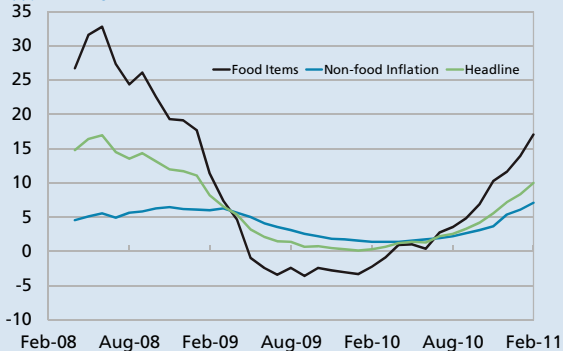
*...with unemployment declining and real wages rising somewhat.*

**Labor Market Developments**

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

**CPI Inflation**

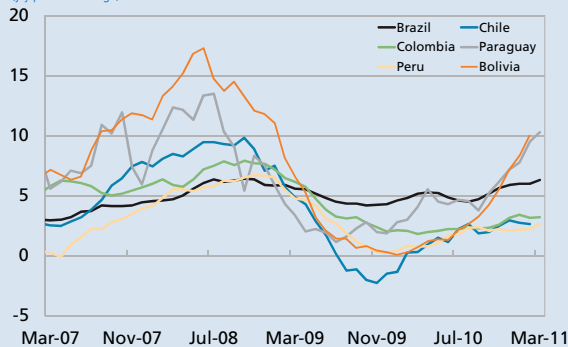
(y/y percent change)



*...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.

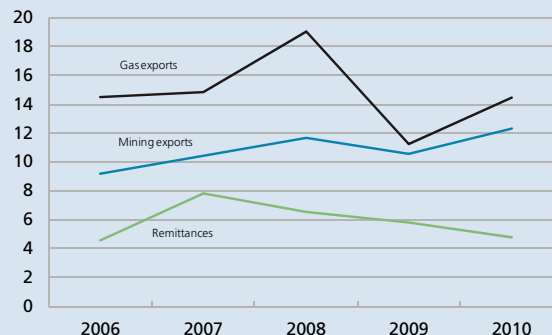
Current account remained in surplus on the backdrop of improving terms of trade

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



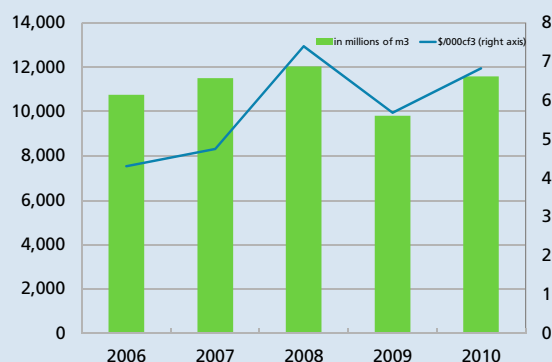
Higher gas and mining exports were partially off-set by lower remittances

**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**



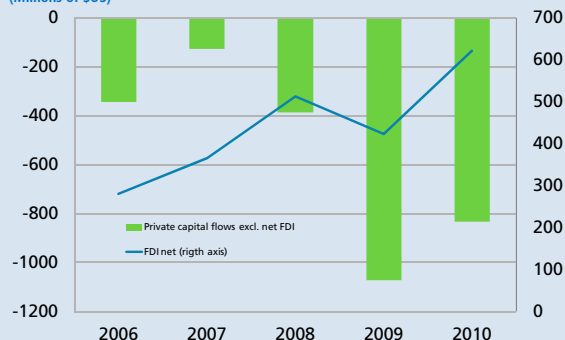
Imports increased by 20 percent with the largest increase in primary materials imports.

**Imports Composition**  
(Millions of \$US)



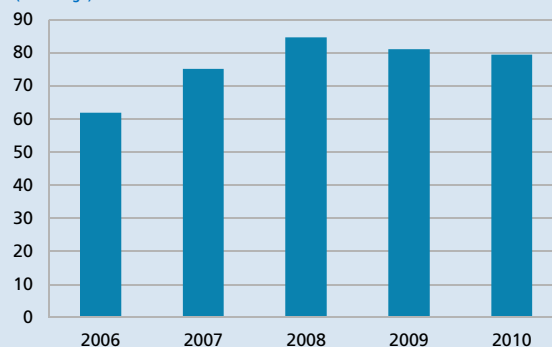
Private capital flows excluding FDI remained negative, while net FDI increased.

**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.

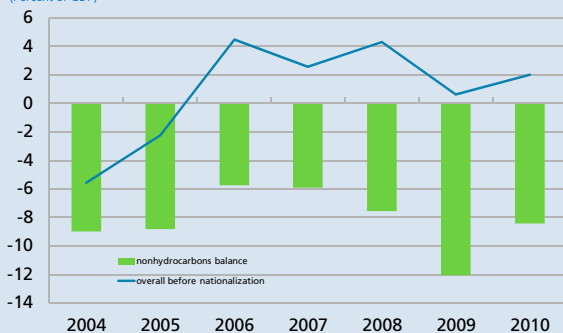
**Figure 3** Bolivia: Fiscal Developments

*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**

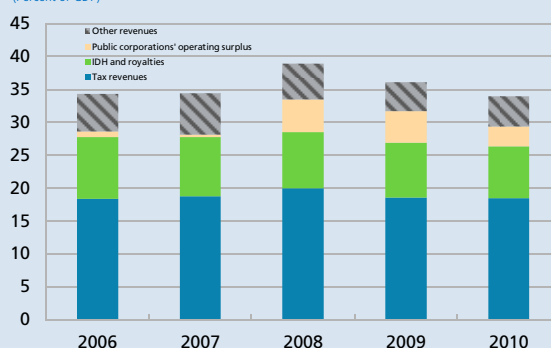
(Percent of GDP)



*Tax revenues and hydrocarbon receipts remain strong.*

**Total Revenues Composition**

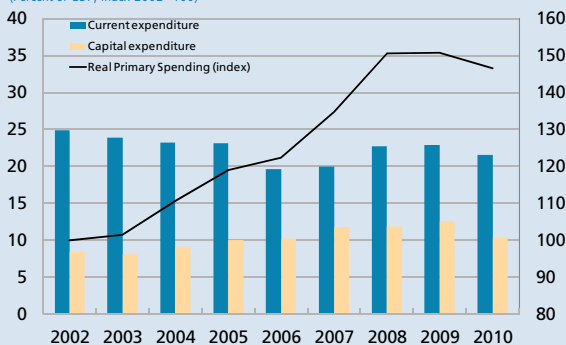
(Percent of GDP)



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

**Expenditure Composition**

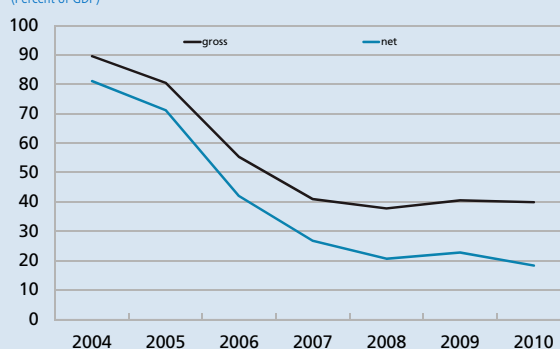
(Percent of GDP, index 2002=100)



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

**Public Sector Debt**

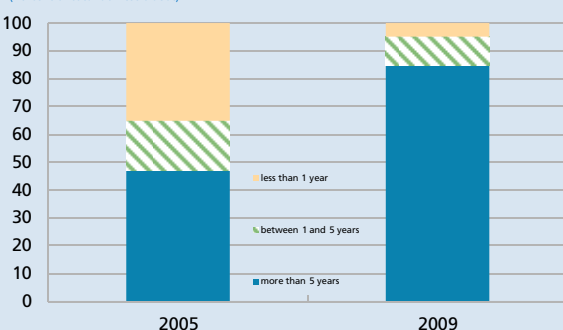
(Percent of GDP)



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

**Domestic Debt Breakdown by Maturities**

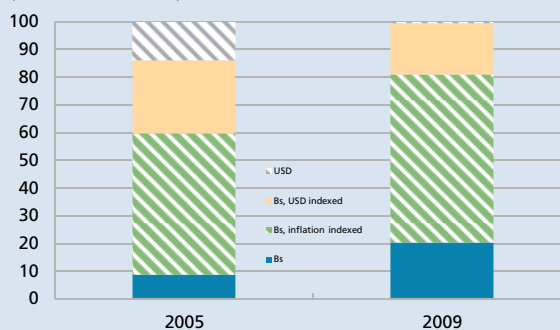
(Percent of total domestic debt)



*...and foreign currency exposure has been reduced.*

**Domestic Debt Breakdown by Currency**

(Percent of total domestic debt)



Sources: National Authorities and IMF staff calculations.

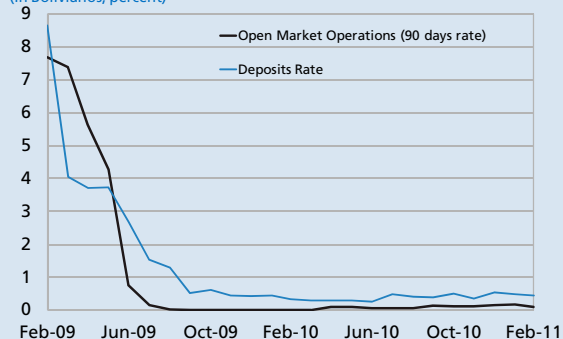
**Figure 4** Bolivia: Monetary Developments

*Monetary policy remains accommodative 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**

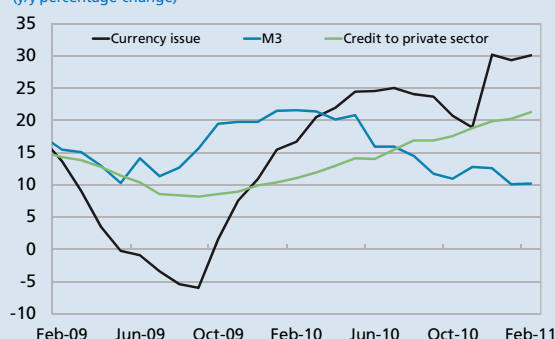
(In Bolivianos, percent)



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

**Monetary Aggregates**

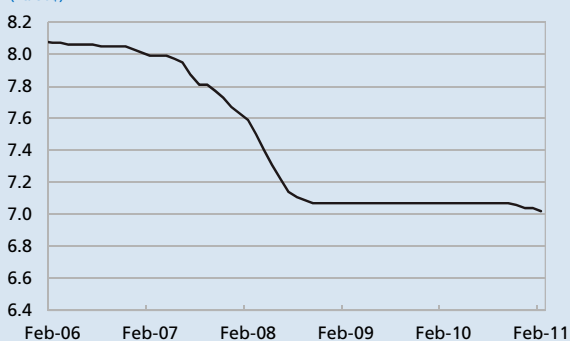
(y/y percentage change)



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

**Nominal Exchange Rate**

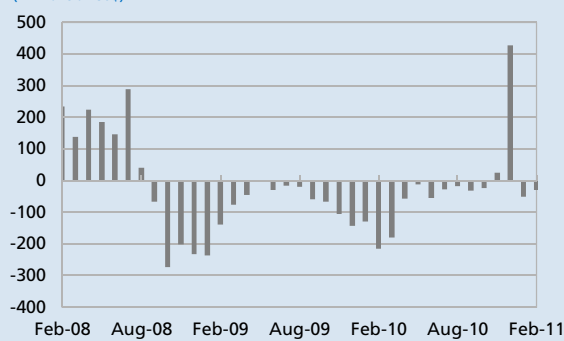
(Bs/US\$)



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

**FX Net Purchases**

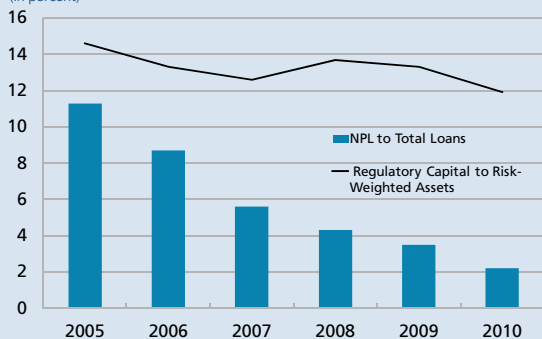
(Millions of US\$)



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

**Financial Soundness Indicators**

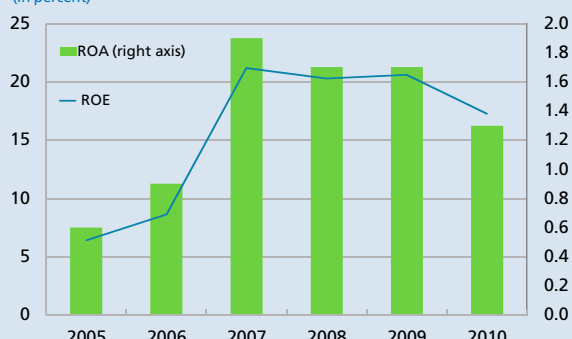
(In percent)



*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

	2007	2008	2009	Prel. 2010	2011	2012	2013	2014	2015	2016
(Annual percentage changes)										
<b>Income and prices</b>										
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
<b>(In percent of GDP)</b>										
<b>Investment and savings</b>										
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
<b>Combined public sector</b>										
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
<b>External sector</b>										
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	...	...	...	...	...	...
<b>(Changes in percent of broad money at the beginning of the period, unless otherwise specified)</b>										
<b>Money and credit</b>										
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	...	...	...	...	...	...
<b>Memorandum items:</b>										
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
<b>Total revenue and grants</b>	<b>34.3</b>	<b>34.4</b>	<b>38.9</b>	<b>36.1</b>	<b>33.9</b>	<b>34.8</b>
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
<b>Total spending</b>	<b>29.8</b>	<b>31.8</b>	<b>34.6</b>	<b>35.5</b>	<b>31.9</b>	<b>34.1</b>
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
<b>Overall balance before nationalization</b>	<b>4.5</b>	<b>2.6</b>	<b>4.3</b>	<b>0.6</b>	<b>2.0</b>	<b>0.7</b>
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
<b>Overall balance after nationalization</b>	<b>4.5</b>	<b>1.7</b>	<b>2.8</b>	<b>0.3</b>	<b>2.0</b>	<b>0.7</b>
<b>Financing</b>	<b>-4.5</b>	<b>-1.7</b>	<b>-2.8</b>	<b>-0.3</b>	<b>-2.0</b>	<b>-0.7</b>
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
<b>Memorandum Items:</b>						
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
<b>Total revenue and grants</b>	<b>31,473</b>	<b>35,428</b>	<b>46,953</b>	<b>43,925</b>	<b>45,755</b>	<b>53,710</b>
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
<b>Total spending</b>	<b>27,372</b>	<b>32,767</b>	<b>41,754</b>	<b>43,182</b>	<b>43,040</b>	<b>52,667</b>
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	...	...
<b>Overall balance before nationalization</b>	<b>4,101</b>	<b>2,661</b>	<b>5,199</b>	<b>744</b>	<b>2,715</b>	<b>1,042</b>
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
<b>Overall balance after nationalization</b>	<b>4,101</b>	<b>1,793</b>	<b>3,327</b>	<b>324</b>	<b>2,715</b>	<b>1,042</b>
<b>Financing</b>	<b>-4,101</b>	<b>-1,793</b>	<b>-3,327</b>	<b>-324</b>	<b>-2,715</b>	<b>-1,042</b>
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
<b>Memorandum Items:</b>						
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)

	2007	2008	2009	2010	Projections					
					2011	2012	2013	2014	2015	2016
<b>Current account</b>	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
<b>Capital and financial account</b>	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
<b>Overall balance</b>	1,952	2,374	547	923	710	994	1,106	937	938	1,123
<b>Financing</b>	-1,952	-2,374	-547	-923	-710	-994	-1,106	-937	-938	-1,123
<b>Memorandum items:</b>										
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
<b>(Flows in millions of Bolivianos, unless otherwise indicated)</b>						
<b>Net international reserves</b>	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
<b>Net domestic assets</b>	-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
<b>Currency issue</b>	2,594	5,329	2,940	1,849	5,693	3,789
<b>(Stocks in millions of Bolivianos, unless otherwise indicated)</b>						
<b>Net international reserves</b>	24,291	40,705	56,215	57,091	66,874	71,685
<b>Net domestic assets</b>	-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
<b>Currency issue</b>	8,774	14,103	17,043	18,892	24,585	28,374
<b>(Changes in percent of beginning-of-period currency issue)</b>						
<b>Net international reserves</b>	166.2	176.6	123.7	13.3	34.1	19.6
<b>Net domestic assets</b>	-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
<b>Currency issue</b>	42.0	60.7	20.9	10.8	30.1	15.4
<b>Memorandum items:</b>						
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/

	2006	2007	2008	2009	2010	Proj. 2011
<b>(Flows in millions of Bolivianos, unless otherwise indicated)</b>						
<b>Net short-term foreign assets</b>	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
<b>Net domestic assets</b>	-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
<b>Broad money</b>	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
<b>(Stocks in millions of Bolivianos, unless otherwise indicated)</b>						
<b>Net short-term foreign assets</b>	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
<b>Net domestic assets</b>	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
<b>Broad money</b>	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
<b>(Changes in percent of deposits at the beginning of the period)</b>						
<b>Net short-term foreign assets</b>	31.3	35.4	34.6	9.9	8.2	7.4
<b>Net domestic assets</b>	-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
<b>Broad money</b>	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
<b>Memorandum items:</b>						
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
<b>(Flows in millions of Bolivianos, unless otherwise indicated)</b>						
<b>Net short-term foreign assets</b>	622	-1,076	1,107	4,021	-354	768
(Flow in millions of U.S. dollars)	78	-139	152	577	-49	158
<b>Net domestic assets</b>	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
<b>Deposits</b>	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
<b>(Stocks in millions of Bolivianos, unless otherwise indicated)</b>						
<b>Net short-term foreign assets</b>	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
<b>Net domestic assets</b>	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
<b>Deposits</b>	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
<b>(Changes in percent of deposits at the beginning of the period)</b>						
<b>Net short-term foreign assets</b>	2.1	-3.3	2.7	8.4	-0.6	1.2
<b>Net domestic assets</b>	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
<b>Deposits</b>	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
<b>Memorandum items:</b>						
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 deposits)	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
<b>Reserve adequacy</b>	<b>(In US\$ million, unless otherwise indicated)</b>				
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
<b>Debt ratios</b>	<b>(In percent of GDP)</b>				
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
<b>Commodity dependency</b>					
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
<b>Banking sector indicators</b>					
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
<b>Composition of bank deposits</b>	<b>(In percent)</b>				
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
<b>Memorandum items:</b>					
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
<b>Goal 1. Eradicate Extreme Poverty and Hunger</b>								
<b>Target 1:</b> 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	<b>24.1</b>
<b>Target 2:</b> 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	...	<b>19.0</b>
<b>Goal 2. Achieve Universal Primary Education</b>								
<b>Target 3:</b> Ensure that, by 2015, children will be able to complete a full course of primary schooling								
Net primary enrollment ratio (percent of relevant age group)		94.0	94.1	92.7	91.8	90.0	...	<b>100.0</b>
Percentage of cohort reaching grade 8	55.4 (1992)	79.5	77.8	75.6	74.7	77.3	...	<b>100.0</b>
<b>Goal 3. Promote Gender Equality and Empower Women</b>								
<b>Target 4:</b> 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	...	<b>0.0</b>
Gender disparities at completion of secondary education (percent)	3.4 (1992)	...	-0.4	-1.5	...	-1.4	...	<b>0.0</b>
<b>Goal 4. Reduce Child Mortality</b>								
<b>Target 5:</b> 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	...	<b>30.0</b>
Immunization against measles (percent of children under 12-months)	68 (1994)	...	84.5	82.6	83.0	84.0	84.5	<b>95.0</b>
<b>Goal 5. Improve Maternal Health</b>								
<b>Target 6:</b> 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	...	...	...	...	<b>104</b>
Proportion of births attended by skilled health personnel (percent)	27 (1995)	59.6	61.9	65.2	63.9	65.0	67.0	<b>70.0</b>
<b>Goal 6. Combat HIV/AIDS, Malaria, and Other Diseases</b>								
<b>Target 7:</b> 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	...	...	...	<b>13.0</b>
<b>Target 8:</b> 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	<b>2.0</b>
Incidence of tuberculosis cases cured (percent of diagnosed)	52.6 (1995)	80.3	78.5	82.9	84.9	81.5	...	<b>95.0</b>
<b>Target 10:</b> 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	...	<b>78.5</b>
Access to improved sanitation facilities (percent of population)	28 (1992)	41.6	43.5	55.7	...	48.4	...	<b>64.0</b>
<b>Goal 8. Develop a global Partnership for Development</b>								
<b>Target 18:</b> 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**

<b>(Percent of cash collections)</b>					
	<b>Provinces</b>	<b>Municipalities</b>	<b>Universities</b>	<b>Central Government</b>	<b>Total</b>
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%
<b>Total</b>	<b>8.8%</b>	<b>21.6%</b>	<b>3.8%</b>	<b>65.2%</b>	<b>100%</b>
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).<sup>1</sup>

<sup>1</sup> 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 tariffs, 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.<sup>1</sup>

**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.

<sup>1</sup> The legislation establishes all amounts in Bolivianos, converted here at the prevailing exchange rate.

**Table All.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 All.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
<b>Total</b>	<b>2,910</b>	<b>3,885</b>	<b>4,626</b>	<b>5,468</b>

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<sup>2</sup> 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).

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, and US\$255 a year otherwise. The Dignity

<sup>2</sup> 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.

**Table All.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.<sup>3</sup> 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).

<sup>3</sup> A similar contribution existed prior to 1996, equivalent to 5 percent of salaries.

**Table All.4 Bolivia: Pension Contributions**

(Percentage of wages)

	<b>Employee</b>		<b>Independent</b>	
	Old System	New System	Old System	New System
<b>Worker's contribution</b>				
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%
<b>Total worker's contribution (minimum)</b>	<b>12.21%</b>	<b>12.71%</b>	<b>13.92%</b>	<b>14.42%</b>
<b>Employer's contribution</b>				
Seguro de invalidez y muerte por riesgo profesional	1.71%	1.71%	-	-
Contribution to Solidarity Fund 3/	-	3%	-	-
<b>Total Employer's contribution 3/</b>	<b>1.71%</b>	<b>4.71%</b>	<b>-</b>	<b>-</b>

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

<b>Guidelines for investment 1/</b>	
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.<sup>4</sup>

<sup>4</sup> 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.