

The Devil's in the Dance: Elements of a Growth Diagnostic in Bolivia

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Growth Lab Working Paper Series
No. 247

**August
2021**

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This paper may be referenced as follows: Cheston, T., Branisa, B., Kotti, R., Zavaleta, D. (2021). “The Devil’s in the Dance: Elements of a Growth Diagnostic in Bolivia.” Growth Lab Working Paper, John F. Kennedy School of Government, Harvard University.

Executive Summary

Bolivia's economy stands at a crossroads. Weakened by the fiscal and external imbalances triggered by the 2014 fall in gas prices and exacerbated by the COVID-19 pandemic, the country faces a complex challenge: how to reignite economic growth while restoring macroeconomic stability. This paper applies the Growth Diagnostic methodology to identify the most binding constraints to growth in Bolivia and proposes pathways forward for policy reform.

The paper presents Bolivia's growth syndrome as “**La Diablada**” or the dance of the devil—a dance between opposing priorities. On one side lies the need for fiscal consolidation to address mounting imbalances; on the other, an urgent need to stimulate demand and support recovery after the COVID-19 shock. This collision of policy needs creates a situation where missteps in either direction could be highly disruptive, risking either prolonged stagnation or macroeconomic crisis.

The paper finds that Bolivia's current growth model—heavily reliant on commodity-led rents and public sector-led investment—has reached its limits. The economic challenge is that the historical engine of growth in Bolivia—net government spending fueled by rising gas prices—cannot drive growth in the current period. Even a short-run recovery in gas prices belies the structural challenges in demand for gas exports in Argentina and Brazil, along with the supply of gas, in the lack of investments in new discovery. Structural weaknesses also include a rising wage bill dominated by public employment, the lack of foreign investment, and a lack of economic diversification into higher complexity sectors. Political uncertainty and institutional inefficiencies, especially among state-owned enterprises (SOEs), further erode the country's fiscal space and growth potential.

To manage current macroeconomic imbalances and lay the groundwork for inclusive growth, the government must prioritize the sequencing of actions across four key policy fronts:

1. **Fiscal Response:** Focus on increasing fiscal space to allow for stimulus to drive economic recovery, including smart fiscal consolidation, cutting unproductive spending—especially in loss-making SOEs and an inflated wage bill, while guarding against the recessionary pressures of fiscal consolidation.
2. **External Finance Response:** Maximize access to external finance while balancing debt sustainability. Foreign reserves risk not being able to cover medium-term debt obligations, if no action is taken.
3. **Monetary Response:** Restore confidence in monetary policy by preparing for a gradual move toward a more flexible exchange rate regime, supported by stronger institutions and clearer communication. Not addressing the overvalued boliviano risks a currency crisis, a balance of payments crisis, or both.
4. **Private Sector Response:** Shift the growth model by enabling private sector-led diversification, removing investment bottlenecks, and targeting support to export-oriented, higher-complexity sectors.

At stake is whether Bolivia can shift from managing crises to enabling a more resilient, inclusive, and sustainable future.

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I. The Growth Question in Bolivia

Bolivia's economy is no stranger to the booms and busts of its commodity-dependent growth model. Even for Bolivia, the current challenge is unique. The Covid-19 pandemic has severely impacted Bolivia in dual dimensions of health and economic outcomes. For a government operating with thin margins on public resources during good times, the Covid-19 pandemic has added a severe, short-run health crisis on top of deep fiscal and external imbalances resulting from a long-term adjustment to the 2014 fall in gas prices.

The pandemic has further exacerbated a period of political instability in Bolivia. The election of President Luis Arce of the *Movimiento al Socialismo* (MAS) in October 2020, along with a ruling party majority in the legislature, promises to restore governability. With over a decade's experience as Minister of Economy and Public Finance, President Arce's more technocratic background offers the potential for a more pragmatic approach to prioritize addressing the country's macro-fiscal imbalances. That those imbalances will need to be tackled through unpopular policies of fiscal consolidation or currency realignment will maintain the risk of political instability. The threat presented by the structural imbalances reach to the heart of the state-led development model started by the Morales administration in 2006, which relied on the expansionary fiscal policy fueled by rising gas revenues to drive high growth. Now, the fall in gas prices calls for prudent fiscal policy to be one of contraction, which will create further recessionary pressures.¹ On the other hand, delaying fiscal adjustment to accelerate economic recovery (and ease political uncertainty) would risk precipitating a balance of payments crisis, a debt crisis, or a larger depreciation than expected.

Disentangling the nature of these concurrent economic shocks, their duration, and distinct remedies must be the top priority for the Arce administration. This paper aims to diagnose the constraints to growth in Bolivia, along with the sources of those constraints and suggest policy priorities for the Arce administration to restore economic growth and prevent a deep, sustained recession.

During the latest boom cycle from 2004 to 2014, economic growth reached an average of 4.9 percent annually in Bolivia, according to the IMF, on the back of high commodity prices and prudent macroeconomic policy. The boom cycle generated real gains in the form of a reduction in poverty and inequality, as moderate poverty fell from 59 to 39 percent from 2005 to 2014 and the Gini coefficient decreased from 0.60 to 0.47 over the same period, according to the World Bank. These gains extended into other areas of social development, with steady progress in closing gaps in educational access for ethnic minorities as nearly all children attend primary and secondary school. Despite these gains, there are two notable features of this growth period: it is not exceptionally high for Bolivia, but falls in line with historical growth rates during commodity

¹ Some voices within the administration have claimed the global recovery from the pandemic has created an appetite for raw materials that may unleash a new commodity supercycle. While Bolivia has already begun to reap the benefits of higher non-traditional export commodity prices, this opportunity is more limited for hydrocarbon exports that face structural problems related to the lack of discovery, rising domestic consumption, and changes in demand in Argentina and Brazil. The growth in non-traditional export commodities may provide welcome relief to reduce the trade deficit, if they offer little support to the deep fiscal deficit.

boom cycles in Bolivia (Figure 1); and it is not exceptionally high for the region, but falls in line with regional averages during the period of high commodity prices (Figures 2 and 3).

The challenge for Bolivia is not in generating periods of higher growth, but in preventing the bust cycle of a deep recession that erases a decade's worth of the gains from growth. The last period of sustained high growth in Bolivia, during the stabilization period of the 1960s and 1970s, the resulting debt crisis of the 1980s eliminated most of the gains of the growth period.

The last time Bolivia sustained a growth period at this rate, the deep crisis that followed meant the economy would require 30 years to restore its previous GDP per capita level -- and only did so with the onset of the latest commodity boom cycle (Figure 1). As growth cratered with the pandemic to -7.7 percent in 2020, fears have risen of history repeating. Yet, for many reasons, Bolivia does not have another 30 years to wait to restore its current income level. Bolivia stands at the peak of its demographic window, with the majority (51 percent) of the population under 25 years old in 2020, according to the UN.

Can policymakers prevent the bust cycle of a deep, sustained recession that has historically followed the end of the boom period? Recent performance shows signs of concern: after the end of the commodity boom in 2014, the government has maintained high levels of public spending and the expansion of domestic credit, in an attempt to maintain the veil of high economic growth. If the boom period saw Bolivia's growth performance only fall in line with regional averages, as the region slowed down significantly after 2014, Bolivia had slightly outperformed the region in the pre-Covid-19 period, by slowing down less than the region. This has come at a high cost, however, as evidenced by the rapid rise in public debt and the erasure of most of the accumulated international reserves from the boom period. Rising macroeconomic imbalances begged the question of whether sustaining higher economic growth would risk inducing a crisis, even before the Covid-19 pandemic. The health crisis of Covid-19 has resulted in a severe economic recession and laid plain the deterioration of macroeconomic buffers. Poverty is on the rise. Moderate poverty rose from 31.1 to 37.5 percent in 2020 from the year prior even with transfers (CEPAL 2021).

II. The Competing Nature of Macroeconomic Shocks in Bolivia

The Covid-19 pandemic could hardly have come at a worse time for Bolivia. The economy was in the midst of a fiscal adjustment to the 2014 commodity price shock, an adjustment that officials had largely postponed, rapidly weakening the economy's finances. The devastating effects of the pandemic further required a massive increase in public health outlays and direct relief programs, just as the economy should have been entering a period of consolidation to ensure the country's debt remains on a sustainable path.

Bolivia must now confront shocks across multiple fronts with distinct causes -- and conflicting policy responses. The two primary shocks in Bolivia are:

- **Commodity price shock in 2014 (and 2020):** a long-term adjustment to new gas price expectations. This is a well-studied shock, with traditional remedies calling for fiscal consolidation and greater exchange rate flexibility. In effect, the government cannot stimulate its way out of this shock, as the source of recessionary pressures in the economy will be the need to cut back fiscal spending from the fall in hydrocarbon revenues.
- **COVID-19 health pandemic in 2020:** a novel, relatively short-term shock, that is not one shock but a series of shocks to supply (workers being able to work) and demand (global consumer spending), foreign direct investment (FDI), tourism, and remittances. The pandemic will leave fewer resources and greater needs, where the policy response would call for new fiscal outlays in health and social spending to get the pandemic under control.

The fiscal adjustment to lower long-term commodity prices is made more challenging by the Covid-19 pandemic, which calls for the opposing response of new fiscal stimulus. The conflicting nature of the policy responses to the two shocks is equivalent to the government needing to put its foot on the brakes just as it needs to put its other foot on the gas. The more the pandemic requires additional spending for health sectors, the more the government will have to cut spending in other areas. Getting the balance wrong risks a runaway pandemic with devastating economic and health outcomes, or too little adjustment risks inducing a macroeconomic crisis in the balance of payments, debt, currency, or some combination.

The diagnosis that Bolivia faces from these concurrent shocks is a short-term crisis on top of a long-term transition to a lower level of commodity incomes. This diagnosis holds important implications for policy. Countries can often spend their way out of short-term crises, as seen in the traditional Keynesian stimulus responses to the global financial crisis of 2008-2009 in which supply exceeded demand. This is not the right prescription in Bolivia, where the loss of gas revenues requires a cut in government spending. Officials have so far delayed that cut by running down reserves and taking on new debt, if no alternative financial source has been identified to stop the bleed, making the fiscal adjustment more pressing. Once the pandemic is under control, it will be the conscious government decision to cut fiscal spending that will slow down growth in Bolivia, particularly for those non-tradable services that depend on government demand. Spending one's way out of this downturn will not be possible in the medium-term, as it would only require a greater increase in revenues or future cut in spending.

The pandemic remains a clear and present danger to economic and health outcomes until at least 2023. Covid-19 has already led to 400,000 reported cases and claimed 15,000 lives in Bolivia by May 2021. Vaccination rollout in Bolivia has been slow, with only five percent of the population fully vaccinated by May 2021. Without the widespread availability of vaccines, the economic recovery in 2021 will remain uneven and dampened as the population remains at risk to new waves of infections. In relying on limited and delayed access to the Russian Sputnik V vaccine, the Chinese Sinopharm vaccine and the COVAX Facility led by the World Health Organization, Bolivia's Covid-19 vaccination campaign risks falling behind regional and global averages. Herd immunity is not expected to be reached until 2023, while economic output is not expected to reach pre-pandemic levels until 2024.

The persistence of Covid-19 in the context of a weak financial position risks inducing a crisis. The Arce administration has already shown its desire to support households in combating the pandemic by creating the *Bono Contra el Hambre*, a one-time cash transfer of Bs 1,000 (USD 145) for qualifying low-income households, injecting nearly 1.5 percent of GDP into the economy. This new stimulus comes on top of previous measures to increase public health outlays and social relief measures, including a reduction in value-added taxes on staple foods. The financial sector also received support through a loan-deferral program, reinforced through caps on lending rates and low reserve requirements. As officials wind down these support measures to address macro imbalances, the recovery will slow and rates will rise in the financial sector, creating new pressures. A weak recovery will raise pressures to inject new stimulus measures by effectively delaying fiscal consolidation.

Growth estimates for Bolivia in the 2022-2025 period fall well below pre-pandemic levels. Despite the prospect of recovering losses from the pandemic, real GDP growth will average a mere 1.8 percent annually, according to the Economic Intelligence Unit (EIU). The main constraints on growth will be the necessary fiscal consolidation driving weak private consumption domestically and the structural challenges to natural gas exports to Argentina and Brazil.

III. Boom, Bust, and Double Bust: Macroeconomic Trends in Bolivia over Three Periods

Macroeconomic trends in Bolivia have evolved over three distinct periods in the creation of the current binding constraint to growth. This section analyzes the source causes of the current macroeconomic imbalances during the periods of the fall in commodity prices and Covid-19, along with the policy choices made during the commodity boom cycle that set the current path. The section presents three periods of study: commodity boom (2000-2014); commodity bust (2015-present); and Covid-19 (2020-present).

A. The commodity price boom (2003 - 2014)

Between 2003 and 2014, Bolivia built a strong external position on the back of high commodity prices. In 2019, mineral resources accounted for 54% of Bolivia's USD 8.9bn exports (National Statistics Institute, INE), of which USD 2.7bn (31% of exports) stemmed from petroleum gas alone. As gas and commodity prices rose in the 2010s (Figure 4), Bolivia mechanically benefited from a strong external position supported by current account surpluses. Before prices plunged in 2014, the government pursued prudent macro-fiscal policy that led to the accumulation of record international reserves, covering up to 14 months' worth of imports (Figure 5).

High commodity prices led to an import boom that drove major increases in living standards. Imports more than tripled in real terms over the decade to 2014. In contrast to the increasing concentration of exports into primary commodities, imports grew across all sectors. Vehicle imports far outpaced all other imports, contributing to rising living standards. The next fastest growing imports were ICT services and industrial machinery. Even before the fall in commodity prices, the growth period in Bolivia led to a narrowing of the export base, while increasing the dependence on complex imports.

A surge in gas revenues allowed for expansionary fiscal policy to be a major driver of growth. Rising gas revenues allowed the Morales administration to pursue a state-led development model, in which import substitution and state-owned enterprises (SOEs) took on an outsized role in the economy. The growth period further concentrated the country's finances on a narrow set of natural resources for export and fiscal revenues. The growth model reinforced dependence on government spending, as those sectors that rely on government spending, including construction and retail services, experienced disproportionate gains over the period. During this period of fiscal expansion, the fastest growing sectors were primarily non-tradable services, including construction and retail and wholesale trade.

Officials cemented economic gains based on transitory commodity prices into enduring policy measures during the expansionary period, including the tripling of the minimum wage. With low historical reserve rates and an export basket concentrated in volatile commodities, structural weaknesses in Bolivia's balance of payments require the country's finances to rapidly adapt to shocks, rather than the desired approach of smoothing out spending adjustments over time. To cement transitory gains in commodity revenues with seemingly permanent increases in the

minimum wage, officials made future fiscal consolidation more likely and more challenging. Minimum wage reached a peak of 2,122 in 2019 (Figure 6) and remained stable since then, representing a 1.5 times increase since 2014 and a 6 times increase since 2000. In addition to wage gains, public sector employment also expanded by 24 percent over the period (INE). The combination of job creation and wage gains cemented in minimum wage policy will be hard to retract after the commodity price collapse. As commodity prices fell, the public sector minimum wage has not fallen. Officials constrained the politically supportable options available for fiscal adjustment during a period of fiscal contraction. By 2014, the wage bill represented 31 percent of government expenditure (INE).

B. The commodity crisis (2014 - 2019)

The collapse of commodity prices in 2014 reverberated through the economy, leading to major fall in exports and government revenues. From their peak in 2014, gas exports lost 69 percent of their value in two years (Figure 4). Gas production was not able to compensate for the fall in prices by reducing production, as the alternative to continuing to export gas is to flare the gas, generating no value. Amidst the sharp fall in gas prices, gas production in 2015 remained stable. By the end of 2017, gas production remained 13 percent below peak, while gas prices fell as low as half of their peak value. After a short recovery in 2018 and 2019, the global pandemic drove prices down again to 36 percent of their peak value. Hence, Bolivia's exports fell from USD 13.0bn in 2014 to USD 8.9bn in 2019 and USD 7.0bn in 2020 (BCB).

As exports fell, imports remained stable, inducing a large trade deficit. Imports are key to Bolivia's production. Capital goods, raw materials, and intermediate products have been responsible for more than 80 percent of the country's imports since 2014, leaving a narrow margin for adjustment. Imports remained stable at an average \$9.7bn between 2014 and 2019. As the pandemic response restricted mobility and work, the demand for imports shrank, falling to USD 7.1bn in 2020. As a result, Bolivia has been incurring a trade deficit since after 2014 until 2020 (Figure 7). Diminished import demand with the pandemic improved the current account, as the first semester of 2021 returned to an estimated trade surplus of USD 0.6bn, as imports have not recovered from the pandemic as fast as exports. As the economy recovers, the extent to which import demand recovers will risk increasing pressure on the balance of payments.

As Bolivia maintained its peg to the US dollar, the trade deficit further suffered from a real appreciation of the Boliviano. Maintaining a stable peg to the US dollar since 2011 has generated low inflation, at the cost of significant real appreciation of the boliviano following the fall in commodity prices. The real exchange rate has appreciated by 31% since 2014 (Figure 8) on the back of steady public spending, increases in the public sector minimum wage, and an appreciation of the US dollar (against which the Boliviano is pegged at BOB 6.91:1 USD) with respect to Bolivia's main partners' currencies (Brazil, Argentina, and Chile) (Figure 9). This dynamic hampered non-oil exporting sectors and hindered an adjustment in consumption good imports. An appreciating real exchange rate also encouraged smuggling at the border, which represented an undisclosed 26 percent of imports according to a governmental estimate for the period 2010 to 2014. Moreover, food imports have also experienced a steady increase between 2005 and 2015,

passing from 242.3 to 653.1 million dollars (National Institute of Statistics). The main products imported are industrial food products, wheat and wheat flour. Other products, traditionally produced by local producers, have also increased their imported share (corn, milk, etc.), increasing Bolivia's food dependency on foreign markets.

The collapse in commodity prices bled into weakened external financing, exacerbating the challenge to the balance of payments. The dependence of the economy on commodities includes the concentration of foreign direct investment (FDI) in commodity and non-tradable sectors. The fall in gas prices exposed the pro-cyclical nature of external financial inflows, which combined to worsen the government's financial position. The nationalization policy launched by the Morales administration in 2006 marked a break in the approach to foreign investment following the preceding period of "capitalization" defined by a wave of privatizations. The capitalization period led to a major uptick in FDI, which averaged 9.8 percent annually from 1995 to 2002. Despite the mantra of nationalization policy targeting foreign investors, FDI flows did not bottom out over the following period, as the commodity price boom led FDI to grow to US\$ 1,750 million in 2013. Rather, nationalization policy transformed the sectors targeted for FDI along with the major countries of origin, with the rise of Chinese investment. It was only after the collapse in commodity prices that the transformation in external financing was laid bare, as foreign investment has been diminishing since 2014, especially in the oil and gas sector. Net FDI has decreased from a positive \$0.6bn in 2014 to a negative \$0.2bn in 2019 and negative \$1.0bn in 2020, representing an average of 0.9 percent of GDP over the 2015-2019 period. After two decades as a significant source of finance, foreign investment now underperforms neighboring peers (e.g., Peru continues to attract an average of 3.6 percent of GDP in FDI after 2014, see Figure 10) and presents a net drag on finances. The nationalization policy in place risks hindering the potential for FDI to contribute positively to the balance of payments.

C. Navigating twin deficits amidst a pandemic (2020-present)

The end of the commodity boom in 2014 marked a new period of twin deficits in Bolivia across fiscal and current accounts. Immediately following the collapse in commodity prices, the government leveraged large fiscal and external deficits through the rapid rundown of reserves and increased public debt in order to afford a smaller slowdown in growth. Between 2015 and 2019, the fiscal deficit averaged 7.4 percent annually. Then the pandemic hit. Responding to the COVID-19 pandemic drove the fiscal deficit to 12.7 percent of GDP in 2020. The persistence of the pandemic alongside a sluggish economic recovery will lead to continued large fiscal deficits at the risk of a balance of payments crisis.

Bolivia has few structural means with which to finance these deficits in order to balance payments. Under a fixed exchange rate system, the trade deficit has historically been kept in check primarily through sharp cuts in imports to accompany any volatility in gas exports. During the boom of this commodity cycle, prudent fiscal policy led to a record accumulation of reserves, which offers a second means with which to fund deficits. Net FDI, which could have compensated for the trade deficit as well, has fallen into negative territory following the crisis and nationalization

policy. External debt has doubled from USD 6 billion in 2014 (18 percent of GDP) to USD 12.2 billion (33 percent of GDP) as of end of May 2021 (Figure 11).

Record reserves have proven a decidedly short-term financing mechanism, as reserves have fallen from their US\$ 15 billion peak in 2014 to US\$ 4.8 billion in May 2021. To support the exchange rate stability, the Central Bank has been drawing from reserves at an unsustainable pace (Figure 5). The Boliviano being pegged to the Dollar, and to compensate the outflow from the trade deficit and the financial account, the Central Bank of Bolivia has been intervening in the foreign exchange market, drawing international reserves down from an equivalent of 14 months of imports in 2014 to 6 months at the end of 2020, which is USD 5.3bn For the first semester of 2021, international reserves have been fluctuating even lower, between USD 4.5bn and USD 5.0bn. This represents 69% of the adequacy level estimated by the IMF, which deems safe a level between 100% and 150%. Considering further that over half of reserves are held in gold, therefore less liquid than international currency holdings, Bolivia has now little buffer to resist external shocks that could threaten the stability of its exchange rate.

Focusing on reserves masks the sharp rise in public debt, which has crossed into risky territory given the country's limited access to market finance abroad. The public debt-to-GDP ratio reached an estimated 71.6 percent in 2020. The government's need to maintain large fiscal deficits to contain the pandemic and to spur economic recovery presents a risk for the public debt burden to worsen before it can stabilize. If the government is to delay fiscal consolidation, the public debt burden could risk spiraling into a crisis. With a large share of public debt held in foreign currencies, a readjustment of the boliviano would have serious implications for the public debt burden. Competing pressures across macro-fiscal imbalances leave a significant risk of sovereign default in the coming period.

Despite the fall in commodity prices, Bolivia has only increased its dependency on state-led growth, particularly through the channel of SOEs. The Bolivian state owns over 75 companies in various sectors, ranging from oil and gas to food processing and consumer finance. SOE development was backed by advantageous and accessible financing directly from the Central Bank, to the extent that, in 2015, the public sector, including SOEs, accounted for 40 percent of GDP. However, as the commodity crisis hit, later followed by the pandemic, 85% of SOEs are running a deficit as of December 2020, according to Senator Andrea Barrientos. Central Bank credit to SOEs rose from near zero in 2011 to over BOB 37 billion (c. USD 5.4bn) in 2020, adding to the BOB 24 billion (c. USD 3.5bn) in Central Bank credit to the government as of 2020 (Figure 12).

The COVID-19 pandemic has decimated the country's finances, thrown the economy into a deep recession, and laid bare the underlying structural challenges in Bolivia that will hinder the ability for rapid, sustained recovery. Long-standing weaknesses include the prevalence of informal employment, low efficiency of social spending given the absence of targeting systems, and the lack of a diversified economic base, particularly in sectors that act countercyclically to gas prices. Prior to the pandemic, the primary complaint of firms in the latest 2017 World Bank Enterprise Survey is competing against informal firms. Informality, itself, appears a symptom of

economic constraints, of distinct potential sources: high costs of formalization; weak enforcement of formalization; high levels of competition with informal firms, etc.

The most striking feature of firm dynamics in Bolivia is not the prevalence of small, informal firms, but the absence of large, formal firms, particularly globally competitive, industrial firms. The challenge of informality in Bolivia is reminiscent of the phrase: “just because the tire is flat at the bottom, does not mean the hole is there.” In Bolivia, just because firms complain of competing with informal firms does not mean the solution is addressing the costs or enforcement of formalization. Diagnosing the cause as to why large firms are not being created or surviving in Bolivia opens up dozens of other possible root causes for their absence: an overvalued exchange rate, high-cost logistics, missing skills, coordination failures, etc. A few signals can rule out possible causes. It is telling that the few, large firms that exist are almost exclusively SOEs in the mining and gas sectors. Learning from the “positive deviance” of large firms operating in industrial sectors must be a priority for the Arce administration. Fortunately, firms are attempting to enter industrial sectors at scale through the creation of the *Parque Industrial Latinoamericano*, the largest industrial park in the Americas based in Santa Cruz. By concentrating infrastructure and logistics in one location, the industrial park has the potential to bypass several potential constraints to its success. Pioneering new industrial sectors is likely to also confront new constraints to firm output. In spending limited public resources, successful industrial parks are often those who do not create public goods to address pre-defined constraints, but those who are able to build the capability to identify and troubleshoot problems as they inevitably arise for investors. Whether officials can shift their approach to investment promotion from one of regulatory and legal “hold-up” to that of proactive investment attraction and troubleshooting investor problems remains to be seen, as it would require the creation of new public sector capabilities.

New complaints with the tax system reaffirms the structural weakness of the dependence on gas revenues. Among Bolivian firms, the main complaint that rose the most in the 2017 Enterprise Survey is the tax system. Assessing the root cause of that rising complaint between the 2010 and 2017 surveys found few changes in tax rates over that period; rather, as gas revenues shrank, government officials leaned on tax enforcement to recover falling revenues. Steep financial penalties were imposed on simple accounting errors, leading firms to add accountants to prevent incurring penalties. According to the 2020 Doing Business Indicators, Bolivian firms report that it takes 1,025 hours per year to prepare and pay their taxes--the highest total among reporting countries and more than 200 hours more than the next highest country. In essence, the source of the complaint with the tax system again reverts back to the narrow dependence of the tax base on gas revenues.

The narrow productive structure presents challenges to the ability to diversify the economy to generate new export and fiscal revenues (Figure 13). Bolivia ranks as the 115th most complex economy out of 133 economies in the Economic Complexity Index (ECI). A decade of research into economic complexity finds that countries who diversify the set of technological capabilities they have are able to diversify their production into increasingly more sophisticated economic activities and experience more rapid, sustained growth. Unfortunately for Bolivia, the country’s economic complexity performs poorly versus regional peers and has been worsening over time, as the economy was the 81st most complex economy in 2000. If structural transformation requires an

economy to learn to produce new things that it, by definition, does not know how to produce, then one constraint to Bolivia's growth process is related to the nature of technology itself: the limited range of Bolivia's existing capabilities fails to offer ready opportunities to redeploy those capabilities to enter new economic activities to meet the pace of diversification required for its growth ambitions (Figure 14).²

The initial economic recovery in early 2021 is being driven by the broad return to work for many sectors, as well as significant gains in mining. Through April 2021, the economy has returned to positive growth of 5.3 percent, according to government figures. The recovery is led by mining, which grew by 34.2 percent, along with hydrocarbons, at 10.0 percent, as global energy demand showed signs of strong recovery. Non-tradable services, including construction (17.9 percent), retail (8.4 percent) and other services (8.1 percent) also outpaced national average growth in the return to operations. This pattern of recovery raises warning signs for its sustainability as the fiscal outlook turns to consolidation in the coming years. Just as non-tradable services were some of the fastest growing sectors during fiscal expansion, the brunt of fiscal consolidation will be felt in declining demand for non-tradable sectors. During periods of fiscal contraction, the sector of the economy that continues to grow is the tradable sector, excluding commodities. One note of optimism is the rapid recovery of manufacturing industries, at 9.6 percent over the same period.

What have we learned from the three periods of recent economic history in Bolivia? Record-high commodity prices in Bolivia did not bring about a growth boom, as growth fell in line with regional averages due in part to prudent fiscal savings that strengthened the external position. Growth only outperformed the region during the fall in commodity prices as the government postponed the necessary fiscal adjustment to allow for a smaller slowdown in growth at the cost of a rapid rundown in reserves and accumulation of public debt. Just as the government had largely exhausted its record savings, the pandemic hit, leaving the government to run even larger fiscal deficits in an increasingly stark tradeoff between short-term stimulus and balancing its payments to prevent a macroeconomic crisis. The three historical options to finance the deficit: reserves, public debt, and external borrowing, are all tapped out just as the potential for a prolonged pandemic creates a need for continued supports. Across the full commodity cycle, record reserves were unable to finance a major transformation in the underlying economy, as the narrow dependence on commodities and government spending remain alongside the preexisting structural constraints.

² Pioneering firms in new industrial sectors must accommodate the wild swings of growth cycles: commodity booms that drive periods of fiscal expansions and higher returns to those non-tradable sectors dependent on government demand; and commodity busts characterized by fiscal consolidation and economic recessions with few resources to support manufacturing firms. Export-oriented manufacturing faces further challenges to its success to add new knowhow, sustain its workforce amidst competing demands, and to operate outside of government support.

IV. Avenues to Unlock Growth Potential in Bolivia: Avoiding a Crisis and Accelerating a Sustained Recovery in Growth

The growth syndrome in Bolivia is “*La Diablada*,” or the Dance of the Devil, in the need to balance the macro-fiscal pressures of a sizable fiscal adjustment alongside the need to stimulate economic recovery and keep the pandemic at bay. Swaying too much in either direction could be ruinous: too little stimulus risks a weak economic recovery, while too strong a stimulus with delays to fiscal adjustment risks inducing a crisis across a series of potential sources in the balance of payments, debt, or currency. The challenge is not only in the magnitude of spending but the quality of that spending to spur short-run recovery and to support the creation of dynamic, new economic sectors in the medium-term. The type of spending required for short-term recovery and medium-term diversification are distinct and, in the context of required fiscal adjustment, will be competing trade-offs moving forward. The choices the government makes in the next three years will determine not only whether Bolivia can hold off a prolonged, deep recession, but whether it can build a new sustainable model of growth for the long-run.

The economic challenge is that the historical engine of growth in Bolivia -- net government spending fueled by rising gas prices -- cannot drive growth in the current period. Even a short-run recovery in gas prices belies the structural weaknesses in demand for gas exports in Argentina and Brazil along with the lack of investments in the discovery of new reserves. Bolivia further lacks alternative sources of growth to counteract the fall in commodity exports. Key sources of finance (e.g. FDI) operate pro-cyclically with commodity prices, increasing the economic volatility during the current period of downturns in prices. During this period of fiscal adjustment, the only way to sustain growth is to develop a new engine of growth: to diversify into new export-oriented sectors that are not dependent on falling government demand.

In managing the delicate balance of timing fiscal stimulus and adjustment, alongside short- and medium-term spending trade-offs, the sequencing of reform actions will matter. This section explores four dimensions of the government response to manage current macro-imbalances: (1) fiscal response; (2) external finance response; (3) monetary response; and (4) private sector response.

1. Fiscal Response

The first-best response for the government would be to create new fiscal space to get the pandemic under control and to stimulate economic recovery. What new revenues may arise? In December 2020, Congress approved a new wealth tax. To date, the tax has failed to generate significant revenue (0.05 percent of GDP so far) and holds little potential for ramp-up to make a dent in the large public deficit. A digital services tax proposed by the Arce administration is equally likely to swiftly pass through Congress if equally unlikely to raise significant revenue, as even the government estimates potential revenue of 0.04 percent of GDP.

The potential for rising commodity prices masks the medium-term shortfall in the quantity of gas exports, if new discoveries are not made. Hopes have risen on the recovery of gas and mineral prices in early 2021, as non-traditional commodity exports show a 63 percent increase in

value in the first six months of 2021 as compared to the same period the year prior. Mineral exports have grown 97 percent over the same period, while hydrocarbon exports are down one percent. Non-gas commodities may offer much needed relief to the trade balance, but little improvement in the fiscal outlook. For Bolivia, natural gas prices adjust with a six-month delay, such that natural gas output, and therefore gas revenues for the government, will remain low for most of the calendar year. Gas exports face additional risks. Far from a perfect market, gas exports are geographically constrained, where one of the greatest risks results from the decline in demand from primary destinations of Brazil and Argentina. The fall in gas reserves in Bolivia has led Brazil to begin negotiating to purchase its energy from Argentina by building a gas pipeline between the two countries. Gas exports must also compete with rising domestic gas consumption. Household gas connections have risen sharply to cover one million households by January 2021, where gas is provided below prevailing market rates. A lack of investment in new gas discoveries further thwart Bolivia's gas export futures. Gas reserves in Bolivia have continuously trended downward and risk depletion if discovery is not prioritized. The discovery process is also among the most sensitive investments given fears of appropriation of any discovery by the government, as is a clear risk in Bolivia. At current rates of gas depletion, Bolivia risks exhausting its proven reserves by 2028, with estimates noting that reduced consumption may stretch reserves for an additional 8 years (YPFB 2020).

The fiscal space for fresh stimulus has narrowed significantly, if not closed, due to the unsustainable rundown of reserves and rapid rise of public debt-to-GDP that has reached risky territory. The fiscal deficit is expected to improve slightly in 2021, due to the recovery of fiscal revenues, the drawing back of COVID-19 stimulus responses, and the slowing of spending and wage growth. Nevertheless, the magnitude of required spending cuts through 2025 is significant, at six percent of GDP in total. A sustainable fiscal path would see the fiscal deficit to fall from 12.7 percent of GDP in 2020 to 2 percent in 2025.

Prudent fiscal policy calls for a period of fiscal consolidation, in which the slowdown in government spending will drive new recessionary pressures. The need for additional funds for the health sector to fight the pandemic will only require further cuts in spending in other areas. How the government makes those cuts will be a major determinant on growth in the period. The more the government cuts imports, or its spending abroad, the less the impact will be felt in job losses, with multiplier effects across the economy, vis-a-vis spending cuts that result in large-scale job losses domestically. Given the size of the adjustment required, consolidation must extend beyond the winddown of stimulus measures to include real cuts to current expenditures, including rolling back the rapid rise in the wage bill, and capital expenditures, including public and SOE investment projects. The approach to fiscal consolidation should include efforts to rationalize spending, particularly among underperforming SOEs that are operating at losses and are not serving clear public value. By addressing SOE efficiency and more progressive targeting of social policies, there appears to be space to achieve fiscal consolidation while continuing to make progress in social indicators and poverty reduction.

2. External Finance Response

Given the absence of new fiscal revenue sources to finance short-run fiscal stimulus, maximizing access to external finance must be a top priority, while balancing debt sustainability. The initial approach taken by the Arce administration is to focus on debt relief on multilateral and bilateral obligations for two years, while continuing to meet private obligations. Foreign reserves should be positioned to cover immediate amortization payments, though known, medium-term debt obligations remain in doubt, if no action is taken. Upcoming private obligations due in 2022-2023 include Eurobond amortizations on the order of US\$ 1 billion and US\$ 300 million in interest payments. The president is reasonably targeting the largest source of external debt, with multilaterals comprising 60 percent of the total, with another 18 percent in bilateral debt. Whether multilateral creditors will offer debt relief without measures to restructure private debt remains to be seen. What is clear is that the government is left with few alternatives. In the scenario that the government is unable to broker a deal on debt relief, this would force the president to consider the lender of last resort: an IMF program. Weak political support for an IMF program would raise risks of fissures within the MAS party. Amidst the onset of the pandemic in 2020, the IMF's rapid financing instrument granted a US\$ 327 million loan to Bolivia during the interim government--before the MAS-dominated Congress blocked the loan and returned it to the IMF even as the pandemic raged. The lack of political support for this path raises the stakes to reach a deal on debt relief.

Other sources of external finance, particularly FDI, offer potential upside in the medium-term if they would require a policy shift. The pandemic decimated financial flows to developing countries, exacerbating the already weak FDI levels in Bolivia due to the pro-cyclical nature of investment flows with commodity prices in the country. Attracting new sources of foreign investment would help ease pressures on the balance of payments, as FDI flows as a share of GDP have fallen two to four percentage points lower in Bolivia versus comparators. Accessing these major potential inflows would require a break from the nationalization policy of the past decade and a half to provide assurance that the government will not appropriate foreign investments. Bolivia would also have to make inroads in attracting a new type of FDI: efficiency-seeking, in contrast to the natural resource-seeking and market-seeking FDI. Existing FDI types are the easiest to attract as production must be located in the country in order to access the raw materials or consumers, respectively. Efficiency-seeking FDI is the most sensitive to policy change, as production is not geographically-bound but can be shipped around the world to access a country's consumers; investors therefore select a locale for being the most efficient place to operate. Making Bolivia a destination for efficient production requires close institutional coordination to address bottlenecks as they arise in the provision of public goods. Bolivia currently has fewer capabilities in attracting and coordinating new investments, rather treating foreign investment as a regulatory matter, a means of revenue extraction, or occasionally as a source of foreign control. Attracting a sizable increase in FDI would ultimately require Bolivia to diversify the source country of FDI away from its recent concentration in Chinese inflows, which would require a new strategy. Bolivia has an opportunity to transform its FDI with the *Parque Industrial Latinoamericano*, to create success cases for more complex industries to attract related investors to enter new tradable

industries. The potential of FDI as a growing source of income hinges on the success of the park, if the success of the park is by no means guaranteed.

3. Monetary Response

The stated preference of officials to ensure the stability of the exchange rate has secured stable, low inflation despite multiple, severe shocks, but is also responsible for rising macroeconomic imbalances with the overvalued currency. Other commodity-driven economies with more flexible exchange rates experienced significant devaluations over the period. By standing by the peg, the Boliviano is overvalued, hindering the prospects of non-commodity exports, such as agriculture. Given the rapid rundown of reserves and rise in public debt, public confidence in the ability for the central bank to maintain the peg has weakened in real terms and in future expectations. Balance of payments pressures will grow with time, calling for greater exchange rate flexibility to address the growing imbalance.

By not addressing the overvalued boliviano, the government risks a currency crisis, a balance of payments crisis, or both. Conversely, a one-off devaluation may increase prices sharply, hurting the economic recovery and risking political support for the new administration. Transitioning to greater exchange rate flexibility requires adequate preparation and capabilities that are not being exercised at the central bank. A disorderly adjustment would risk leaving inflation expectations unanchored. At the same time, delaying the adjustment, or not taking action altogether, would risk inducing a balance of payments crisis that may require a sharper devaluation than currently foreseen. Ultimately, addressing the overvaluation would prevent a continued loss of reserves, increase the prospects for non-commodity exports, and improve the economic resilience to future shocks.

Addressing the overvalued boliviano further reduces the spending cuts required by the government. Current discussions approach fiscal adjustment through demand-cutting policies; whether by collecting new revenues or cutting spending. What is missing is demand-shifting policy, which moves demand away from imports toward higher domestic output. The most direct demand-shifting policy is a real depreciation; this would make imports relatively more expensive and exports less expensive in such a way that would reduce the fiscal adjustment required. Few aspects of demand-cutting policy under consideration would support this policy need to shift the composition of demand away from imports into domestic output. By not addressing the rapid rise in the public sector minimum wage, the fiscal adjustment would risk shifting relative prices in the wrong direction. Demand-shifting policy would improve the external balance with the least contractionary effect. This improves the competitiveness of Bolivian firms.

4. Private Sector Response:

The only way to maintain growth during this medium-term period of fiscal adjustment to lower gas revenues is to transform the base economic model by diversifying into new exportable sectors, of increasingly greater complexity. Bolivia must learn to grow without the expansionary fiscal policy that has been its recent source of economic dynamism. An economic model driven by expansionary fiscal policy built a private sector concentrated in non-tradable

services that are focused on supplying domestic demand. Transforming the economic model toward diversification has today become essential to sustaining income levels.

Only non-oil tradable (i.e. exportable) activities can serve as a sustainable driver of growth in Bolivia in the medium term. This transformation must be achieved during a period of fiscal consolidation, when a primary source of domestic demand for goods and services (government) is declining. In turn, employment and investment to supply domestic demand will also face weak or declining growth prospects. As a result, the main sources of demand will be declining in Bolivia over the coming period — with one exception: exports. The global demand for goods and services will continue to expand over the coming period, which, in relation to the current low starting base of Bolivia’s non-commodity exports, offers near infinite growth potential. During fiscal consolidation, the global-domestic differences in potential growth markets for Bolivia’s goods will reach an all-or-nothing scale, respectively. This is the reason why non-commodity exports must be the priority in Bolivia for the coming period.

Sustaining growth during the coming period of fiscal consolidation depends on the economy’s ability to diversify into new areas of exportable production, outside of commodities. This diagnostic allows for a framework to assess the government’s national strategy. In this view, policy priority should be given to spending that makes output and investment in non-commodity exportable activities more attractive or more feasible. As fiscal consolidation creates a drag on growth, officials will face rising pressures to divert resources to shore up those industries facing declining demand. This will increasingly come at the expense of using those funds to provide the public inputs toward facilitating investments that can pioneer new exportable industries to advance job creation and economic dynamism. As resources become increasingly scarce and spending areas become competing priorities, these two approaches will present competing paradigms: to slow the death of the past or to build the future of Bolivia.

What industries may drive diversification in Bolivia given existing capabilities? Our research identifies promising opportunities in three sectors:

- **Industrial Machinery:** the highest value cluster of opportunity is in heavy machinery, particularly in building on domestic demand to gradually gain export competitiveness, including in excavation machinery, agricultural processing machinery, and soil preparation and harvesting machinery
- **Vehicles:** as a high-risk, high-reward sector not as related to existing capabilities, segments of vehicles appear to hold opportunities, including parts of railway cars, work trucks, goods transport vehicles, and trailers.
- **Processed agriculture:** Opportunities exist to use existing base of capabilities to enter new areas of paper materials (e.g. fiberboard and packing boxes), as well as in liquid beverages and animal products.

The identification of high-potential sectors for diversification is not included here for use as an end product from which the government should “pick winners” but offers a starting point to orient efforts at investment promotion as a search to understand what constrains these sectors from taking off. Targeting heavy machinery and vehicle sectors likely require firms that start large

(i.e. few machinery start-ups exist) and require significant infrastructure to operate (vs. a software company that only requires internet access to write code).

Investment policy would do well to recognize Bolivia's promising sectors will not be achieved through SME policy or start-up financing but require significant coordination to attract firms that start large. These modern industries require the coordination of hundreds of inputs, including many public goods, to be present for a firm to be productive. The challenge is that governments rarely know which input is in relatively scarcest supply that is constraining output. Industrial policy in Bolivia has traditionally aimed to internalize that problem by nationalizing firms through heavy spending on SOEs or by subsidizing inputs or credit to firms. A better approach to industrial policy in Bolivia would be to admit the government does not know which public goods are missing that would allow for new investments, but to build new capabilities as a "smart coordinator" to reveal information as to what may constrain investments.

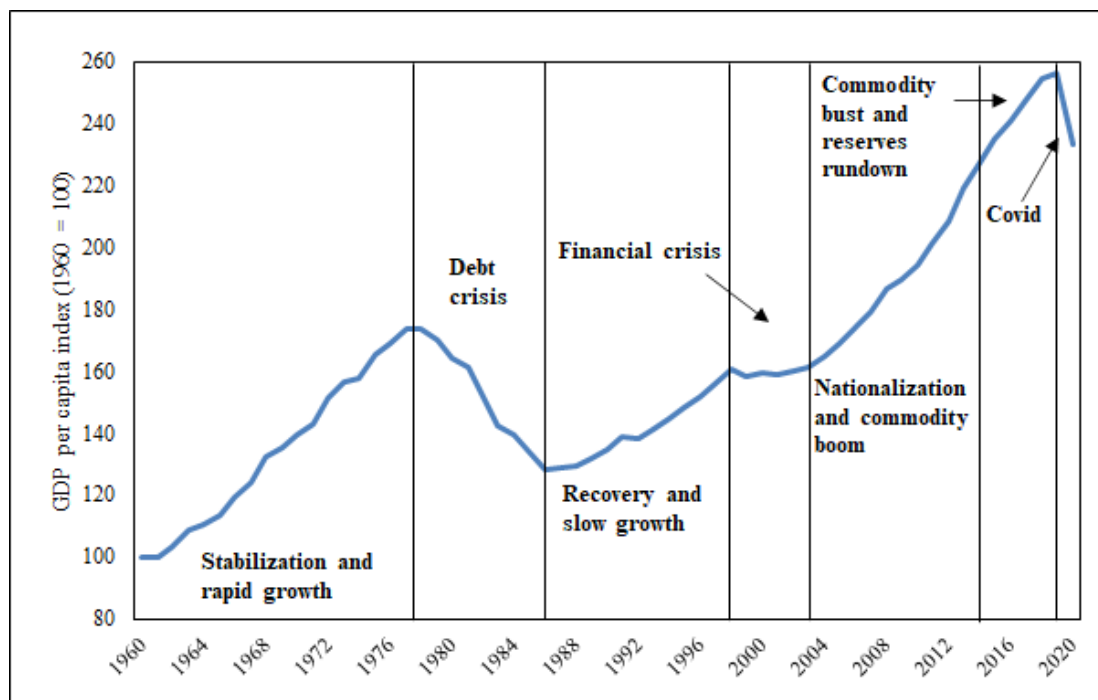
Policymakers must break from the mindset of viewing policy as a set of instruments, inputs, or incentives, to one of creating problem-solving organizations with the capabilities to promote and attract investment. Ultimately, the easiest reform in Bolivia may be in managing the balance between fiscal stimulus and consolidation. What remains unproven is the ability to align strategy around a solution that will stop the current financial bleed: to build the new industries that will generate the revenues, jobs, and growth to rebalance the economy for the future. In our view, this starts by reorienting policy to focus on coordinating diversification into new export-oriented sectors.

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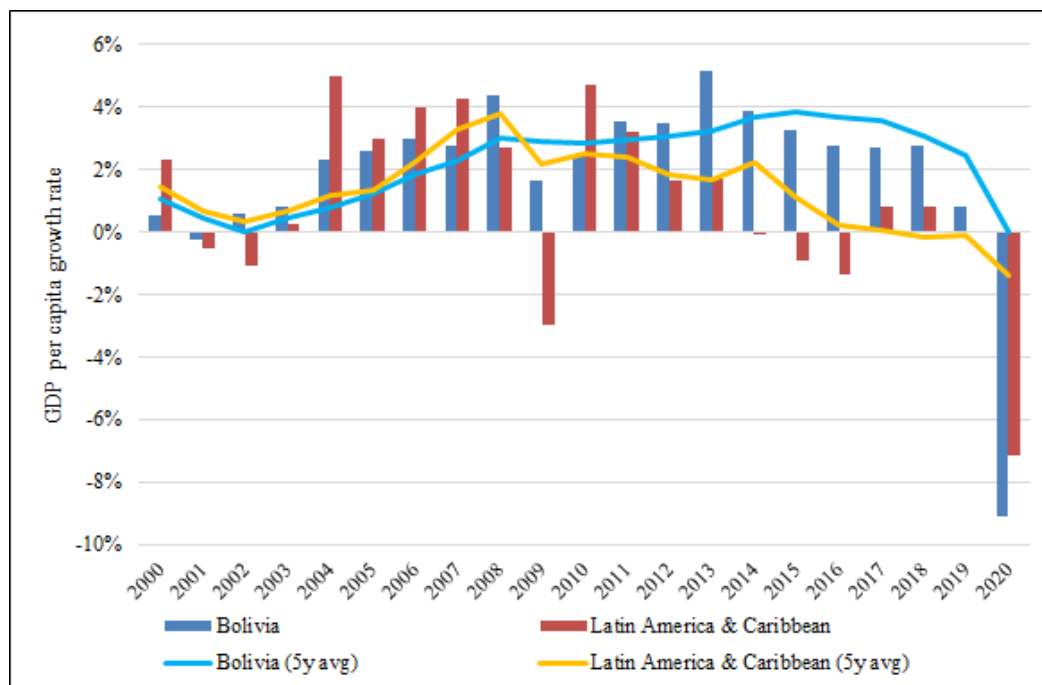
Appendix 1: Figures

Figure 1: GDP Growth in Bolivia since 1960: real GDP per working-age person.



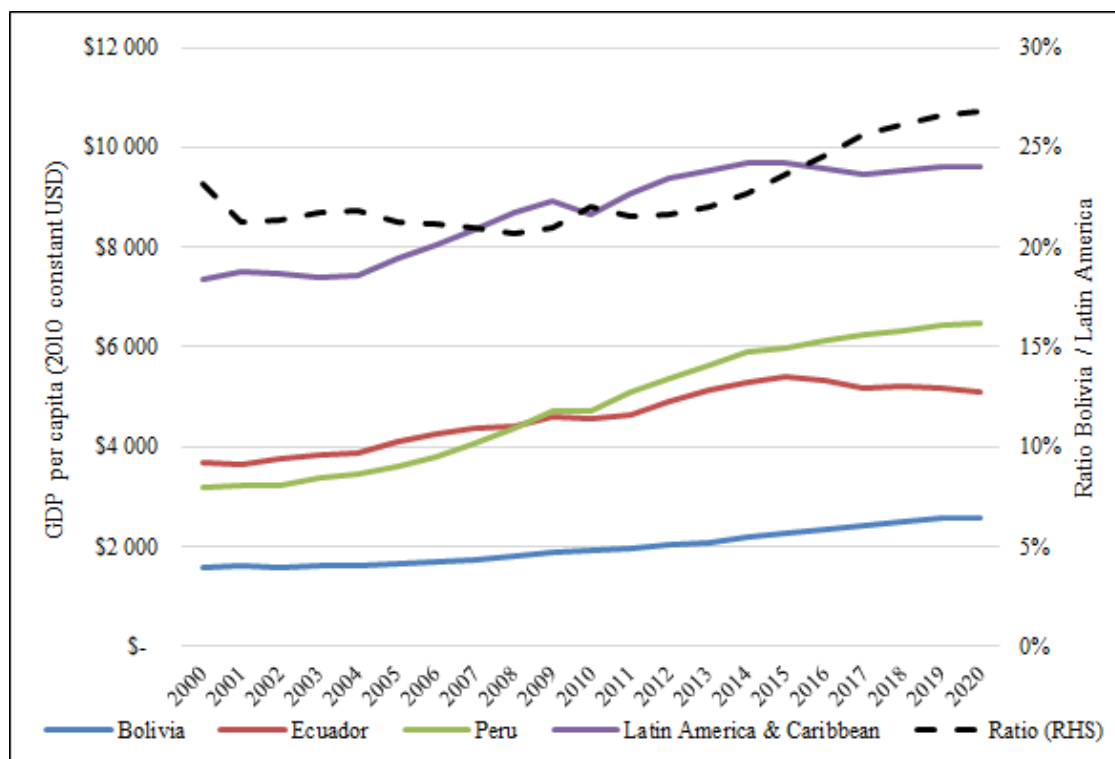
Sources: World Economic Outlook. Adapted from Kehoe et al. (2019).

Figure 2: GDP per capita growth, Bolivia compared to Latin America and the Caribbean.



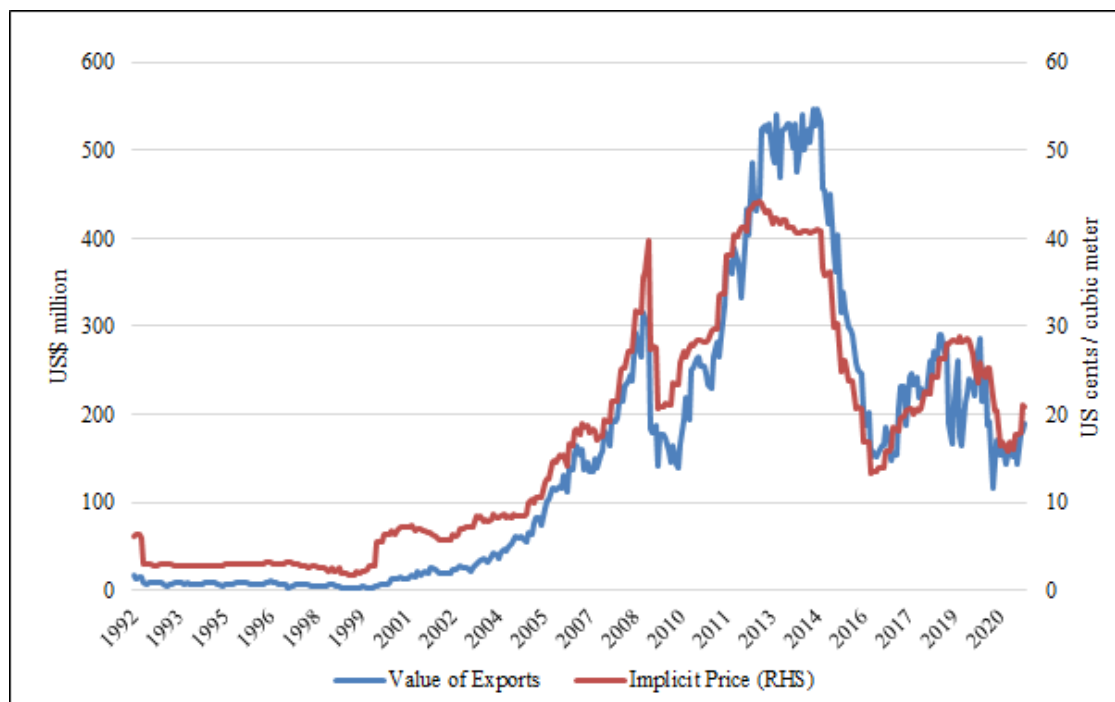
Source: World Economic Outlook

Figure 3: GDP per capita, Bolivia compared to peers.



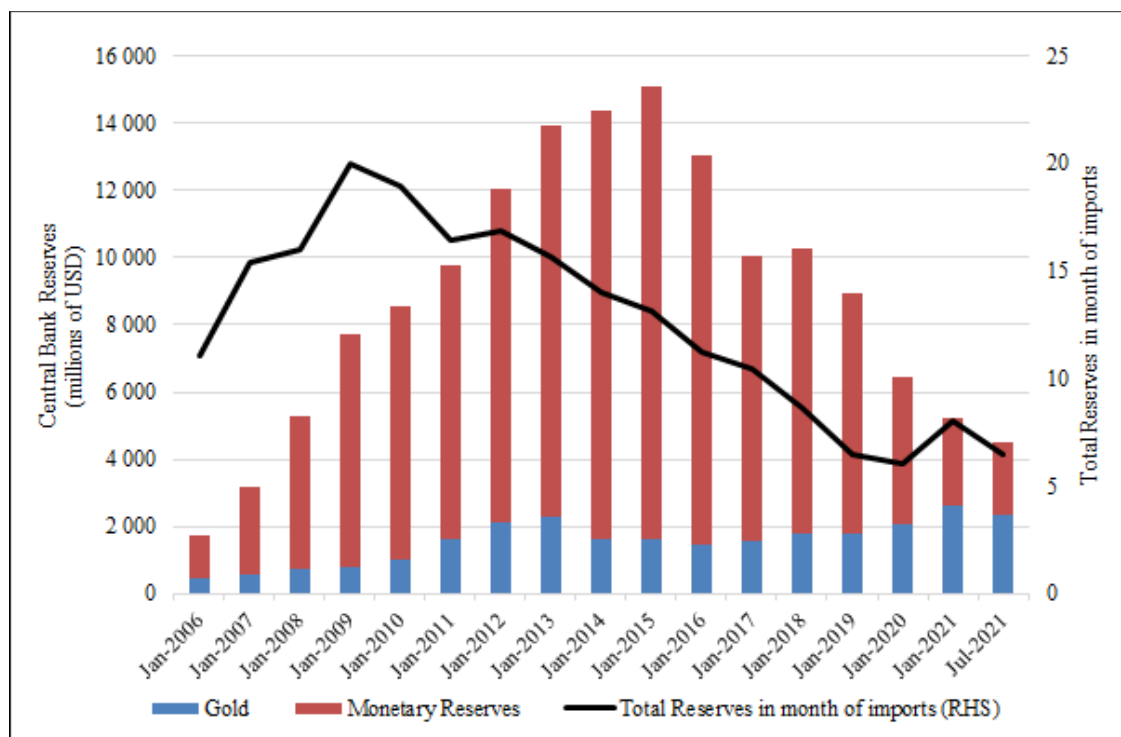
Source: World Economic Outlook

Figure 4: Natural gas exports, volume and prices.



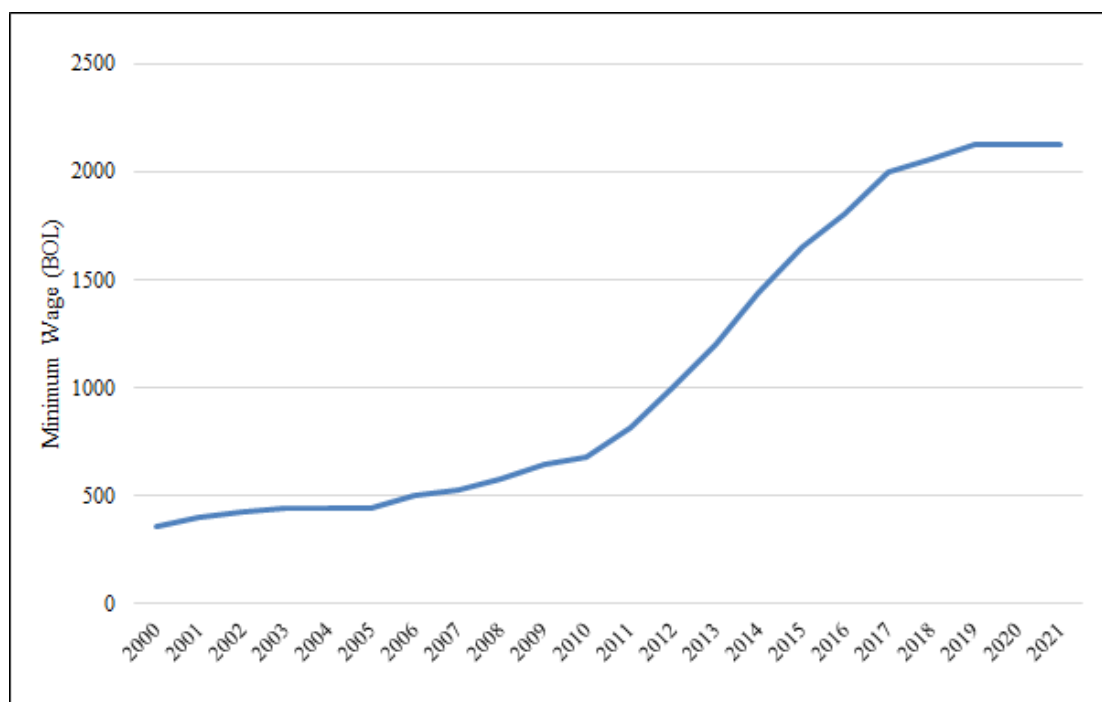
Source: Central Bank of Bolivia

Figure 5: Central Bank reserves.



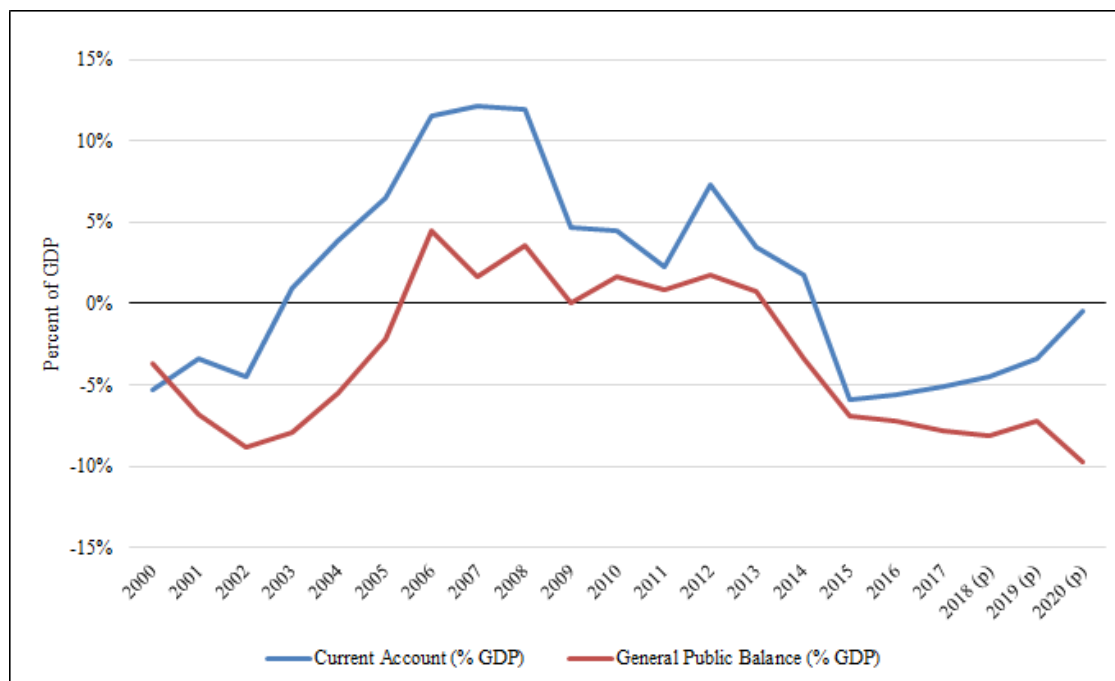
Sources: IMF, Central Bank of Bolivia

Figure 6: Boliviano minimum nominal wage.



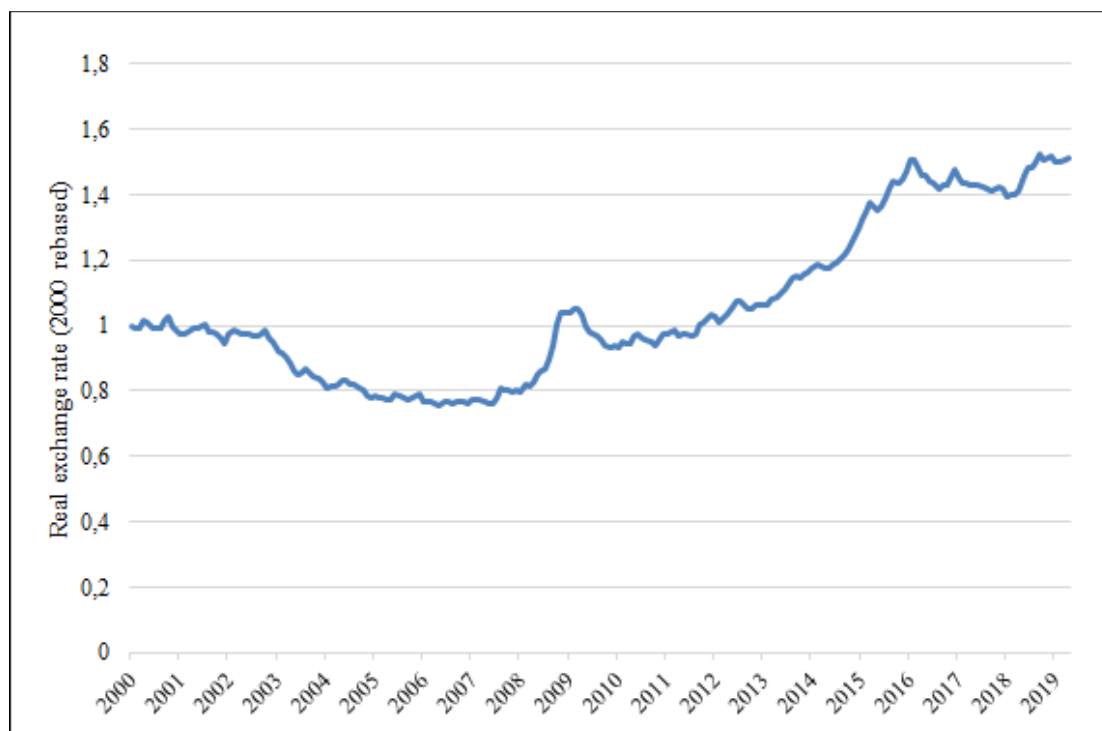
Source: Central Bank of Bolivia

Figure 7: Bolivia internal and external balance.



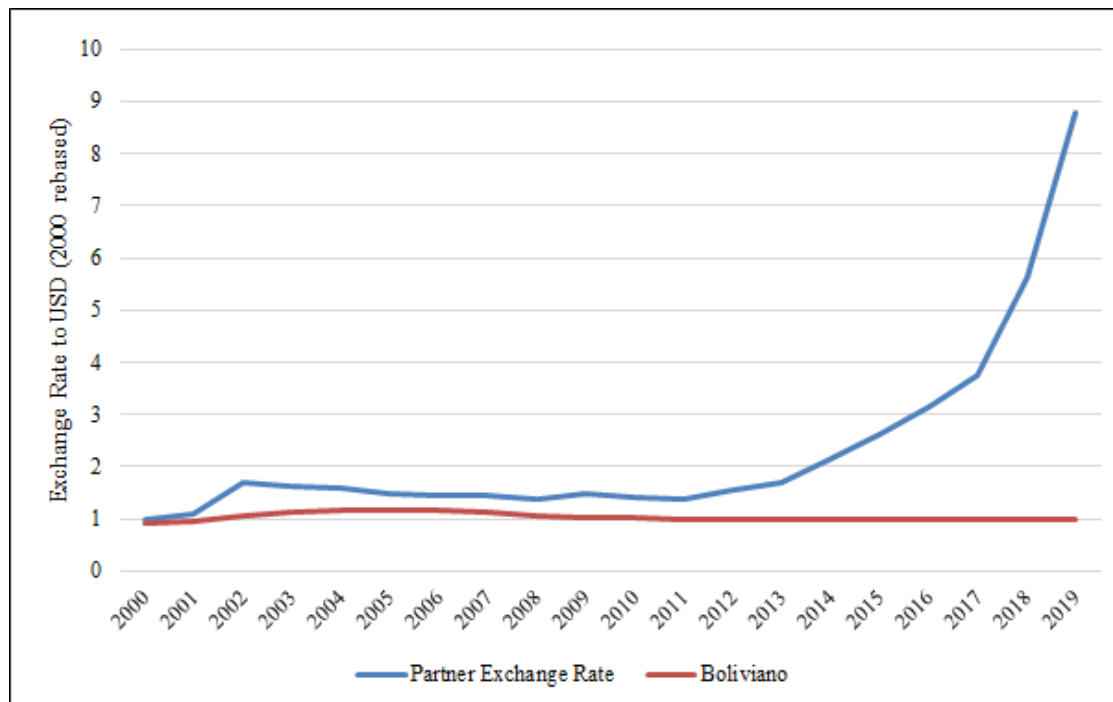
Source: World Bank

Figure 8: Bolivian real exchange rate.



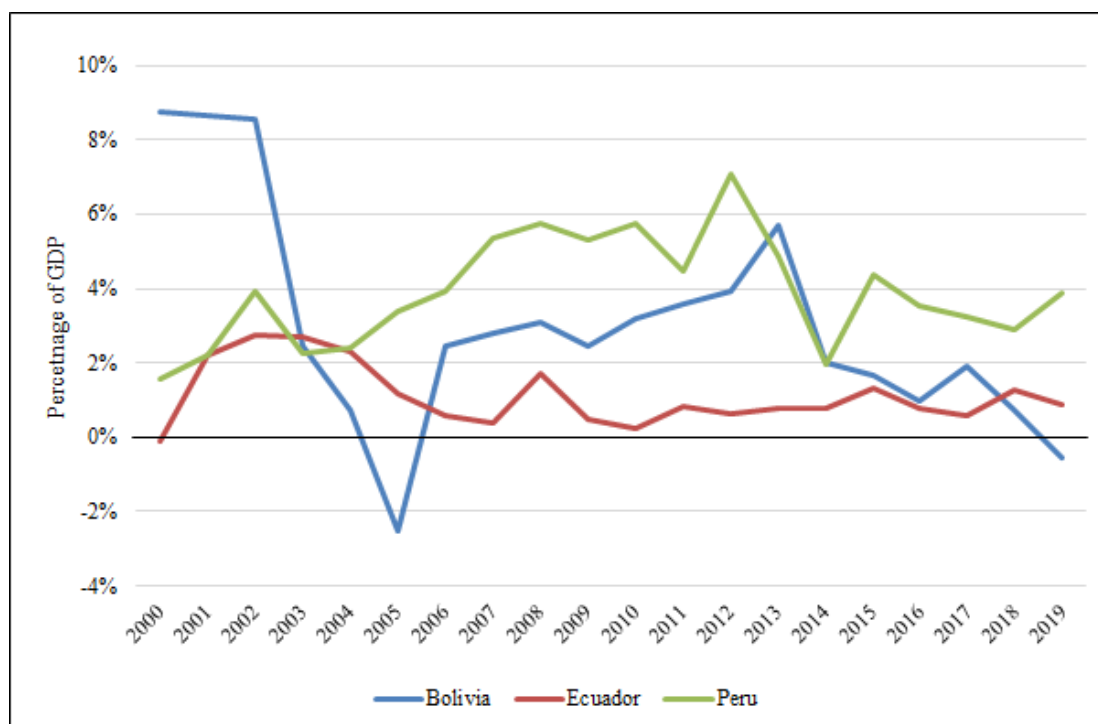
Source: Bruegel

Figure 9: Boliviano exchange rate to USD compared to import partners (weighted average).



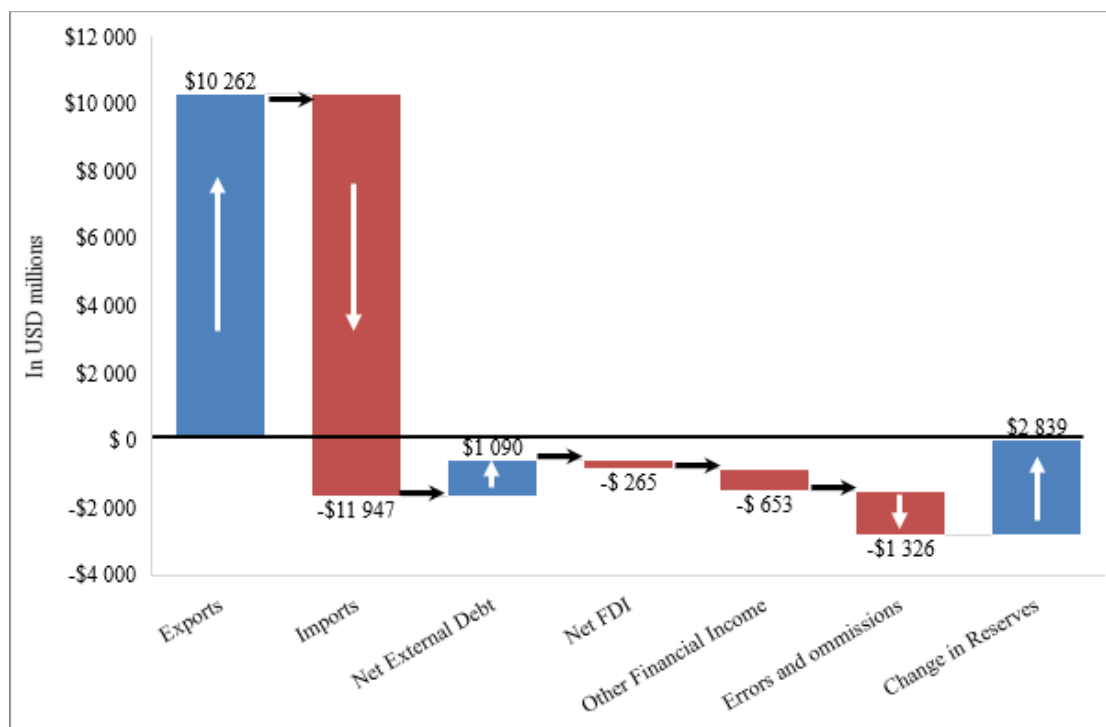
Sources: World Bank, Central Bank of Bolivia

Figure 10: Foreign Direct Investment (FDIs) in Bolivia compared to peers.



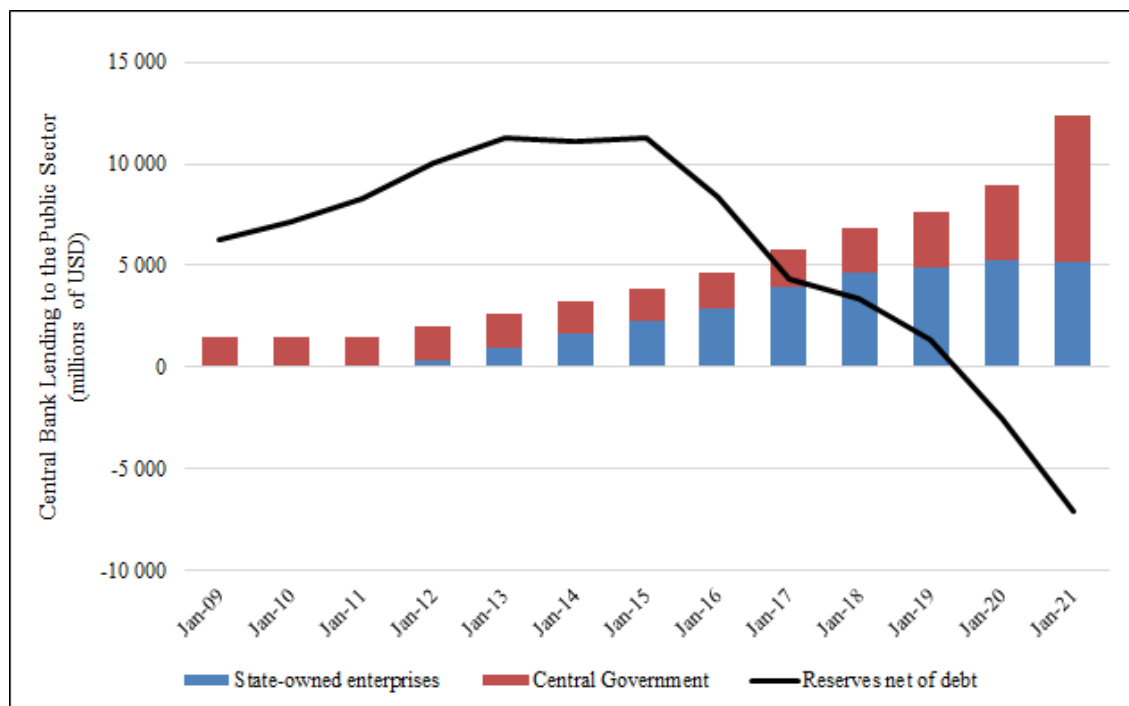
Source: World Bank

Figure 11: 2019 Bolivia balance of payment decomposition.



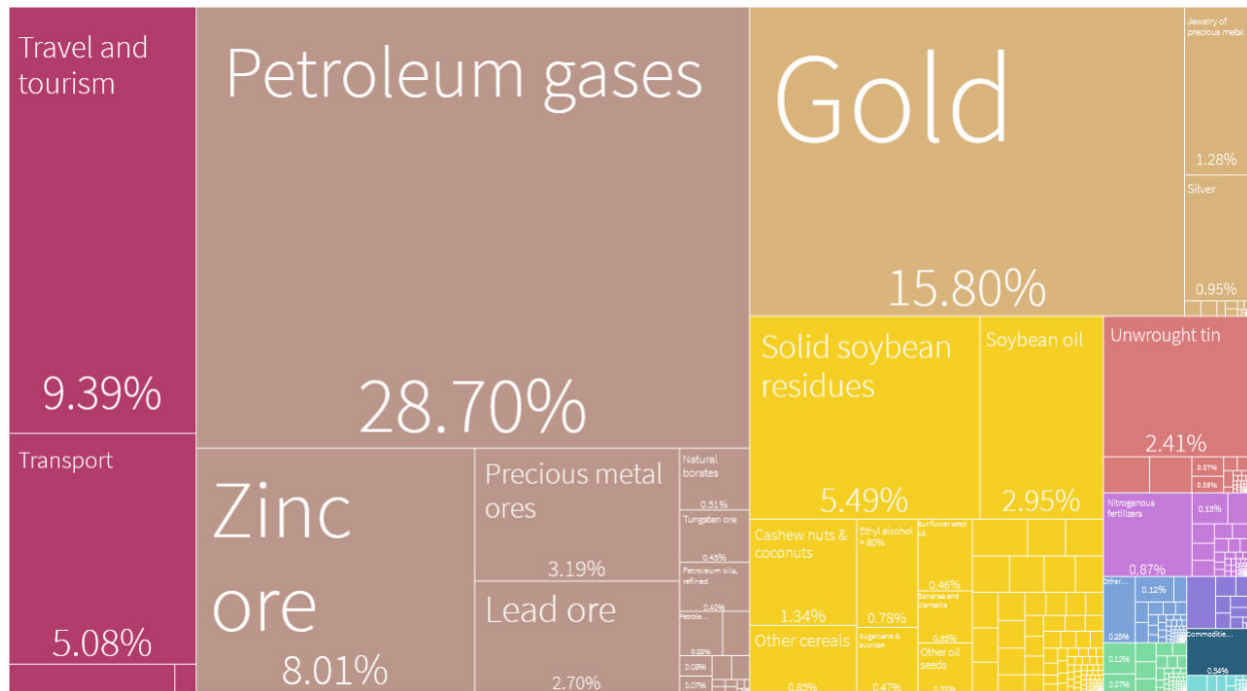
Source: IMF BoP Database

Figure 12: Central Bank lending to the public sector.



Sources: IMF, Central Bank of Bolivia

Source: Atlas of Economic Complexity



Source: Atlas of Economic Complexity

