EXECUTIVE BOARD MEETING

SM/18/244*
Correction 1

November 8, 2018

To: Members of the Executive Board

From: The Acting Secretary

Subject: **Chile—Staff Report for the 2018 Article IV Consultation**

Board Action:	The attached corrections to the reissued staff report SM/18/261 (11/7/18) have been provided by the staff:
Mischaracterizations of the Views of the Authorities	**Page 11 (para. 25)**
Evident Ambiguity	**Pages 4, 5, 6, 11 (panel footnotes), 21 (para. 46, lines 2 and 3), 23 (third panel, second line title), 31, 33, 35 (footnotes), 36 (footnotes)**
Factual Errors Not Affecting the Presentation of Staff's Analysis or Views	**Pages 8, 12, 13, 15 (second bullet), 21 (para. 46, line 7), 32, 35 (data), 36 (data), 47**
Typographical Errors	**Pages 7, 15 (first bullet), 18, 23 (third panel, first line), 26, 36 ("of goods" added; "Sources:"), 42**
Additional Information	The attached corrections are being issued as a correction 1 to the reissued staff report for the 2018 Article IV consultation with Chile (SM/17/261, 11/7/18). The corrections are unchanged from SM/18/244, Cor. 1 (11/6/18).
Questions:	Mr. Ricci, WHD (ext. 36007) Mr. Hadzi-Vaskov, WHD (ext. 34614)

***The staff report (SM/18/244, 10/24/18) has been reissued to reflect an administrative error. The corrections in SM/18/244, Cor. 1 have been incorporated into SM/18/261.**

CONTEXT

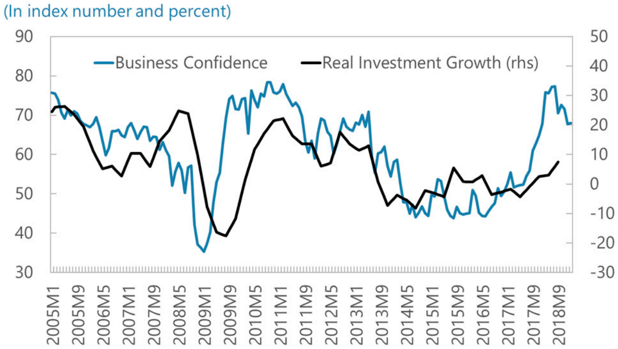
1. **Chile's economy remains grounded in strong fundamentals, solid institutional frameworks, and a sound track record of macroeconomic policies.** Such attributes have helped the economy through the adjustment to sizable external shocks, given high openness and exposure to global developments. The new administration of President Sebastián Piñera, which took office on March 11, aims to reinvigorate investment, improve competitiveness, and boost economic growth through a series of structural reforms, within the context of five national agreements (*acuerdos nacionales*) with broad constituencies.

CHILE'S ECONOMIC RECOVERY GAINS MOMENTUM

2. **The economy proved resilient through the prolonged slowdown.** While several adverse shocks (e.g., related to copper, trading partner growth, and domestic policy uncertainty) affected economic activity in the recent past (see Selected Issues Paper), the economy proved its resilience, supported by expansionary monetary and fiscal policies as well as a free floating exchange rate regime, and avoided an outright recession. Nonetheless, per capita GDP growth averaged only 1 percent in the past four years (down from 4 percent during 1990-2013) and last year GDP growth reached only 1.5 percent, bottoming out in 2017Q1.

Business Confidence and Investment

(In index number and percent)

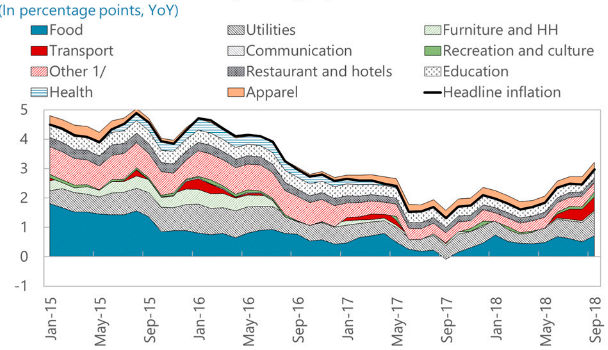


Note: Business Confidence is the average of the trade and manufacturing future expectations about the general condition of business indices.
Sources: Central Bank of Chile and ICARE.

3. **Improved external conditions and lower domestic policy uncertainty have favored an economic rebound in the first half of 2018.** Growth reached 5.3 percent yoy in 2018Q2, the highest since 2012Q3. The recovery has been supported by mining exports and improving consumer and business confidence, resulting in robust private consumption and buoyant investment (4.5 and 7.1 percent yoy in 2018Q2, respectively). Inflation has been close to the lower bound (2 percent) of the target range until May 2018, and has risen to 3.1 percent in September, partly driven by energy prices and the peso depreciation. However, core inflation remains subdued (2.1 percent in September).

Inflation Contributions by Category

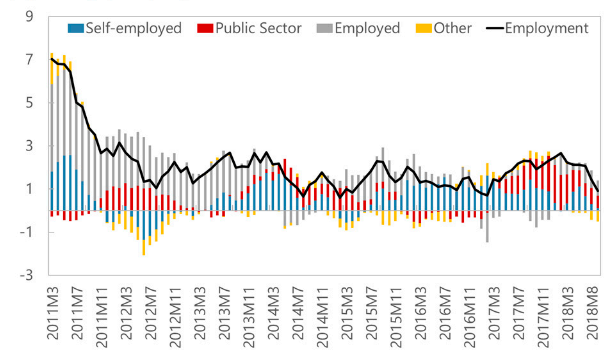
(In percentage points, YoY)



1/ Includes other goods and services, and alcoholic beverages and tobacco.
Source: INE.

4. Unemployment edged up, while the quality of job growth improved. The unemployment rate reached 7.3 percent in August 2018, as labor force growth outpaced employment. On a positive note, private-sector salaried jobs accounted for an increasing employment share, while contribution from public sector jobs and self-employed declined, which may in part reflect a reversal of the previous shift toward self-employment and public-sector jobs that helped keep unemployment low during the downturn. The remaining slack in the labor market is likely to have contributed to the protracted slowdown in real wage earnings growth, which continued its decline and was virtually null in July.

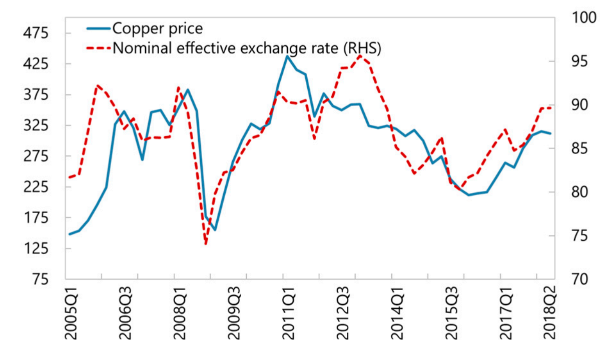
Contributions to Employment Growth
(In percentage points, YoY)



Sources: INE and IMF staff calculations.

5. Terms-of-trade fluctuations have driven the current account and the exchange rate. The current account deficit narrowed from 4.1 percent of GDP in 2013 to 1.5 percent in 2017, helped initially by a peso depreciation, then by a strong compression in investment-related imports and a rebound in copper prices that led to an 11 percent increase in the terms-of-trade in 2017. Import growth increased strongly since the last quarter of 2017, led by import-intensive business investment.

Nominal Effective Exchange Rate and Copper Price
(In USD cents and index, 1998Q1=100)



Sources: INS and SONAMI.

6. Monetary policy remains accommodative. The central bank cut policy rates by a cumulative 100 bps from January to May 2017 and has kept the rate at 2.5 percent until October 2018, when it raised the rate to 2.75 percent. The monetary policy stance was ~~only~~ mildly accommodative from mid-2017 till early 2018—given the marked growth slowdown and the deceleration in inflation—but since mid-2018 it has become more accommodative with the pickup in economic activity and inflation.

7. After years of consistent deterioration, the fiscal balance is at a turning point. The structural deficit in 2017 was 2 percent of GDP, 0.4 percentage point wider than the structural deficit in 2016 on comparable parameters basis[1] (rather than 0.25 percentage point lower as set in the fiscal targets for 2017). The headline fiscal deficit in 2017 was 2.8 percent of GDP, wider than the structural deficit because of the considerable negative output gap. The fiscal deficit in the first half of 2018 was reported at 0.1 percent of GDP, close to the first-half outcomes registered over the past four years. Following the sovereign credit rating downgrades by Fitch and Standard & Poor's in 2017Q3,

[1] This methodology was used since 2015 to compare structural balance results across years and was replaced in 2018 by the pre-2015 methodology that calculates the structural balance using the parameters in the budget for the corresponding year.

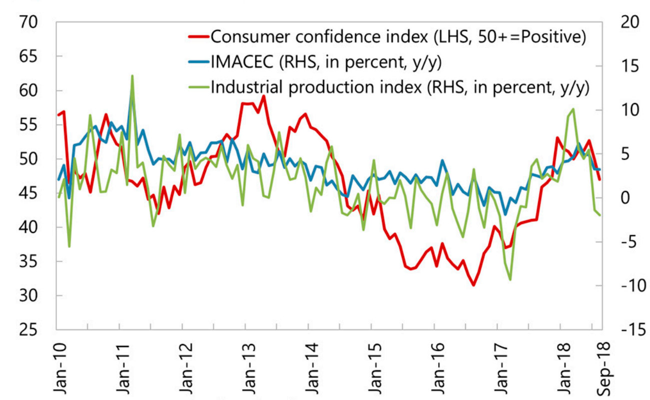
Moody's also lowered Chile's rating in July 2018, arguing that the planned fiscal consolidation would not be sufficient to reverse the significant debt increase that occurred over the past decade.

8. Financial conditions have remained stable and are roughly neutral. Despite increasing distress in emerging markets lately, Chile's CDS and bond spreads have remained stable, and are generally lower than regional peers. House prices and household mortgage growth slowed down in 2016-17, in part due to the effect of a regulation tightening bank provisioning on high LTV-loans and the introduction of VAT on new houses in 2016. Corporate debt remains high by international standards (see Selected Issues Paper).

A. Outlook and Risks

9. The growth momentum is continuing but at a slower pace relative to the strong performance of the first half of 2018. After the significant rebound in 2018H1, GDP growth is expected to slow down (partly due to a base effect from solid growth in 2017H2) in line with the recent softening of economic activity and confidence. Accordingly, growth is projected at 4 percent in 2018. As the output gap closes and monetary policy normalizes, GDP growth should converge to its medium-term potential estimated at about 3 percent (based on the staff projections and historical productivity growth over the past two decades). The unemployment rate is projected to move toward its neutral rate of around 6 percent, as slackness is reabsorbed, participation picks up, and the quality of job composition improves.

IMACEC, Consumer Confidence, and Industrial Production
(In percent and index number)



Sources: INE and Adimark Gfk.

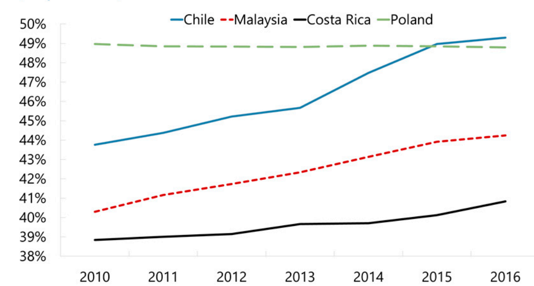
10. While headline inflation is close to the target level, core inflation remains low. Headline inflation rose to 3.1 percent in September 2018, reflecting higher fuel prices, the peso's recent depreciation and the closing of the output gap. However, core inflation is picking up more slowly, partly dragged down by residual slackness in the labor market (as also suggested by the slow wage growth), and the weakening of economic activity since mid-2018.

11. The current account deficit is expected to widen slightly as the economy expands. Staff projects a decline in the goods trade balance (from 2.9 percent in 2017 to 2.0 percent in 2018 and 1.6 percent of GDP in 2019) due to a strong increase in imports, largely related to the investment recovery, and a terms-of-trade worsening. In turn, the decline in the trade balance should result in a widening of the current account deficit to 2.5 and 2.7 percent of GDP in 2018 and 2019, before narrowing to about 2 percent of GDP over the medium term. Staff assesses Chile's external position and exchange rate to be broadly in line with medium-term fundamentals and desirable policies (Annex II).

12. **Risks appear balanced** (Risk Assessment Matrix, Annex V). *External risks* stem from both financial and trade sources. Rising protectionism could lead to further declines in copper prices, denting fiscal revenues and growth prospects. A sharp tightening of global financial conditions, notably from a faster-than-expected monetary tightening in the U.S., could pass through onto domestic rates, thereby dampening growth. Weaker-than-expected trading partners' growth (especially China) would affect copper and other exports. Domestic *upside risks* may result from a stronger-than-expected rebound in investment, including due to recently-announced structural reforms. Domestic *downside risks* could arise mainly from new cyber-attacks and high leverage in the non-financial corporate sector and increasing household debt (see Selected Issues Paper). Nonetheless, staff and authorities agree that these latter risks are mitigated from the fact that such leverage is associated either with debt to parent companies or long maturity and exchange rate hedging, as well as from the recovery in economic activity and expected improvement in the labor market.

13. **The financial sector is healthy and resilient, but risks remain especially via macro-financial linkages.** The banking system is generally well-capitalized at present and non-performing loans remain~~ed~~ low at about 2 percent of total loans, notwithstanding the prolonged economic slowdown. Going forward, banks will need to increase capital to meet Basel III minimum solvency requirements in line with the new banking law, and higher global rates will pass through onto local rates; however, better economic prospects should lower credit risks. The planned pension reform could provide higher long-term stable funding for banks and more room for credit expansion, though possible risks from limited absorptive capacity may arise. In recent years, Chile significantly closed the financial access gender gap, via 'simplified deposit accounts' requiring only national identification and no employment history.

Share of Female Borrowers
(In percent)



Source: IMF 2018 SDN "Women in Finance: A Case for Closing Gaps."

Authorities' Views

14. **The authorities (the Central Bank and the Ministry of Finance) expect the economy to grow 4-4½ percent in 2018 and 3¼-4¼ percent in 2019, largely owing to a rebound in private investment.** They estimate trend growth over the medium term at 3½ percent. The Ministry of Finance estimates that the effect of planned reforms (which is not included in the staff projections) might increase trend growth to 4 percent. In terms of risks, the authorities concurred with staff's view that downside risks mainly stem from the uncertain external environment, underlining the importance of global trade tensions and China's growth performance. They consider spillovers from countries in the region to be rather limited at present. They do not see significant concerns originating from corporate sector debt given the extent of hedging mechanisms. Moreover, in light of Chilean firms' sizeable foreign-based operations, they believe measuring indebtedness as a percentage of domestic GDP underestimates balance sheet strengths.

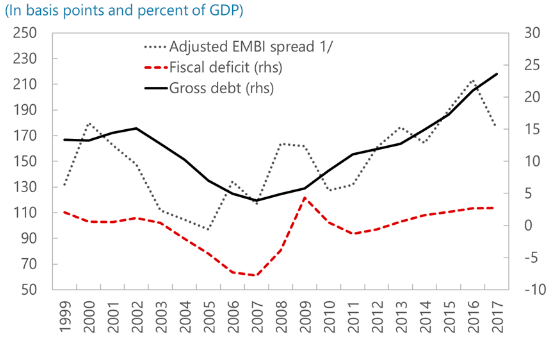
MACROECONOMIC POLICIES

A. Fiscal Policy

15. While Chile's fiscal position deteriorated over the past decade, it still remains solid. Between 2007 and 2017, gross debt rose by nearly 20 percentage points of GDP, accompanied by an increase in spreads. The recent sovereign downgrades point to a deterioration of market perceptions of Chile's debt position. Nonetheless, the public net-debt position (about 5 percent of GDP in 2017) remains strong by international standards and provides some fiscal space to smooth growth shocks, support potential growth, and continue social inclusion programs. Such flexibility could only be exploited to the extent that market credibility has been adequately strengthened.

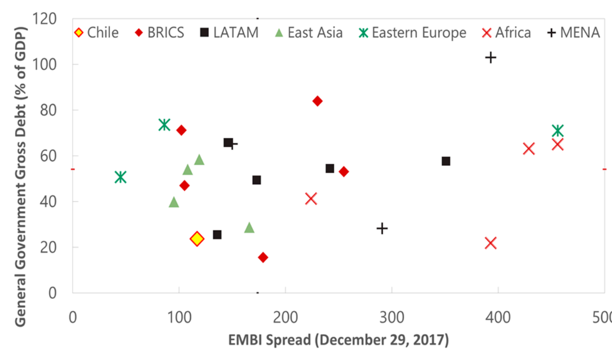
16. The announced gradual fiscal consolidation should enhance policy credibility and stabilize debt over the next few years. The fiscal targets over the next four years entail an improvement in the structural balance by 0.2 percent of GDP per year. The consolidation path aims to strike a balance between addressing spending challenges and stabilizing debt over the medium term. In the staff projections, the authorities' consolidation plans will be sufficient to stabilize debt as a share of GDP by the early 2020s (see Annex IV).

Fiscal Deficit, Gross Debt, and Sovereign Debt Premium
(In basis points and percent of GDP)



1/ Adjusted EMBI spread is net of the effect of VIX and copper price (through a regression).
Sources: Central Bank of Chile, Ministry of Finance, Bloomberg, and Fund staff calculations.

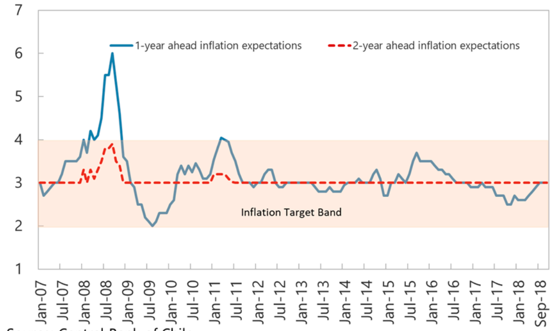
EMBI and Debt-to-GDP, 2017



Source: WEO and JP Morgan EMBI Global Index

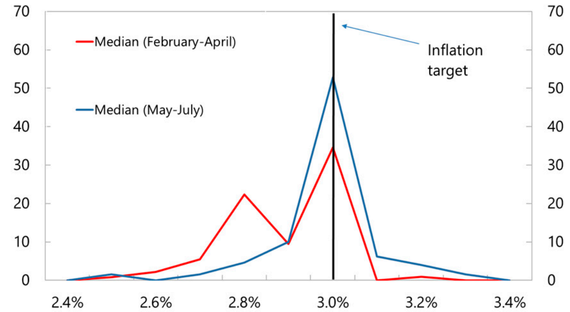
17. The overall fiscal deficit will narrow substantially this year. The authorities have announced a series of austerity measures to cut government expenditure by US$4.~~6~~4 billion between 2018 and 2022 to make room for the government's priority spending. At the same time, the authorities indicated they inherited unbudgeted expenditures (mainly health-related) in the amount of US$5.6 billion over the same period, now included in the baseline. In 2018, staff expects the fiscal balance to improve substantially vis-à-vis 2017 by about 1 percentage point of GDP to minus 1.7 percent of GDP (after deteriorating since 2013), due to an increase in actual mining revenues and a decline in expenditure as a share of GDP. As structural revenues (in percent of GDP) decline due to the narrowing of the output gap, meeting the structural balance target requires lower expenditure to GDP (see Annex III for further details). Overall, the 2018 staff fiscal projections are similar to the authorities' ones, in percent of GDP. In 2019, staff expects the fiscal balance to worsen slightly with

Inflation Expectations at 1 and 2 Years 1/
(12- month variation, in percent)



Source: Central Bank of Chile.
1/ Inflation expectations come from the "Encuesta de Expectativas Economicas (EEE)."

Distribution of Inflation Expectations at 24 Months 1/
(In percent of respondents, surveys February2018-July2018)



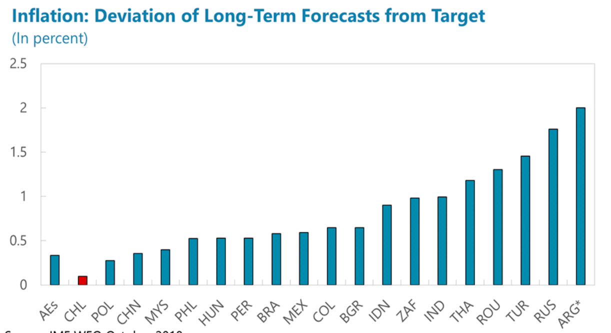
Sources: Central Bank of Chile and IMF staff calculations.
1/ Inflation expectations come from the "Encuesta de Operadores Financieros (EOF)."

23. Monetary policy normalization should be undertaken cautiously. Despite the pickup in economic activity since 2017 and in headline inflation since 2018Q2, the tightening cycle should be guided by evidence of a persistent convergence of inflation towards the target that is supported by a broad set of indicators. On the one hand, the pickup in economic activity and headline inflation point to the need of a fast tightening pace. On the other hand, the large gap between headline and core inflation (mainly driven by factors such as energy prices and the peso depreciation), the remaining slack in the labor market, weak earnings growth, and the recent signs of moderation in economic activity (notably industrial production) and confidence constitute key additional factors to determine the pace of the tightening cycle. In this context, the evolution of external and domestic risks would need to be given careful consideration. Staff expects a gradual convergence of the policy rate toward its medium-term level (estimated between 4 and 5 percent), which—on the basis of current expectations—should occur by 2020.

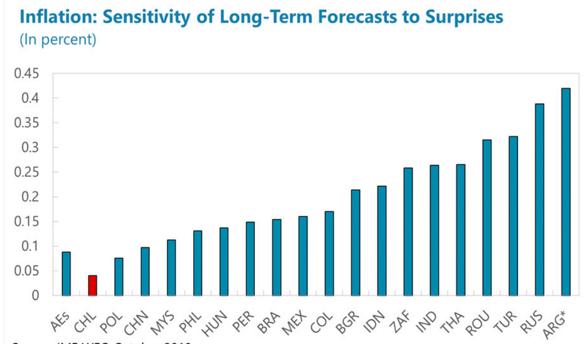
24. The revamped communication strategy by the central bank is welcome. The authorities aligned the release of the Monetary Policy Report (4 times a year) to the policy meetings, introduced regular press conferences, and reduced the number of meetings from twelve to eight (a frequency in line with many other central banks). Staff expects these changes to further enhance the already strong central bank's communication policy. Staff analysis (Pescatori 2018), indeed, shows that the past communication framework (thanks to its transparency and the clarity of its monetary policy report) has improved over time and has generally delivered a highly-predictable monetary policy conduct (especially after the great financial crisis). Predictability, in turn, has helped minimize unwarranted financial market volatility and improved monetary policy effectiveness, inducing an adequate management of private sector expectations.

Authorities' Views

25. The authorities broadly concurred with staff's assessment. However, the Central Bank considers that the labor market has been more dynamic than implied by official statistics, due to some rapid demographic changes that have been observed. They also expect a more visible pickup in core inflation in the rest of 2018, partly due to 2017-base effects, ~~.~~and estimate a smaller range for the neutral policy rate (4-4½ percent).



Source: IMF WEO October 2018.
Note: Deviation is calculated as the root-mean-square of the difference between inflation forecasts and the target.

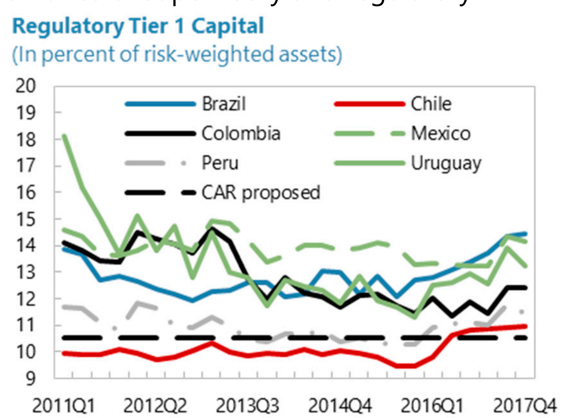


Source: IMF WEO October 2018.
Note: Sensitivity is the coefficient that is obtained by regressing the change in the mean of short-term inflation forecasts on the mean of long-term inflation forecasts.

FINANCIAL SECTOR

A. The New Banking Law and Financial Sector Stability

26. The new general banking law will bolster the sector's resilience, but additional efforts are necessary. [3] The new law is an important step forward towards enhancing the resilience of Chile's financial system. It aims at closing the gap with Basel III minimum capital requirements, providing new financial stabilization tools, and improving the governance of supervisory and regulatory agencies. Banks have six years to increase the minimum total solvency requirement to 10.5 percent from 8 percent of risk-weighted assets (RWA). The law also mandates a capital surcharge of up to 3.5 percent of RWA for systemically-important domestic banks. The authorities estimate the capital needs at about 0.5 percent of GDP (excluding *Banco del Estado*), which appears manageable without posing undue constraints to credit supply under the baseline scenario. In addition, the authorities already passed a regulation imposing on banks a minimum liquidity requirement equivalent to 60 percent of the liquidity coverage ratio, gradually increasing to 100 percent over 5 years.



Sources: Haver Analytics; IMF, Financial Soundness Indicators database; and national authorities.

27. The law provides additional macro-prudential tools. It gives the central bank the authority to set counter-cyclical capital buffers with the aim of increasing the resilience of the banking system. The financial market commission (CMF), recently created, will set capital surcharges

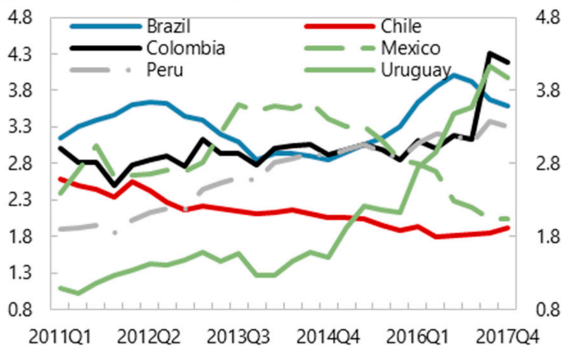
[3] The law allows the authorities to move forward on the implementation of the Basel III framework, however, it does not incorporate other important recommendations of the 2011 FSAP with respect to powers for consolidated supervision and the resolution regime.

for systemically-important institutions. In both cases, however, methodological and governance details are still left to be clarified.

28. The newly established CMF, once fully implemented, will put the regulator in a better position to supervise conglomerates, reduce data gaps, and offer the potential for exploiting synergies, although room for further improvement remains. The CMF now incorporates the former securities and insurance superintendence (SVS) and ~~is expected to~~will incorporate the banking superintendence (SBIF). Further enhancements would still be needed in certain areas of the institutional set-up, i.e. autonomy, governance, and legal protection of staff. The planned integration of banking supervision into the CMF (to be realized over the next 12 months) will be a significant organizational challenge, also considering that the CMF itself is still settling into its new governance structure (transitioning from a single person Superintendent model to a collegial Board). The authorities have asked technical assistance from the IMF on these matters.

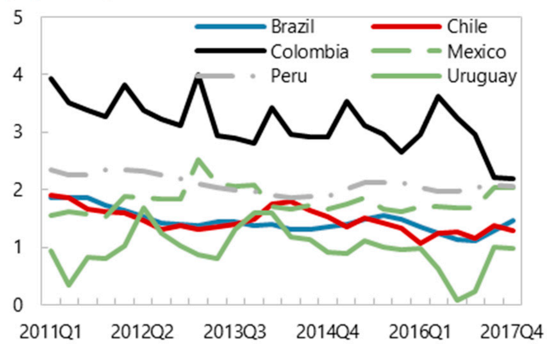
Chile: Selected Banking Indicators

Nonperforming Loans
(In percent of total loans)



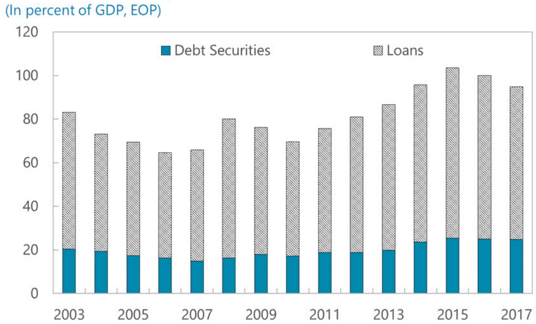
Sources: Haver Analytics; IMF, Financial Soundness Indicators database; national authorities.

Return on Assets
(In percent)



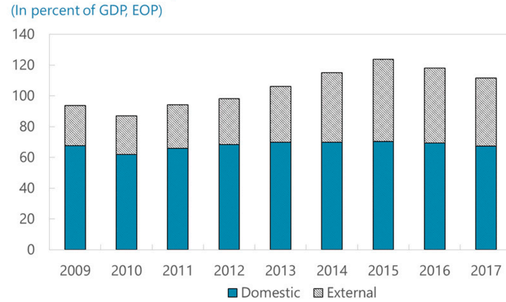
Sources: Haver Analytics; IMF, Financial Soundness Indicators

Non-financial Corporate Debt
(In percent of GDP, EOP)



Sources: Central Bank of Chile and IMF staff estimates.

Non-financial Corporate Debt
(In percent of GDP, EOP)



Source: Central bank of Chile and IMF Staff estimates.

29. Some of the limitations of the current legislation will still need to be addressed in the future. These include:

- *Resolution regime*. In line with the 2011 FSAP, staff recommends strengthening the early intervention regime, revising~~e~~ and expanding the triggers for resolution, and broadening the powers and tools available to the resolution authority (CMF), including the power to override shareholders' rights.

- *National deposit insurance scheme*. The current system, where checking and ~~saving accounts'~~sight deposits at banks are 100 percent guaranteed by the ~~State~~ Central Bank while personal term-deposits are 90 percent guaranteed by the government up to a limit, creates a contingent fiscal liability. Staff recommends establishing a national deposit insurance institution funded by member banks.

- *Coordination among supervisors*. Staff recommends strengthening the supervisory framework and inter-agency coordination and cooperation for the supervision of *cooperativas* and *cajas de compensación*.

- *A credit registry*. There is only partial sharing of borrower's information among non-bank lenders and between banks and non-banks. Staff recommends establishing a consolidated public credit registry across the entire financial industry, while adequately managing the delicate balance of consumers' rights versus financial data sharing.

- *Oversight of conglomerates*. A more effective oversight of conglomerates and the non-banking sector is still needed. The new banking law is extending bank exposure limits towards own conglomerate (30 percent) to any conglomerate; this is a positive step, and exposure limits to the own conglomerate (which is riskier) should be tightened further. Moreover, the supervisors should be given the power to bring financial holding companies and affiliates in the supervisory sphere.

- *Banco del Estado*. Staff recommends a gradual capital injection into *Banco del Estado*—government-owned bank and main provider of loans to SMEs—to address an estimated capital shortfall of about 0.5 percent of GDP, as well as an upgrade of its corporate governance, a review of operational risks, and measures to increase its efficiency.

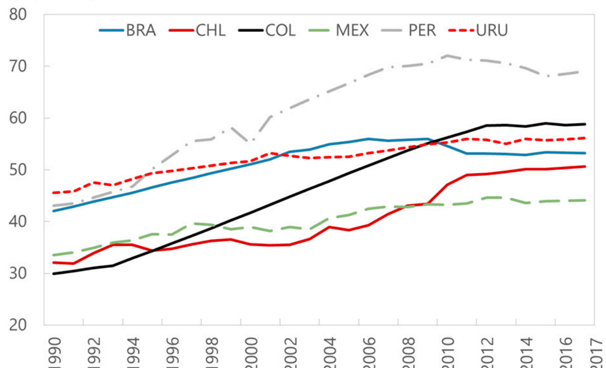
Authorities' Views

30. The authorities agreed with the staff suggestions on the agenda beyond the recently approved banking law. They stressed that in the next few years they plan to work on developing a resilience agenda that would tackle issues related to the resolution framework, credit unions (*cooperativas*), and supervision of conglomerates. The authorities have requested a Financial Sector Assessment Program from the Fund, scheduled for early 2020. The recapitalization of Banco del Estado is planned for 2020-2024.

start a business and e-registration, there is scope to streamline procedures through a single contact point and improve coordination among license-issuing institutions. In this context, the recently announced government's "pro-investment agenda" with twelve core measures, coupled with the establishment of a Sustainable Projects Management Office (GPS) and a Productivity Office (OPEN) and the proposed legislation to streamline and lower cost of notary services, focus on addressing key regulatory bottlenecks, reducing red-tape and business costs, facilitating investment, and enhancing firm productivity. Strengthening competition, particularly in the maritime sector, as well as improving market access (including to finance) for new and small firms, are likely to yield productivity dividends.

37. Labor market measures need to focus on reducing legal uncertainty and increasing flexibility. The labor law adopted in August 2016, which aimed at reforming labor negotiations, has created some legal uncertainty about the form of collective negotiations and the employees' obligation to provide minimum services during strikes. With the aim to lower uncertainty, the Labor Directorate issued an opinion (*dictamen*), clarifying that negotiating groups can also conclude labor agreements with employers, which is now being challenged by labor unions through the judicial system. Increased labor market flexibility, e.g. by reducing firing costs (severance payments and legal procedures) as well as incentivizing the use of flexible employment contracts (on hours, timing, and workplace) along the lines of the authorities' recent telework proposal, would help increase job creation in the formal sector, and facilitate labor mobility toward well-performing sectors. There is a need to revamp and target both training incentives and active labor market policies toward the unemployed workers who are most likely to benefit from them. Reducing the minimum contribution period for unemployment benefits eligibility would help the adjustment of workers with precarious jobs. The proposal to fund universal childcare through contributions by all employers would lower female hiring costs and boost female employment. Continued assessment of labor market policies will help prioritize resources and strengthen their impact.

Female Labor Force Participation in LA6
(In percent)



Source: International Labor Organization.

38. Enhancing human capital and innovation capacity is key to achieve advanced-economy status. Building on recent progress in education coverage, policies need to focus on improving education quality. In international education assessments (e.g. PISA), Chilean students score better than Latin American peers, but significantly below OECD countries. In addition, while higher education is among the best in the region, the share of engineering graduates is among the lowest in Latin America, which may constrain the ability to compete and diversify into new technologies and knowledge-based economy (see Selected Issues Paper). Education priorities also include continued quality assessments and linking teacher performance to student achievements. There is space to enhance R&D and innovation capacity, including through streamlined incentives schemes, as Chile's spending on R&D and innovation, particularly by the business sector, is substantially lower than OECD-peers.

STAFF APPRAISAL

42. The economy is recovering after several years of subdued growth. Supported by robust business and consumer confidence, and a considerable rebound in both mining and non-mining, growth in the first half of 2018 has been the strongest since 2012. Given solid fundamentals and limited bilateral trade exposure, the economy has been largely sheltered from the recent volatility in the region, with the free floating exchange rate playing the role of shock absorber.

43. The outlook is favorable with balanced risks. Output growth is projected to gradually converge to its medium-term potential of about 3 percent, and headline inflation to remain around the 3 percent target. Downside risks mainly stem from the uncertain external environment and are related to rising protectionism, sharp tightening of global financial conditions, and weaker-than-expected growth in key trading partners. Upside risks to the outlook are related to a rapid implementation of the structural reform agenda.

44. The financial sector remains healthy, though macro-financial linkages need to be closely monitored. Risks to financial stability are mostly related to high leverage of non-financial corporates, which could propagate through macro-financial linkages. Nonetheless, these risks are mitigated because leverage is often associated either with debt to parent companies or long maturity and exchange-rate hedging.

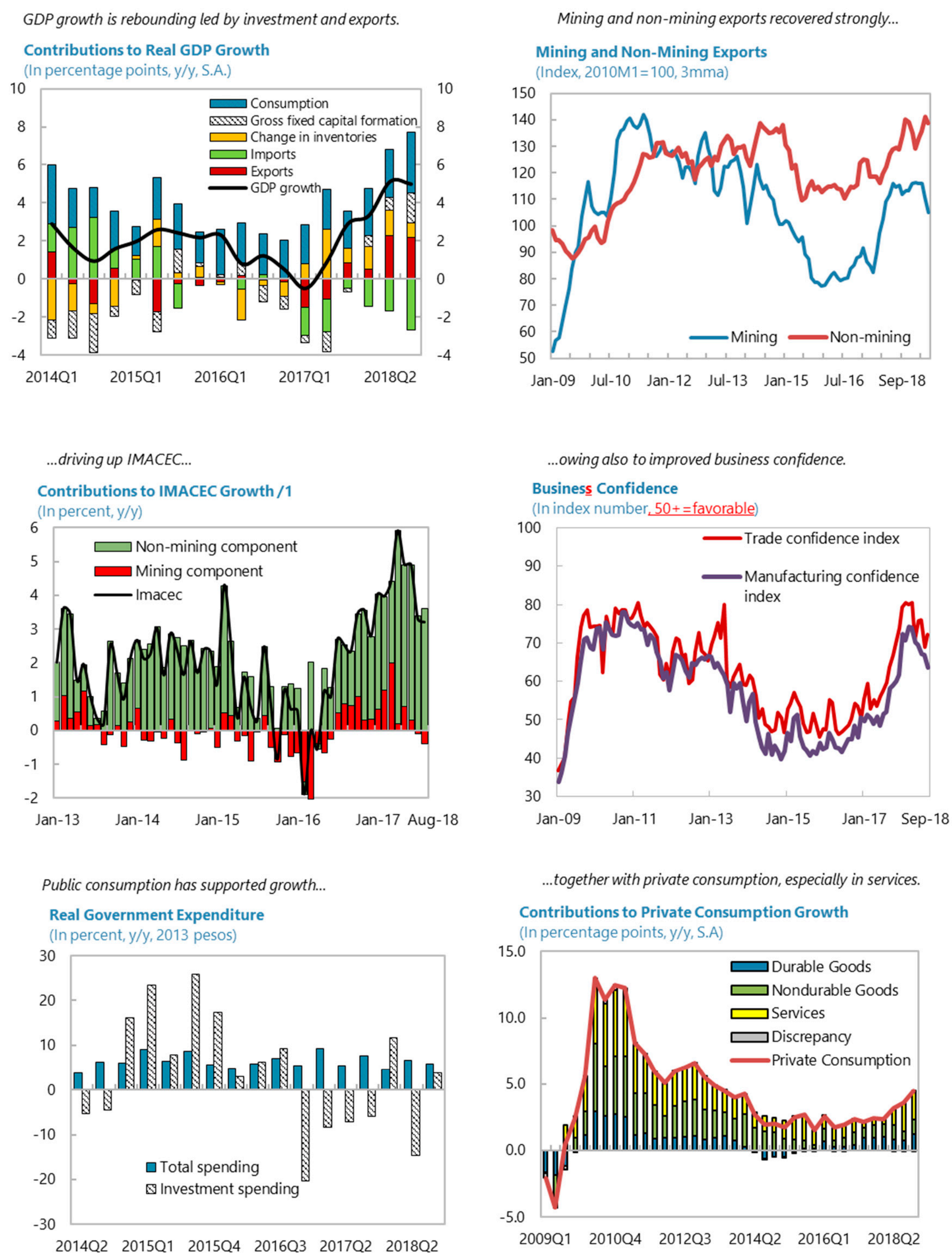
45. The announced gradual fiscal consolidation should enhance policy credibility, with the aim of striking a balance between stabilizing debt and addressing development and social spending needs. Staff projects central government gross debt to broadly stabilize in 2021. To further enhance credibility and market confidence, the authorities could consider strengthening the fiscal framework or deepening the fiscal consolidation.

46. The authorities presented a proposal to streamline the tax system to make it more efficient and pro-growth, and it will be essential to ensure that the final outcome is equitable and funded ~~and equitable~~. Overall, the reform should spur investment and growth in the short term. Staff welcomes the authorities' commitment that the reform will be fully funded. In order to address concerns about income inequality and tax evasion and avoidance, the authorities should consider further strengthening tax administration and explore additional measures such as raising the top marginal PIT rate and introducing a final flat withholding dividend tax. In a broader context, the authorities could also consider widening the tax base.

47. With the aim to strengthen the institutional framework on fiscal responsibility, the authorities proposed to enhance the fiscal council. The proposal will institutionalize a new council with more independence, its own resources, and a broader mandate than the existing one.

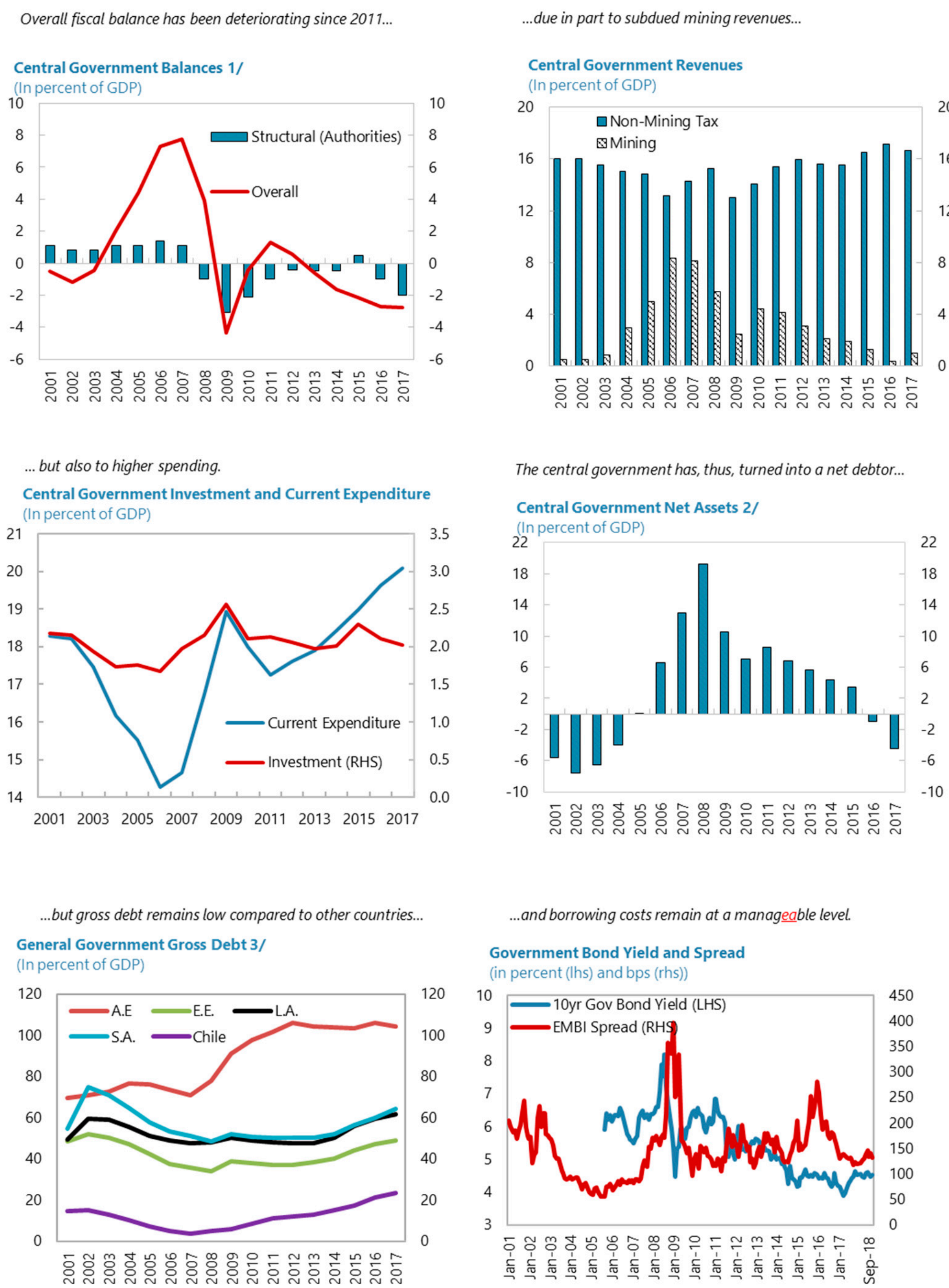
48. Caution is warranted in deciding the pace of the monetary policy normalization. Such a tightening cycle should be guided by evidence of a persistent convergence of inflation towards the target that is supported by a broad set of indicators. Despite the pickup in economic activity and headline inflation, a subdued core inflation, remaining labor market slack, weak earnings growth, and

Figure 1. Chile: Economic Activity



Sources: Central Bank of Chile, Ministry of Finance, Haver Analytics, and IMF staff calculations.
/1 IMACEC is a monthly economic activity indicator.

Figure 4. Chile: Fiscal Policy and Public Finances



Sources: Ministry of Finance, Central Bank of Chile, Bloomberg, and IMF staff calculations.
1/ Based on the authorities' structural balance, at current or constant parameters.
2/ Authorities' definition of net assets.
3/ Source: World Economic Outlook; A.E = Advance Economies; E.E. = Emerging and Developing Ecomomies; L.A. = Latin America and the Caribbean: Excluding Venezuela; S.A. = South America.

Table 1. Chile: Selected Social and Economic Indicators 1/

GDP (2017), in billions of pesos	179,727	Quota	
GDP (2017), in billions of U.S. dollars	277.0	in millions of SDRs	1,744
Per capita (U.S. dollars)	15,068	in % of total	0.37
Population (2017), in millions	18.4	Poverty rate (2015)	11.70
Main products and exports	Copper	Gini coefficient (2015)	49.50
Key export markets	China, Euro area, U.S.	Literacy rate (2015)	99.2

	2013	2014	2015	2016	2017	Proj. 2018	2019
	(Annual percentage change, unless otherwise specified)						
Output							
Real GDP	4.1	1.8	2.3	1.3	1.5	4.0	3.4
Consumption	4.4	2.9	2.6	2.8	2.8	3.7	3.0
Investment 2/	1.0	-10.3	2.6	-3.6	5.0	5.6	2.5
Net exports 3/	0.4	2.2	-0.2	-0.1	-1.6	-0.2	0.5
Employment							
Unemployment rate (annual average)	5.9	6.4	6.2	6.5	6.7	6.9	6.5
Consumer prices							
Inflation (End of period, %)	3.0	4.6	4.4	2.7	2.3	2.9	3.0
Inflation (average, %)	1.8	4.7	4.3	3.8	2.2	2.4	3.0
	(In percent of GDP, unless otherwise specified)						
Public sector finances							
Central government revenue	20.9	20.6	21.0	20.8	21.0	21.7	21.2
Central government expenditure	21.5	22.2	23.2	23.5	23.7	23.3	23.2
Central government fiscal balance	-0.6	-1.6	-2.1	-2.7	-2.8	-1.7	-2.0
Structural Fiscal Balance 4/	-0.5	-0.5	0.5	-1.1	-2.0	-1.8	-1.6
Central Government Gross Debt	12.7	15.0	17.3	21.0	23.6	24.7	26.0
of which, FX-denominated Debt	1.6	2.4	3.2	3.7	4.1	4.7	4.8
Central Government Net Debt	-5.6	-4.3	-3.4	0.9	4.4	5.8	7.7
Public sector gross debt 5/	33.9	37.6	40.1	42.8	42.6	43.7	45.1
	(Annual percentage change, unless otherwise specified)						
Money and credit							
Broad money	11.1	9.5	11.0	7.3	6.2	5.3	5.5
Credit to the private sector	10.0	10.2	10.7	5.2	4.8	n.a.	n.a.
3-month central bank bill rate (%)	4.9	4.0	2.7	3.5	2.6	2.8	3.3
Balance of payments							
Current account (% of GDP)	-4.0	-1.7	-2.3	-1.4	-1.5	-2.5	-2.7
Current account (in billions of U.S. dollars)	-11.3	-4.4	-5.6	-3.5	-4.1	-7.4	-8.3
Foreign direct investment net flows (% of GDP)	-3.9	-4.2	-2.1	-2.0	-0.6	-2.2	-2.2
Gross international reserves (in billions of U.S. dollars)	41.1	40.4	38.6	40.5	39.0	37.0	37.0
Gross Reserves (Months of next year import)	5.9	6.8	6.8	6.5	5.5	5.1	4.9
Gross external debt (% of GDP)	48.4	57.9	65.6	66.2	63.0	61.0	62.2
Public	2.7	3.3	3.9	4.8	5.3	5.5	5.7
Private	45.6	54.6	61.7	61.5	57.7	55.5	56.5
	(Annual percentage change)						
Relative prices							
Real effective exchange rate (real appreciation +)	-0.6	-8.8	1.4	2.0	2.9	...	...
Terms of trade	-3.0	-2.0	-3.1	4.6	10.6	-2.7	-3.1
Memorandum items							
Nominal GDP (in billions of pesos)	137,879	148,595	159,569	169,180	179,727	189,239	199,631

Sources: Central Bank of Chile, Ministry of Finance, Haver Analytics, and Fund staff calculations and projections.

1/ The annual numbers occasionally show a small discrepancy with the authorities published figures, as they are calculated as the sum of the quarterly series seasonally-adjusted by staff.

2/ Investment is defined as: gross fixed capital formation + changes in inventories.

3/ Contribution to growth.

4/ The output gap used for the structural adjustment calculation is measured as the difference from the potential GDP of the committee of experts.

5/ Include liabilities of the central government, the cental bank of Chile and public enterprises. Excludes Recognition bonds.

Table 2. Chile: Summary Operations of the Central Government

(In percent of GDP; unless otherwise specified)

	2013	2014	2015	2016	2017	Proj. 2018	2019
Revenues	**20.9**	**20.6**	**21.0**	**20.8**	**21.0**	**21.7**	**21.2**
Taxes	16.6	16.5	17.3	17.1	17.1	17.5	17.3
Private mining companies	1.1	1.0	0.8	0.0	0.5	0.7	0.6
Other tax revenues, non-mining	15.6	15.5	16.5	17.1	16.7	16.8	16.8
Social contributions	1.4	1.4	1.4	1.4	1.5	1.5	1.5
Grants	0.1	0.0	0.1	0.1	0.1	0.2	0.2
Other revenue	2.8	2.6	2.2	2.2	2.3	2.6	2.3
Codelco revenues	1.0	0.9	0.4	0.4	0.5	0.8	0.5
Income on assets	0.5	0.5	0.4	0.5	0.4	0.4	0.4
Operating income	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Other income	0.8	0.8	0.8	0.8	0.9	0.8	0.8
Expenditures	**21.5**	**22.2**	**23.2**	**23.5**	**23.7**	**23.3**	**23.2**
Expense	19.6	20.2	20.9	21.4	21.7	21.4	21.4
Compensation of employees	4.3	4.4	4.5	4.7	4.8	4.5	4.6
Purchases of goods and services	2.0	2.2	2.1	2.1	2.1	1.8	1.8
Interest payments	0.6	0.6	0.7	0.7	0.8	0.9	0.8
Subsidies and grants	7.0	7.2	7.6	8.1	8.3	8.9	8.7
Social benefits	4.0	4.1	4.1	4.0	4.0	3.6	3.7
Other expense	1.7	1.8	1.9	1.8	1.7	1.7	1.7
Capital transfers	1.7	1.8	1.9	1.8	1.6	1.7	1.7
Net acquistion of nonfinancial assets	1.9	2.0	2.3	2.1	2.0	2.0	1.9
Investment	2.0	2.0	2.3	2.1	2.0	2.0	1.9
Sale of physical assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net lending/borrowing	**-0.6**	**-1.6**	**-2.1**	**-2.7**	**-2.8**	**-1.7**	**-2.0**
Non-mining overall balance	-2.7	-3.5	-3.4	-3.1	-3.7	-3.2	-3.1
Net financial transactions	**-0.6**	**-1.6**	**-2.1**	**-2.7**	**-2.8**	**-1.7**	**-2.0**
Net acquistion of financial assets	-0.5	0.2	-0.2	0.6	0.4	0.0	0.3
Net incurrence of liabilities	0.1	1.8	1.9	3.3	3.1	1.7	2.3
Domestic	1.1	1.7	1.8	2.9	2.7	1.4	2.3
External	-0.3	0.6	0.5	0.8	0.8	0.6	0.3
Recognition bonds	-0.6	-0.5	-0.5	-0.4	-0.4	-0.3	-0.3
Memorandum items							
Primary balance	-0.5	-1.5	-1.9	-2.4	-2.4	-1.3	-1.6
Structural Fiscal Balance 1/	-0.5	-0.5	0.5	-1.1	-2.0	-1.8	-1.6
Structural Revenue 1/	21.0	21.7	23.7	22.5	21.7	21.5	21.6
Fiscal Impulse 2/	-0.2	0.3	-0.5	0.2	0.2	0.1	-0.1
Expenditure growth (in real terms; annual percent change)	3.9	6.5	7.4	3.8	4.8	1.2	1.8
Central Government Net Debt	-5.6	-4.3	-3.4	0.9	4.4	5.8	7.7
Gross debt	12.7	15.0	17.3	21.0	23.6	24.7	26.0
Peso-denominated assets	6.5	6.2	6.8	7.2	7.3	6.9	6.7
Foreign currency-denominated assets	11.8	13.1	14.0	12.9	11.9	12.0	11.6
Central Government Net Debt (Excl Pension Reservation Fund)	-2.8	-1.1	0.2	4.4	7.8	9.4	11.4
Public Sector Gross Debt 3/	33.9	37.6	40.1	42.8	42.6	43.7	45.1
Public Sector Net Debt 3/	-1.0	0.5	1.0	6.1	8.9	10.3	12.3
Nominal GDP (trillions of pesos)	137.9	148.6	159.6	169.2	179.7	189.2	199.6
General Government Fiscal Balance 4/	-0.5	-1.5	-2.1	-2.7	-2.6	-1.6	-1.9

Sources: Ministry of Finance and Fund staff calculations and projections.

1/ The output gap used for the structural adjustment calculation is measured as the difference from the potential GDP of the committee of experts.

2/ The Fiscal Impulse is defined as the negative of the annual change of the structural non-mining primary balance.

3/ Includes liabilities of the central government, the cental bank of Chile and non-financial public enterprises. Excludes Recognition bonds.

4/ Includes the central government and municipality governments.

Table 3. Chile: Balance of Payments 1/

(In millions of USD; unless otherwise specified)

	2013	2014	2015	2016	2017	Proj. 2018	2019
Current account	-11,263	-4,356	-5,579	-3,484	-4,102	-7,417	-8,347
Trade balance of Goods	1,989	6,396	3,357	5,457	7,968	6,044	5,004
Exports	76,812	75,090	62,009	60,717	69,256	76,302	77,834
Copper	39,964	37,377	30,032	28,002	34,660	37,065	36,572
Non-copper	36,848	37,713	31,978	32,715	34,597	39,237	41,261
Imports	74,823	68,694	58,652	55,260	61,288	70,258	72,830
Net services	-3,426	-3,729	-3,575	-3,280	-3,059	-4,337	-4,868
Net income	-12,034	-9,140	-7,219	-7,046	-10,803	-12,067	-11,451
Net transfers	2,208	2,117	1,858	1,385	1,792	2,944	2,969
Capital account balance	12	11	674	8	68	0	0
Financial account balance	-12,880	-6,718	-5,328	-4,386	-345	-5,417	-8,347
Foreign direct investment	-10,937	-10,936	-5,026	-4,909	-1,595	-6,602	-6,743
Portfolio investment	-4,724	-3,842	-1,211	1	4,378	-178	788
Financial derivatives	1,005	1,610	722	715	-90	-90	-90
Other investments	1,775	6,449	186	-193	-3,039	1,454	-2,302
Change in reserves assets	311	1,057	211	1,805	-2,750	-2,000	0
Errors and omissions	-1,317	-1,317	-213	895	939	0	0
Gross official international reserves	5.9	6.8	6.8	6.5	5.5	5.1	4.9
(In months of imports of goods and services)							
				(In percent of GDP)			
Current account	-4.0	-1.7	-2.3	-1.4	-1.5	-2.5	-2.7
Trade balance of Goods	0.7	2.5	1.4	2.2	2.9	2.0	1.6
Exports	27.6	28.8	25.4	24.3	25.0	25.4	25.5
Copper	14.4	14.3	12.3	11.2	12.5	12.4	12.0
Non-copper	13.2	14.5	13.1	13.1	12.5	13.1	13.5
Imports	26.9	26.4	24.0	22.1	22.1	23.4	23.8
Net services	-1.2	-1.4	-1.5	-1.3	-1.1	-1.4	-1.6
Net income	-4.3	-3.5	-3.0	-2.8	-3.9	-4.0	-3.7
Net transfers	0.8	0.8	0.8	0.6	0.6	1.0	1.0
Financial account balance 2/	-4.6	-2.6	-2.2	-1.8	-0.1	-1.8	-2.7
				(Annual change in percent)			
Total export volume	3.9	1.6	-1.3	-0.2	-1.9	7.8	4.3
Total import volume	1.5	-6.5	-0.6	0.1	5.5	7.7	2.9
Terms of trade	-3.0	-2.0	-3.1	4.6	10.6	-2.7	-3.1
Total export prices	-5.2	-3.8	-16.3	-1.7	16.1	2.6	-2.3
Copper export prices	-9.9	-8.3	-19.2	-3.5	27.5	0.7	-5.4
Total import price	-2.3	-1.8	-13.8	-6.0	4.9	5.4	0.8
Memorandum items							
Copper price (WEO; U.S. cents per pound)	333	311	250	221	280	297	282
Volume of copper exports (2004=100)	106	108	107	104	100	107	112

Sources: Central Bank of Chile, Haver Analytics, and Fund staff calculations and projections.

1/ The annual numbers occasionally show a small discrepancy with the authorities published figures, as they are calculated as the sum of the quarterly series seasonally-adjusted by staff.

2/ Excluding change in reserves.

Table 5. Chile: Medium-Term Macroeconomic Framework 1/

						Proj.					
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
National accounts	(Annual percentage change, unless otherwise specified)										
Real GDP	4.1	1.8	2.3	1.3	1.5	4.0	3.4	3.2	3.0	3.0	3.0
Total domestic demand	3.5	-0.5	2.6	1.4	3.3	4.1	2.9	3.1	2.9	2.8	3.1
Consumption	4.4	2.9	2.6	2.8	2.8	3.7	3.0	3.0	3.0	2.8	3.0
Private	4.6	2.7	2.1	2.2	2.4	4.4	3.1	3.3	3.2	2.9	3.1
Public	3.1	3.8	4.7	6.3	4.1	1.4	1.8	1.6	1.6	2.5	2.7
Investment	1.0	-10.3	2.6	-3.6	5.0	5.6	2.5	3.3	2.8	2.9	3.2
Fixed	3.9	-5.0	-0.4	-0.6	-1.3	4.5	2.4	3.6	2.8	2.8	3.2
Private	4.4	-5.4	-2.0	-0.1	-1.4	4.6	3.1	3.9	3.3	3.0	3.4
Public	-0.8	-0.2	14.5	-4.9	-0.7	3.5	-3.4	0.4	-1.3	0.8	0.8
Inventories 2/	-0.7	-1.4	0.7	-0.7	1.4	0.3	0.0	0.0	0.0	0.0	0.0
Net exports 2/	0.4	2.2	-0.2	-0.1	-1.6	-0.2	0.5	0.1	0.1	0.2	0.0
Exports	3.4	0.3	-1.7	-0.1	-0.9	6.0	4.4	4.2	4.3	4.6	3.8
Imports	2.1	-6.5	-1.2	0.2	4.7	6.8	2.7	3.8	4.1	4.0	3.9
Consumer prices											
End of period	3.0	4.6	4.4	2.7	2.3	2.9	3.0	3.0	3.0	3.0	3.0
Consumer prices (average)	1.8	4.7	4.3	3.8	2.2	2.4	3.0	3.0	3.0	3.0	3.0
Output gap	0.8	-0.7	-0.6	-1.3	-1.8	-0.4	0.1	0.3	0.2	0.2	0.1
Potential growth	4.3	3.2	2.2	2.0	2.0	2.5	2.9	3.0	3.1	3.1	3.1
Memo items:											
Nominal GDP	**6.1**	**7.8**	**7.4**	**6.0**	**6.2**	**5.3**	**5.5**	**6.5**	**6.2**	**6.1**	**6.1**
Balance of payments	(In percent of GDP)										
Current account	-4.0	-1.7	-2.3	-1.4	-1.5	-2.5	-2.7	-2.5	-2.2	-1.9	-1.8
Trade balance	0.7	2.5	1.4	2.2	2.9	2.0	1.6	1.9	2.0	2.1	2.1
Financial account balance	-4.6	-2.6	-2.2	-1.8	-0.1	-1.8	-2.7	-2.5	-2.2	-1.9	-1.8
Of which, foreign direct investment (net)	-3.9	-4.2	-2.1	-2.0	-0.6	-2.2	-2.2	-3.0	-2.9	-2.7	-2.8
Change in reserves assets	0.1	0.4	0.1	0.7	-1.0	-0.7	0.0	0.0	0.0	0.0	0.0
Errors and omissions	-0.5	-0.5	-0.1	0.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0
REER (in percent y/y, +=appreciation)	-0.6	-8.8	1.4	2.0	2.9	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	(Annual percentage change)										
Total export volume	3.9	1.6	-1.3	-0.2	-1.9	7.8	4.3	4.2	4.3	4.6	3.8
Of which, copper export volume	6.2	1.8	-0.7	-3.1	-3.7	7.2	4.2	3.4	2.9	2.1	2.0
Total import volume	1.5	-6.5	-0.6	0.1	5.5	7.7	2.9	3.8	4.1	4.0	3.9
Terms of trade	-3.0	-2.0	-3.1	4.6	10.6	-2.7	-3.1	0.7	0.4	-0.1	-0.1
Total export prices	-5.2	-3.8	-16.3	-1.7	16.1	2.6	-2.3	0.5	0.0	-0.5	-0.5
Copper export price index	-9.9	-8.3	-19.2	-3.5	27.5	0.7	-5.4	1.1	0.6	0.1	0.0
Total import price	-2.3	-1.8	-13.8	-6.0	4.9	5.4	0.8	-0.2	-0.4	-0.4	-0.4
External debt	(In percent of GDP)										
Gross external debt	48.4	57.9	65.6	66.2	63.0	61.0	62.2	61.7	60.3	59.6	58.4
Public	2.7	3.3	3.9	4.8	5.3	5.5	5.7	6.4	6.2	6.5	6.3
Private	45.6	54.6	61.7	61.5	57.7	55.5	56.5	55.3	54.1	53.1	52.1
Gross int. reserves (in billions of U.S. dollars)	41.1	40.4	38.6	40.5	39.0	37.0	37.0	37.0	37.0	37.0	37.0
Savings and investment											
Gross domestic investment	25.7	23.3	23.8	22.3	22.0	22.4	22.5	22.5	22.4	22.4	22.4
Public	2.3	2.3	2.6	2.4	2.3	2.3	2.1	2.1	2.0	1.9	1.9
Private	23.5	21.0	21.2	19.9	19.8	20.2	20.4	20.4	20.5	20.5	20.5
National saving	21.7	21.6	21.4	20.9	20.5	20.5	19.8	20.0	20.2	20.5	20.6
Public	1.8	0.8	0.5	-0.3	-0.4	0.7	0.2	0.5	0.9	1.0	1.2
Private	19.9	20.9	20.9	21.2	20.9	19.8	19.6	19.6	19.4	19.5	19.5
Public sector finance											
Central government gross debt	12.7	15.0	17.3	21.0	23.6	24.7	26.0	26.7	26.9	26.6	26.1
Central government net debt	-5.6	-4.3	-3.4	0.9	4.4	5.8	7.7	9.1	10.0	10.4	10.6
Central government balance	-0.6	-1.6	-2.1	-2.7	-2.8	-1.7	-2.0	-1.7	-1.2	-1.0	-0.8
Total revenue	20.9	20.6	21.0	20.8	21.0	21.7	21.2	21.1	21.2	21.1	21.0
Total expenditure	21.5	22.2	23.2	23.5	23.7	23.3	23.2	22.8	22.4	22.1	21.8
Central government structural balance 3/	-0.5	-0.5	0.5	-1.1	-2.0	-1.8	-1.6	-1.4	-1.2	-1.0	-0.8
Employment	(Annual percentage change, unless otherwise specified)										
Working age population	1.6	1.6	1.6	1.7	1.8	1.1	2.3	1.7	1.7	1.7	1.7
Labor force	1.6	2.0	1.4	1.4	2.2	1.5	2.2	1.8	1.7	1.6	1.6
Employment	2.1	1.5	1.6	1.1	2.0	1.2	2.7	2.1	1.9	1.6	1.6
Unemployment rate (in percent)	5.9	6.4	6.2	6.5	6.7	6.9	6.5	6.2	6.0	6.0	6.0

Sources: Central Bank of Chile, Ministry of Finance, National Statistics Institute, Haver Analytics, and Fund staff calculations and projections.

1/ The annual numbers occasionally show a small discrepancy with the authorities published figures, as they are calculated as the sum of the quarterly series seasonally-adjusted by staff.

2/ Contribution to growth.

3/ The output gap used for the structural adjustment calculation is measured as the difference between staff's real GDP and the potential GDP of the committee of experts for years for which it is available and binding. Beyond those years, the output gap is progressively closed over time taking into account staff's assessment of the state of the economy.

Table 6. Chile: Indicators of External Vulnerabilities 1/

(In percent; unless otherwise specified)

	2013	2014	2015	2016	2017
Financial indicators					
M3 (percent change)	11.4	11.1	12.4	8.7	4.8
Less pension funds' deposits (annual percentage change)	12.1	9.2	13.2	9.4	
Private sector credit to GDP	77.7	79.5	82.0	81.4	80.3
90-day central bank promissory note (nominal) interest rate (avg.)	4.9	4.0	2.7	3.5	2.6
Share of foreign currency deposits in total deposits	14.0	16.6	15.4	15.2	13.0
Share of foreign currency loans in total credit	13.5	13.7	13.9	13.0	11.4
External indicators					
Exports of goods, U.S. dollars (annual percentage change)	-1.5	-2.2	-17.4	-2.1	14.1
Imports of goods, U.S. dollars (annual percentage change)	-0.7	-8.2	-14.6	-5.8	10.9
Terms of trade (annual percentage change)	-3.0	-2.0	-3.1	4.6	10.6
REER (annual percent change, period average)	-0.6	-8.8	1.4	2.0	2.9
Exchange rate (pesos per U.S. dollar, period average)	495.3	570.4	654.1	676.9	648.9
Current account balance (percent of GDP)	-4.0	-1.7	-2.3	-1.4	-1.5
Financial account less reserves accumulation (percent of GDP)	-4.6	-2.6	-2.2	-1.8	-0.1
Gross official reserves (in billions of U.S. dollars) 2/	41.1	40.4	38.6	40.5	39.0
Gross official reserves, months of imports of goods and services	5.9	6.8	6.8	6.5	5.6
Gross official reserves to M3	14.6	15.0	14.9	13.6	11.5
Gross official reserves to short-term external debt 3/	112.9	98.6	106.3	92.5	104.9
Gross official reserves (percent of GDP) 4/	14.8	15.5	15.8	16.2	14.1
IMF reserve adequacy metric (percent of GDP) 4/	13.2	14.0	14.0	14.6	14.6
Total external debt (percent of GDP)	48.4	57.9	65.6	66.2	63.0
Of which: External public sector debt	1.9	2.5	3.2	4.0	4.6
Total external debt to exports of goods and services	151.4	175.9	223.7	235.9	219.9
External interest payments to exports of goods and services	3.4	3.9	6.1	5.4	7.0
External amortization payments to exports of goods and services	52.4	49.9	57.4	51.8	55.2
Financial market indicators					
Stock market index (in U.S. dollars; period average) 5/	2173	1726	1465	1409	1731
Sovereign long-term foreign currency debt rating (end of period)					
Moody's	Aa3	Aa3	Aa3	Aa3	Aa3
S&P	AA-	AA-	AA-	AA-	A+
Fitch ratings	A+	A+	A+	A+	A

Sources: Central Bank of Chile, Haver Analytics, WEO and Staff calculations

1/ The annual numbers occasionally show a small discrepancy with the authorities published figures, as they are calculated as the sum of the quarterly series seasonally-adjusted by staff.

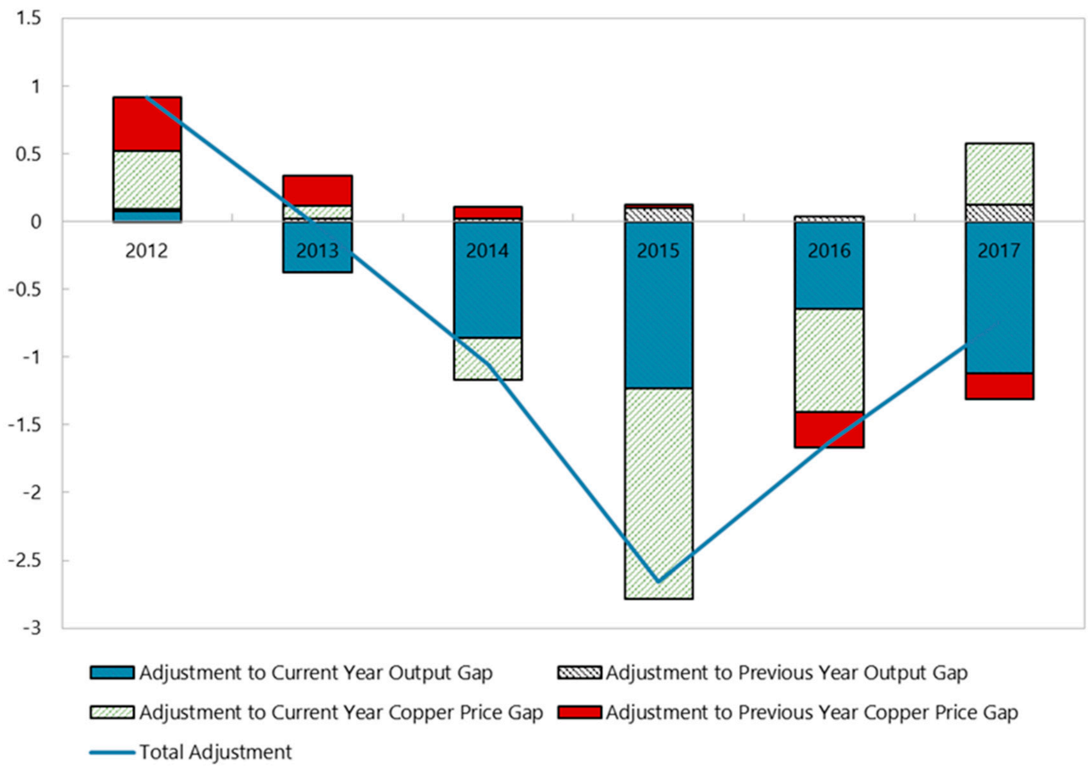
2/ Gold valued at end-period market prices.

3/ Includes amortization of medium/long-term debt due during the following year.

4/ Assessing Reserve Adequacy (IMF, 2011 Policy Paper).

5/ Morgan-Stangley Capital International Index (Dec/1987 = 100).

Decomposition of the Structural Adjustment (as percent of GDP, 2012-17)



	2012	2013	2014	2015	2016	2017
Output Gap (t; %-devation of GDP from PGDP)	-0.3	1.5	3.4	4.5	2.3	4.1
Output Gap (t-1; %-devation of GDP from PGDP)	0.5	0.6	0.5	2.3	1	2.7
Copper Price Gap (t; US Cents/lb)	59	26	7	-57	-29	59
Copper Price Gap (t-1; US Cents/lb)	141	59	26	7	-57	-36
Codelco Price Gap (US Cents/lb; Period Average)	29	14	-12	-83	-44	27

Source: Indicador del balance cíclicamente ajustado, Metodología y resultados (2014-2018), DIPRES; and Staff Calculations.

Note: Output gap follows the authorities' definition.

The Staff approach to the estimation of the structural balance

5. The design of fiscal policy in Chile is anchored on choosing an expenditure path that ensures meeting the structural balance target ex-ante. Fiscal discipline is assessed on the basis of whether the structural balance target is met ex-post. Over the medium term, it is also essential to assess the implications of fiscal policy for the overall deficit, as this would allow to forecast the debt path. For these purposes, the staff calculations for the structural balance over the projection horizon have to: 1) employ a methodology, formulae, and parameters that are as close as possible to the authorities' ones, which will govern the final calculation of the structural balance; 2) but rely on the IMF projections for actual GDP, copper prices, and exchange rates, which may differ from the authorities' ones, and, thus, inform the policy dialogue. With respect to the parameters, this implies that, for the current and following year projections, staff will make use of the series of trend GDP and the long-

Annex IV. Debt Sustainability Analysis

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

(in percent of GDP unless otherwise indicated)

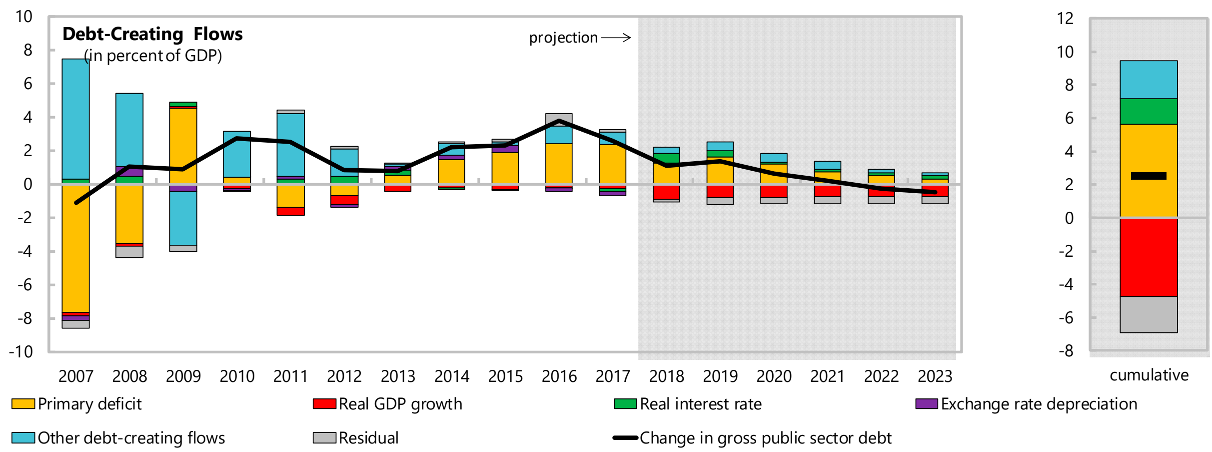
Debt, Economic and Market Indicators [1]

	Actual			Projections					
	2007-2015 [2]	2016	2017	2018	2019	2020	2021	2022	2023
Nominal gross public debt (EoP)	10.1	21.0	23.6	24.7	26.0	26.7	26.9	26.6	26.1
Public gross financing needs	0.4	10.8	3.9	2.9	2.3	2.7	4.8	1.3	1.0
Net public debt (excludes Pension Reserve Fund)	-7.0	4.4	7.8	9.4	11.4	12.8	13.6	14.1	14.3
Real GDP growth (in percent)	3.6	1.3	1.5	4.0	3.4	3.2	3.0	3.0	3.0
Inflation (GDP deflator, in percent)	4.0	4.7	4.7	1.3	2.0	3.2	3.1	3.0	3.0
Nominal GDP growth (in percent)	7.7	6.0	6.2	5.3	5.5	6.5	6.2	6.1	6.1
Effective interest rate (in percent) [4]	8.1	4.6	4.1	3.9	3.6	3.9	3.8	3.8	3.8

As of September 20, 2018		
Sovereign Spreads		
EMBIG (bp) 3/		131
5Y CDS (bp)		48
Ratings	Foreign	Local
Moody's	A1	A1
S&Ps	A+	AA-
Fitch	A	A+

Contribution to Changes in Public Debt

	Actual			Projections							
	2007-2015	2016	2017	2018	2019	2020	2021	2022	2023	cumulative	debt-stabilizing primary balance [9]
Change in gross public sector debt	1.4	3.8	2.5	1.1	1.3	0.6	0.2	-0.3	-0.5	2.5	
Identified debt-creating flows	1.5	3.0	2.4	1.3	1.8	1.0	0.6	0.1	-0.1	4.7	
Primary deficit	-0.5	2.4	2.4	1.3	1.6	1.2	0.7	0.5	0.3	5.6	-0.4
Primary (noninterest) revenue and grants	21.4	20.4	20.5	21.2	20.8	20.7	20.7	20.6	20.5	124.6	
Primary (noninterest) expenditure	20.9	22.8	22.9	22.5	22.4	21.9	21.4	21.1	20.9	130.2	
Automatic debt dynamics [5]	0.0	-0.4	-0.7	-0.3	-0.4	-0.6	-0.6	-0.6	-0.6	-3.2	
Interest rate/growth differential [6]	-0.1	-0.2	-0.4	-0.3	-0.4	-0.6	-0.6	-0.6	-0.6	-3.2	
Of which: real interest rate	0.2	0.0	-0.1	0.6	0.4	0.1	0.1	0.2	0.2	1.6	
Of which: real GDP growth	-0.3	-0.2	-0.3	-0.9	-0.8	-0.8	-0.8	-0.8	-0.8	-4.7	
Exchange rate depreciation [7]	0.1	-0.2	-0.3	…	…	…	…	…	…	…	
Other identified debt-creating flows	1.9	1.0	0.7	0.3	0.6	0.5	0.5	0.2	0.2	2.3	
Net acquistion of Financial Assets (negative)	1.3	0.6	0.4	0.0	0.3	0.3	0.3	0.2	0.2	1.3	
Contingent liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Net Repayment of Recognition Bond	0.6	0.4	0.4	0.3	0.3	0.2	0.2	0.0	0.0	1.0	
Residual, including asset changes [8]	-0.1	0.7	0.2	-0.2	-0.4	-0.4	-0.4	-0.4	-0.4	-2.2	



Source: IMF staff.

1/ Public sector is defined as central government.

2/ Based on available data.

3/ EMBIG.

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

5/ Derived as $[(r - \pi(1+g) - g + ae(1+r)]/(1+g+\pi+g\pi))$ times previous period debt ratio, with r = interest rate; π = growth rate of GDP deflator; g = real GDP growth rate; a = share of foreign-currency denominated debt; and e = nominal exchange rate depreciation (measured by increase in local currency value of U.S. dollar).

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

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

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

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