

Ministerio de Hacienda



The Chilean economy: recent developments and emerging opportunities

Chile Day - London

December 2022

Mario Marcel | Minister of Finance

Agenda

1. Recent Macro Developments and Medium-Term Outlook

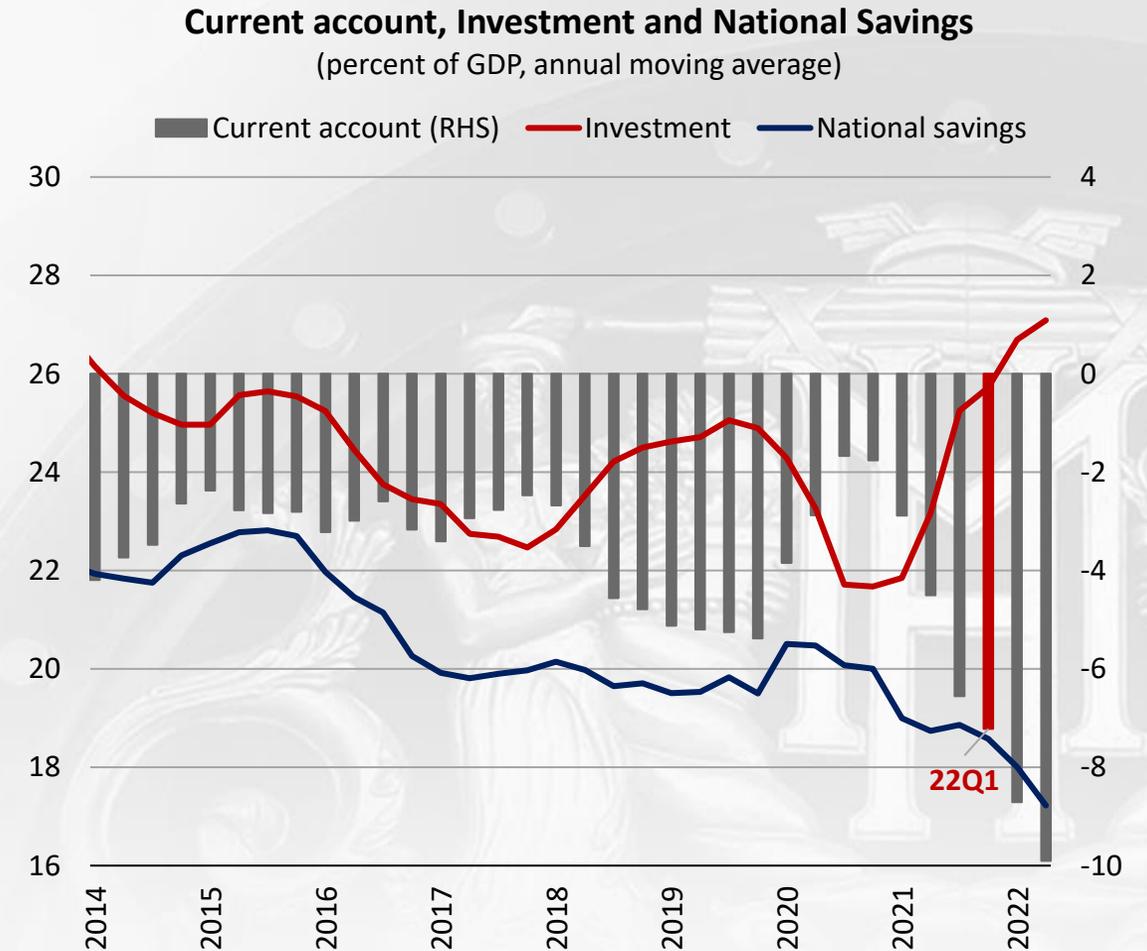
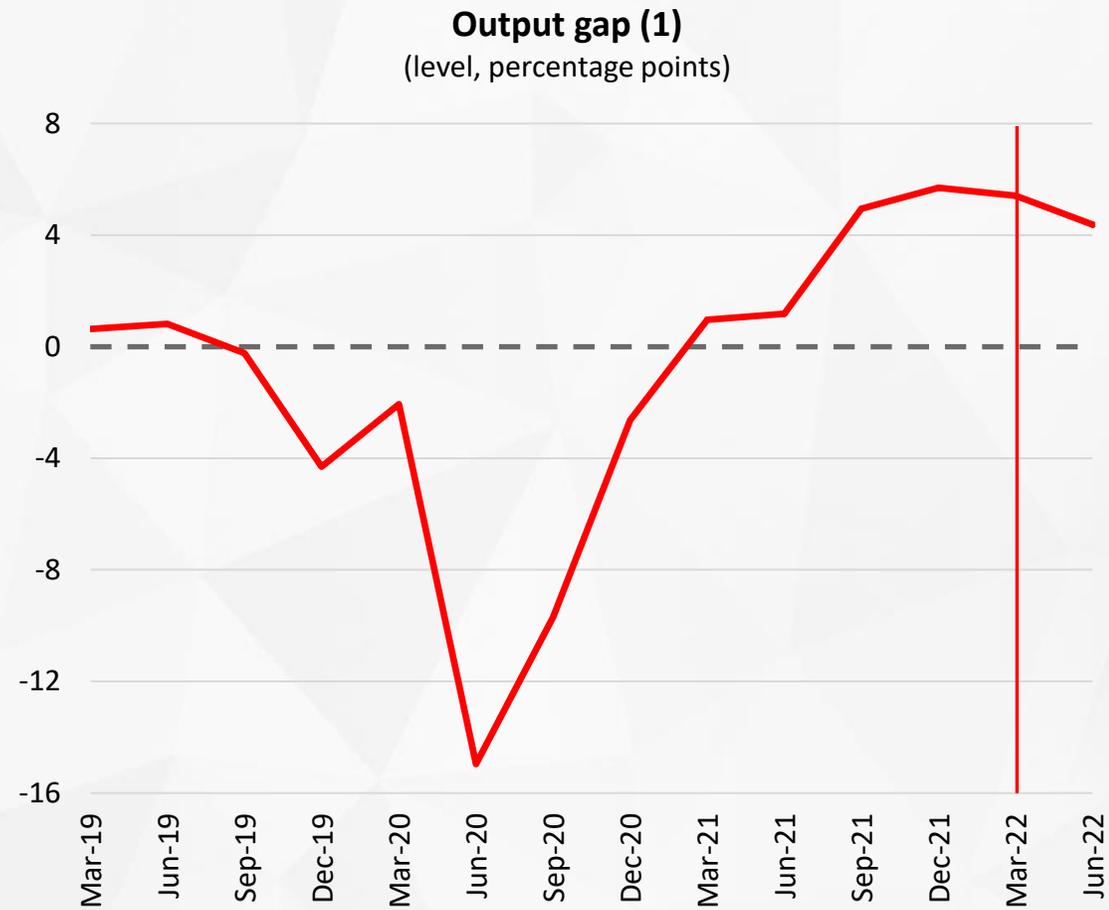
2. The reform agenda

3. Future prospects and emerging opportunities



Recent Macro Developments and Medium-Term Outlook

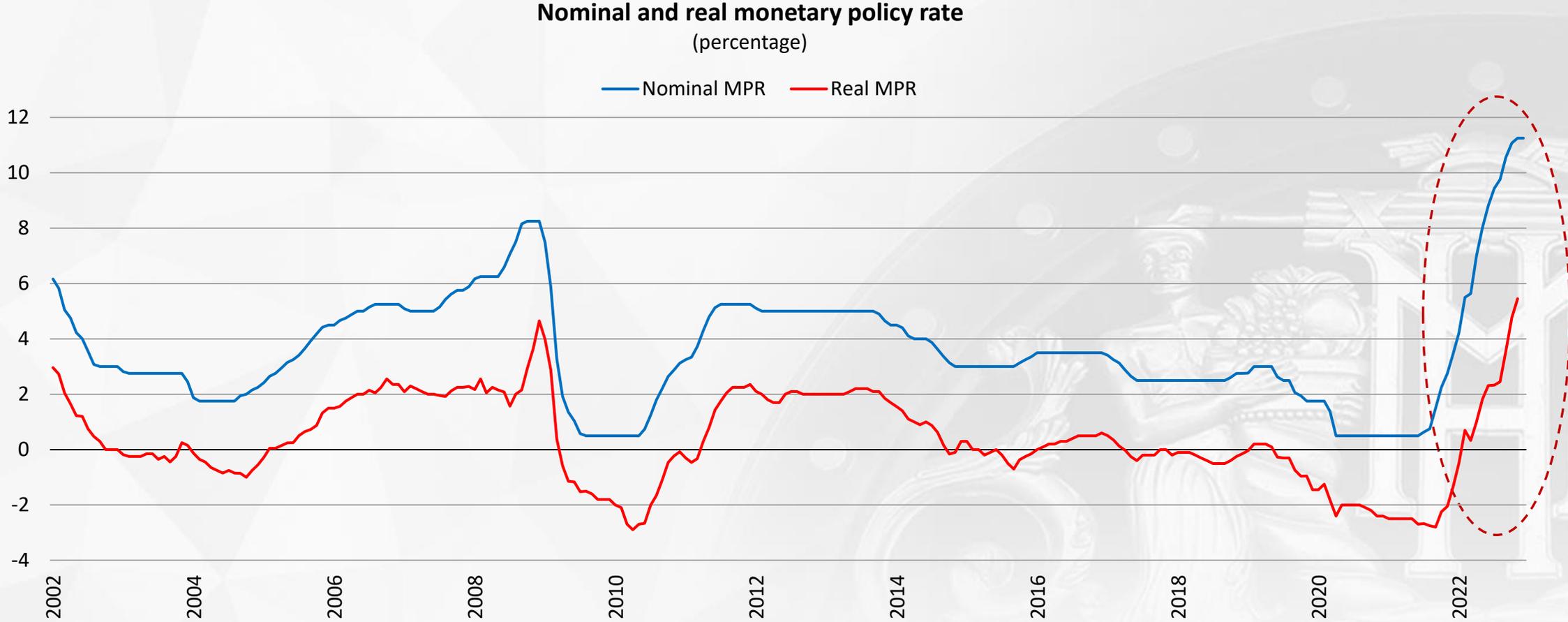
Chile emerged fast from the Covid-19 crisis. Yet massive fiscal transfers and pension fund withdrawals overheated the economy, adding to inflation pressures and current account imbalances



Note: (1) Output gap based on September Monetary Policy Report.

Source: Central Bank of Chile.

The Central Bank responded early on, rapidly raising the Monetary Policy Rate (MPR) to a record high

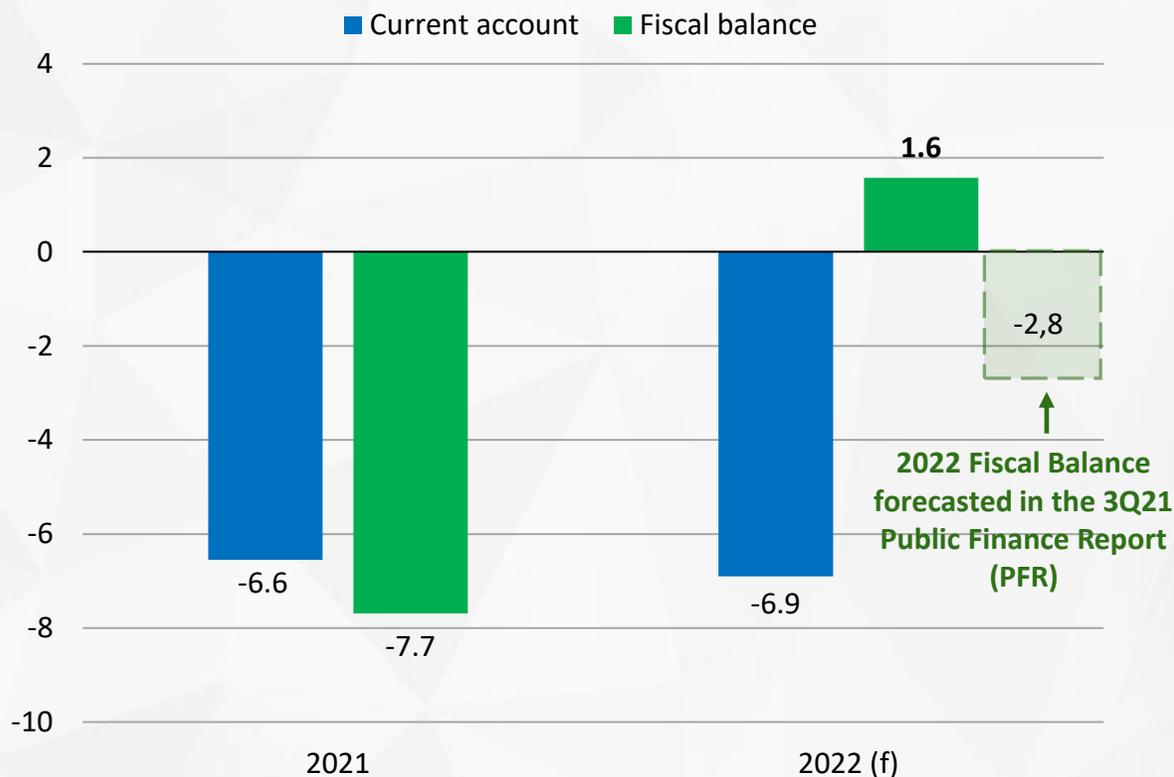


Note: Nominal MPR is the month average. Real MPR consider expectations to eleven months from the Economics Expectations Survey of Central Bank of Chile.

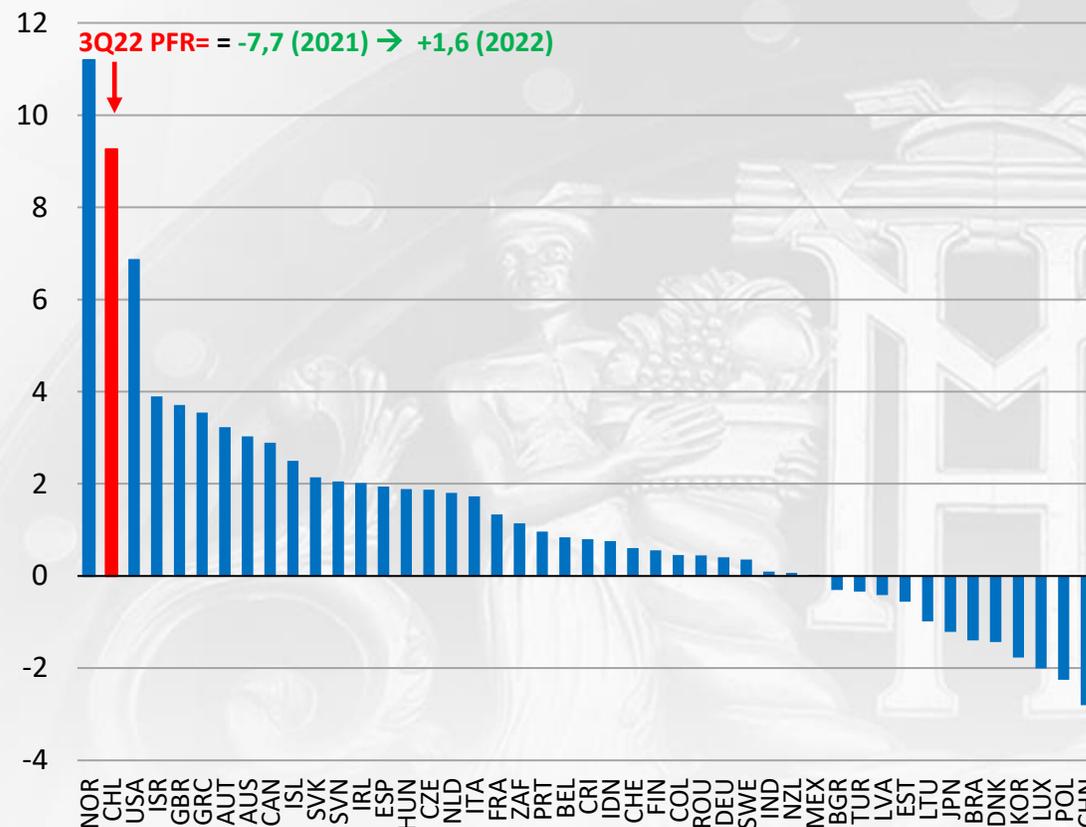
Source: Central Bank of Chile.

Meanwhile, the new government reined-in fiscal imbalances, articulating one of the largest post-Covid-19 fiscal consolidations

Current account and overall fiscal balances (1) (2)
(% of GDP)



Fiscal consolidation 2021-2022 (3)
(% of GDP, IMF)



Note: (1) (f): forecast. (2) PFR: Budget Office's Public Finance Report. (3) Calculations are made with the general government net lending data, according to the IMF World Economic Outlook (October 2022). For Chile, the calculation is based on the central government's overall balance data.

Source: IMF, Budget Office (Dipres), Ministry of Finance.

External observers highlight Chile's commitment to fiscal discipline

Moody's , October 2022

- “Overall, the budget highlights the Boric Administration's commitment to medium-term fiscal consolidation, despite a challenging macroeconomic and political environment.”
- “Chile's 2023 budget proposal reflects commitment to fiscal consolidation, a credit positive”

FT, October 2022

- “One of the world's most dramatic post-Covid spending squeezes is expected to deliver a bigger-than-expected budget surplus for Chile's leftwing government this year, pleasing investors.”

Bloomberg, August 2022:

- “The latest forecast from the country's budget office is for a full-year deficit worth 0.1% of GDP, down from a whopping 7.7% in 2021 and 7.3% the year before. Analysts are skeptical, but even they see the shortfall dropping to 2.95%. None of the other 22 emerging-market economies in Bloomberg's EM currency basket is expected to trim their deficit by more than 2.1% of GDP, and in most cases it will widen”.
- “More remarkably, Finance Minister Mario Marcel is planning to slash spending by 24% for the full year, even more than the 22% the former government had forecast in its budget for 2022.”

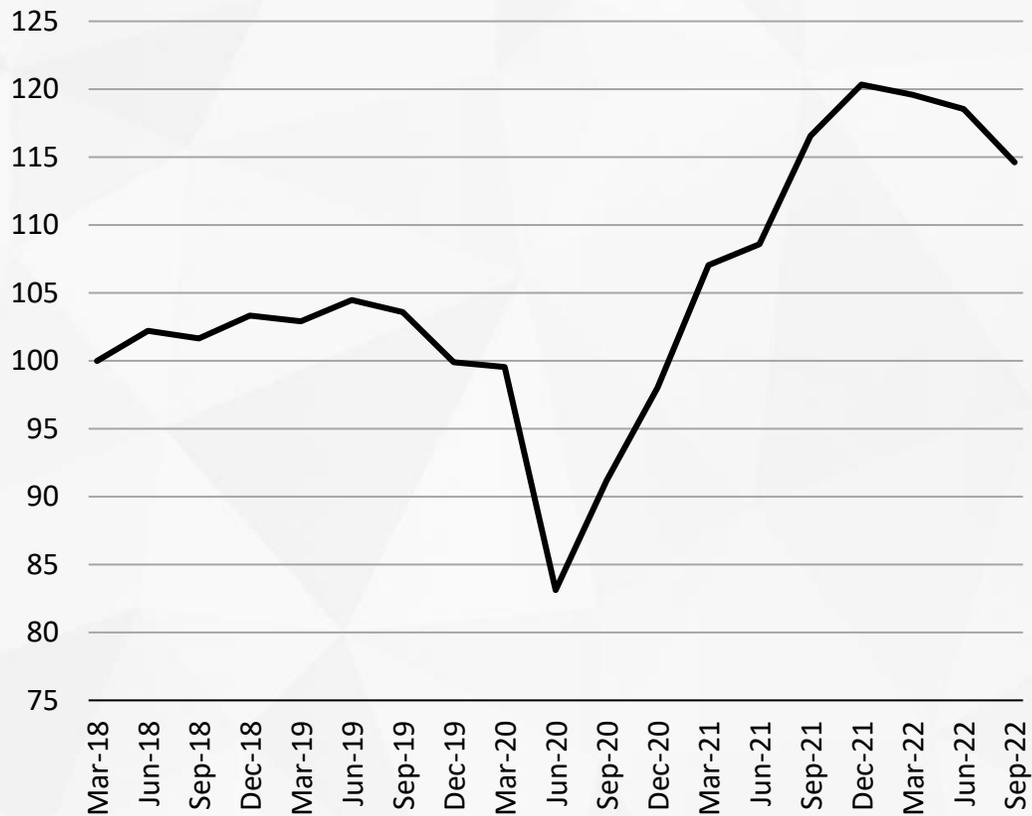
IMF, August 20, 2022:

- “The government's structural fiscal consolidation, guided by the fiscal rule, is advancing significantly faster than anticipated while protecting the most vulnerable.” ... “The government is also replenishing the sovereign wealth fund,”
- “The authorities remain firmly committed to debt sustainability and fiscal responsibility. Gradual fiscal consolidation guided by the fiscal rule is expected to rebuild buffers and stabilize gross public debt below 45 percent of GDP..., which is low by international standards.”

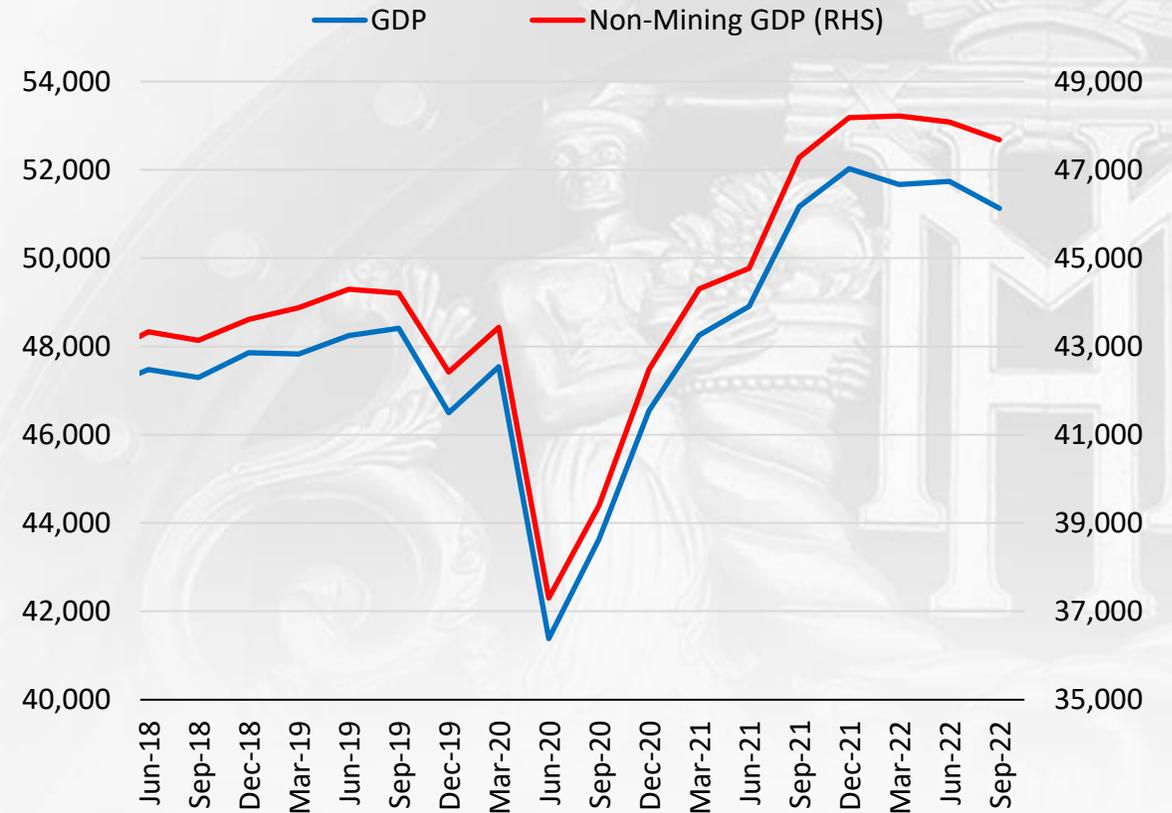
Fitch Ratings, May 2022: Chile's updated economic and fiscal projections are consistent with earlier statements indicating that the Boric administration favors prudent fiscal policy settings.

After peaking in 2021Q3, economic activity has slowed down due to fiscal and monetary stabilization. Wholesale and retail trade lead the downturn, reflecting weakening private consumption. The economy is adjusting more moderately than anticipated

Domestic Demand
(index 2018Q2=100, seasonally adjusted)

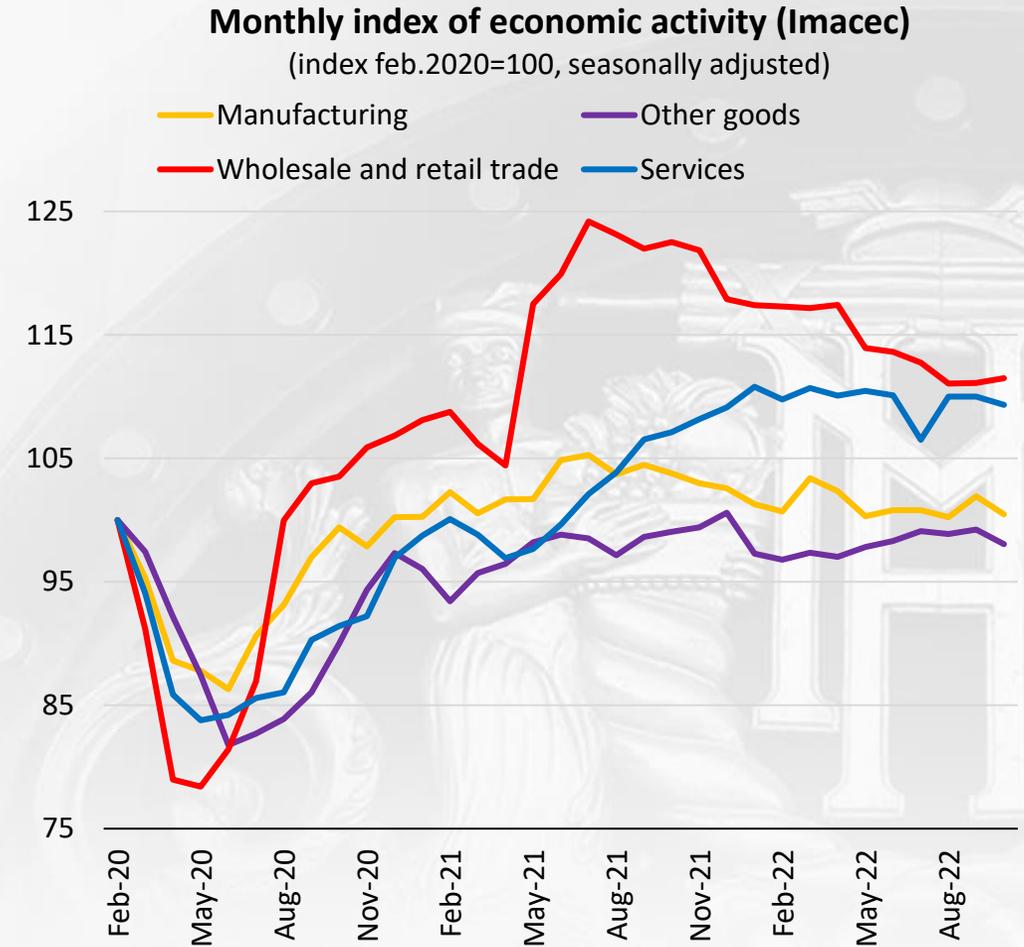
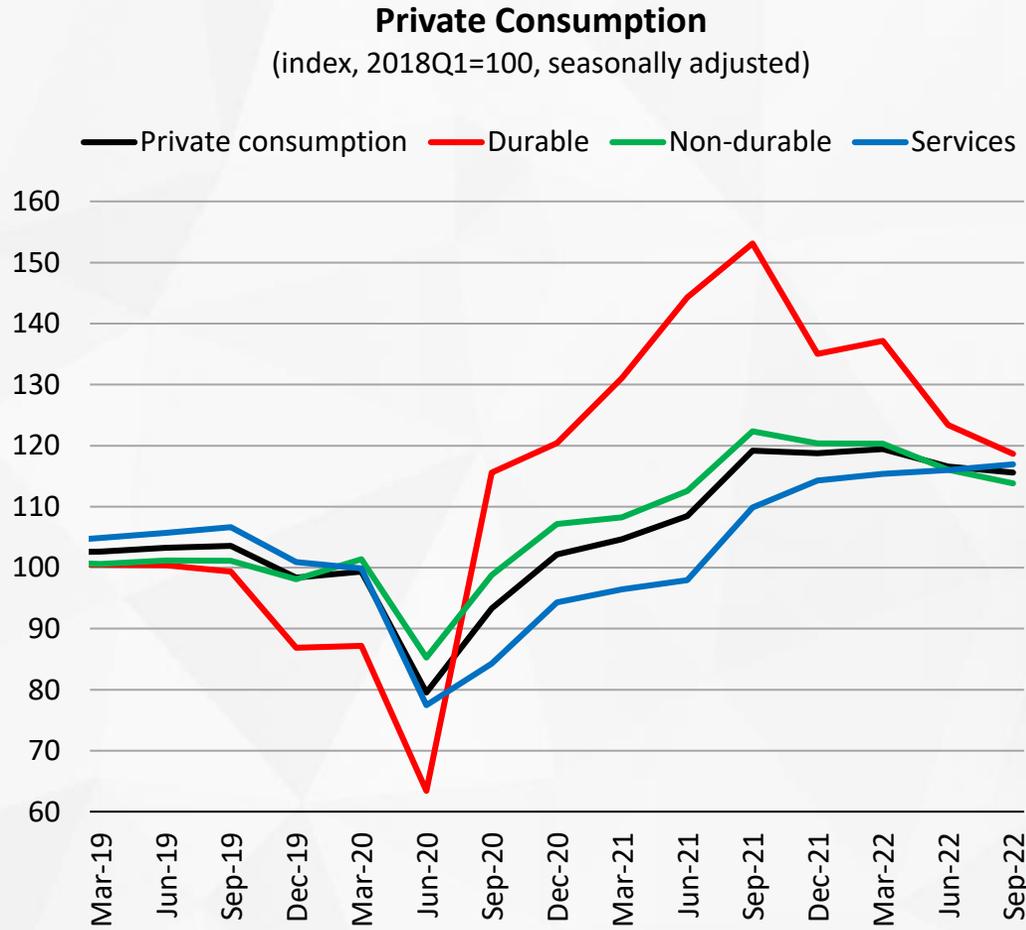


Gross Domestic Product
(billions of pesos, chained volume at previous year prices, quarterly, seasonally adjusted)



Source: Central Bank of Chile.

Private consumption has continued to decline from its peak on end-2021, without dragging down other sectors



Source: Central Bank of Chile.

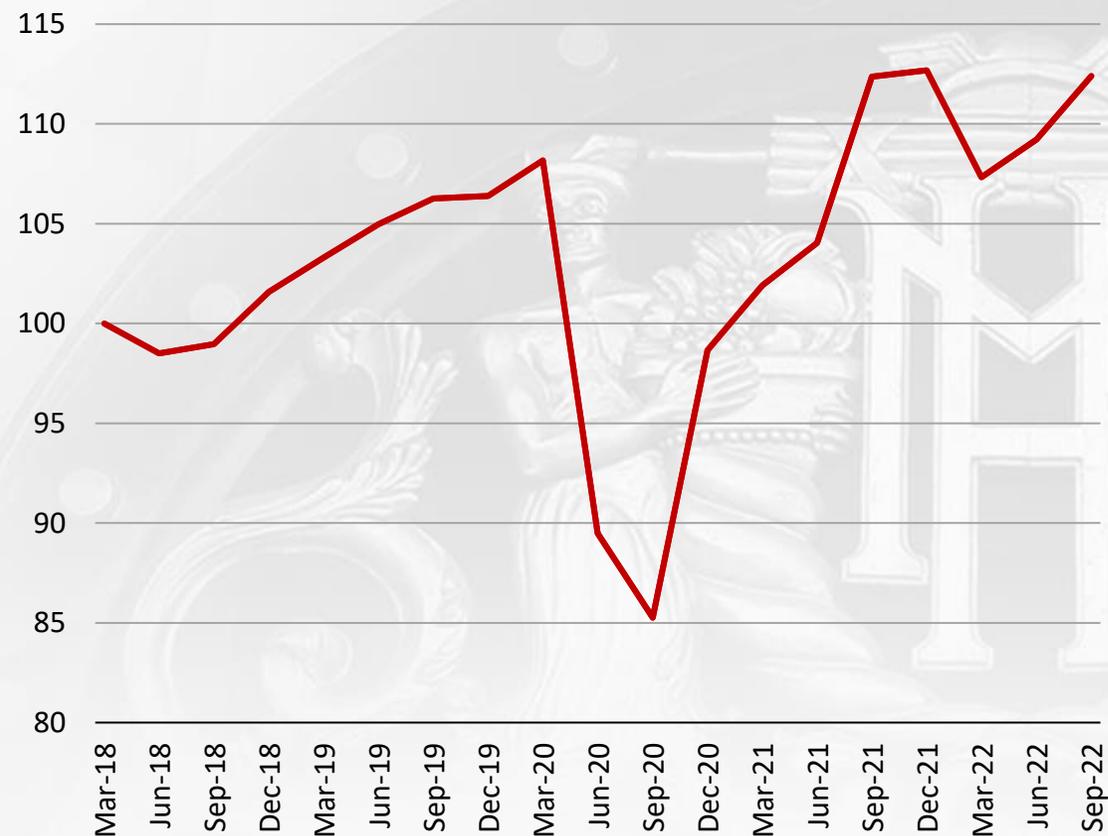
Investment is performing better than expected, with an expansion over 3% in 2022. Machinery and equipment has recovered, while construction and civil works expand with heterogeneity. Residential construction slows down; technology-based projects peak up

Capital goods imports
(moving quarter, millions of US\$)



Gross fixed capital formation in construction and other investment works

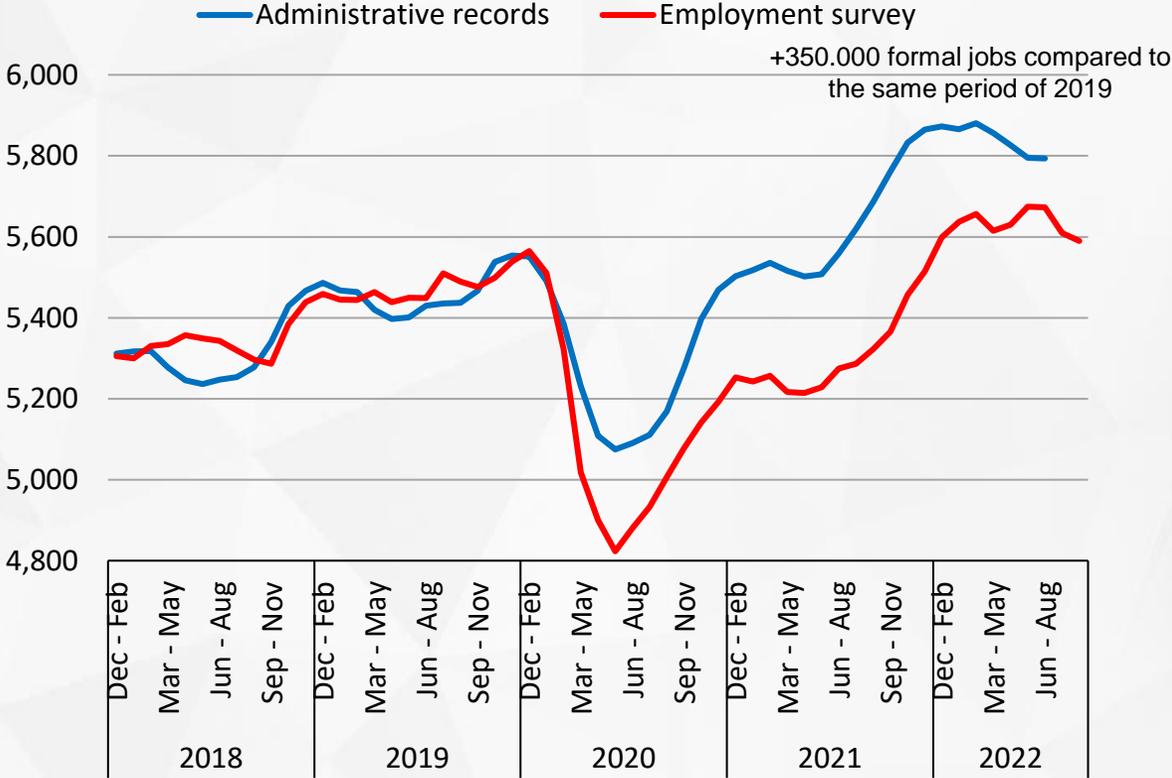
(index, 20181Q=100, seasonally adjusted)



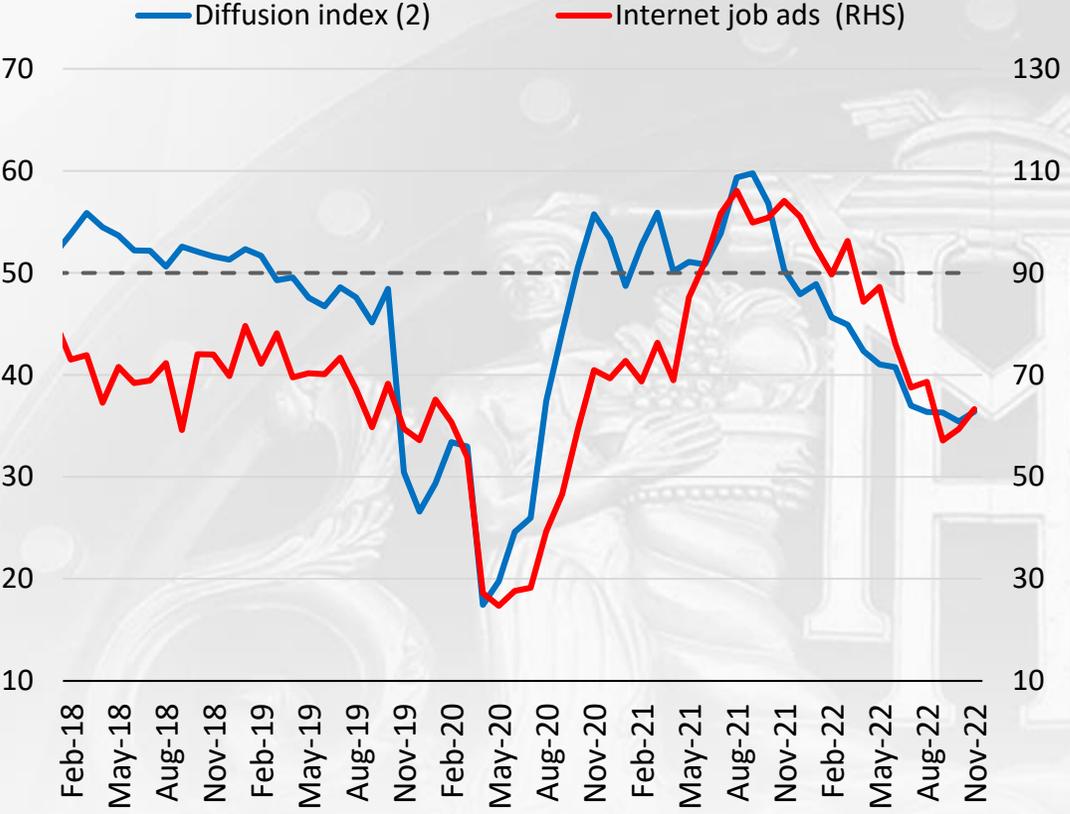
Source: Central Bank of Chile.

The labour market has created formal jobs, but demand is losing steam in the last few months

**Formal salaried employment:
Survey and Administrative data (1)**
(thousands)



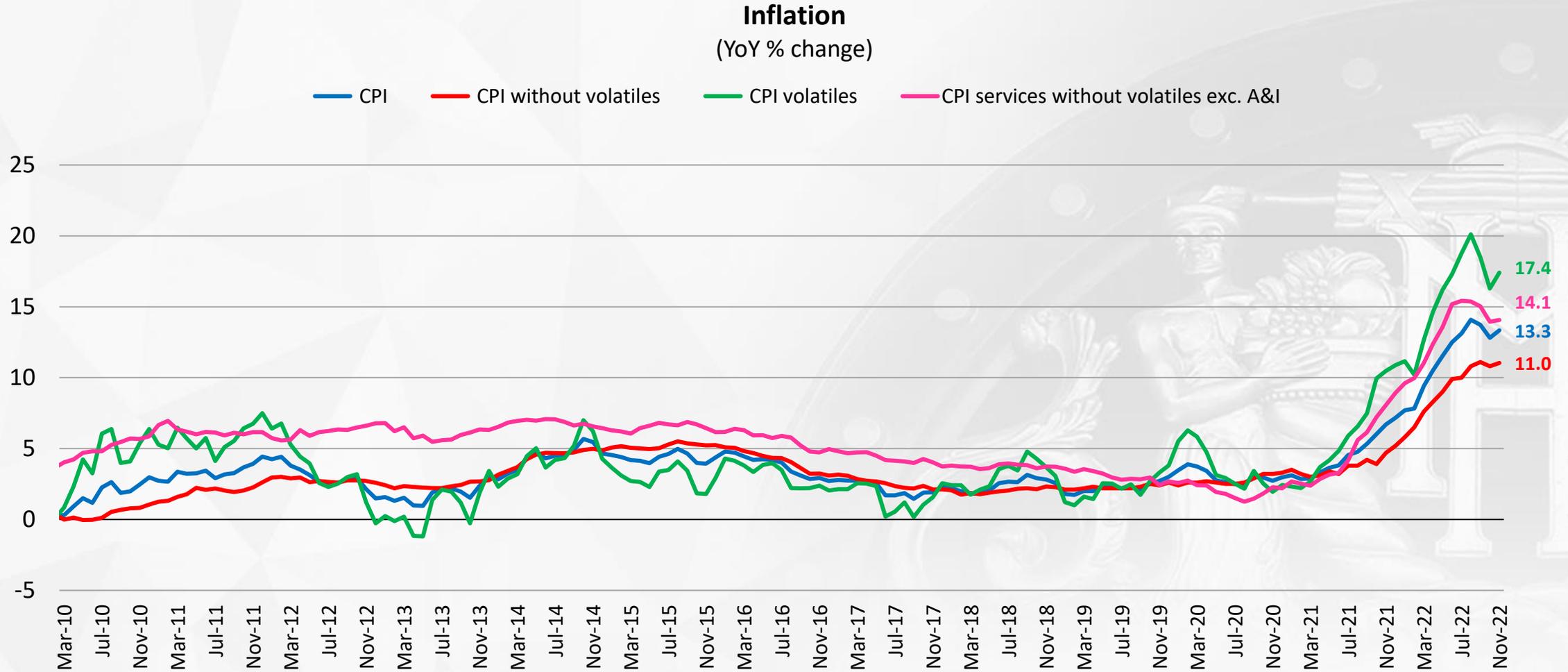
**Labor demand
(indexes)**



Note: (1) Administrative records correspond to retirement contributors inform by Superintendency of pensions. (2) Average of IMCE employment indicators in Commerce, Industry and Construction. Values above (under) 50 indicate optimism (pessimism).

Source: Central Bank of Chile, National Statistics Institute and Superintendency of pensions.

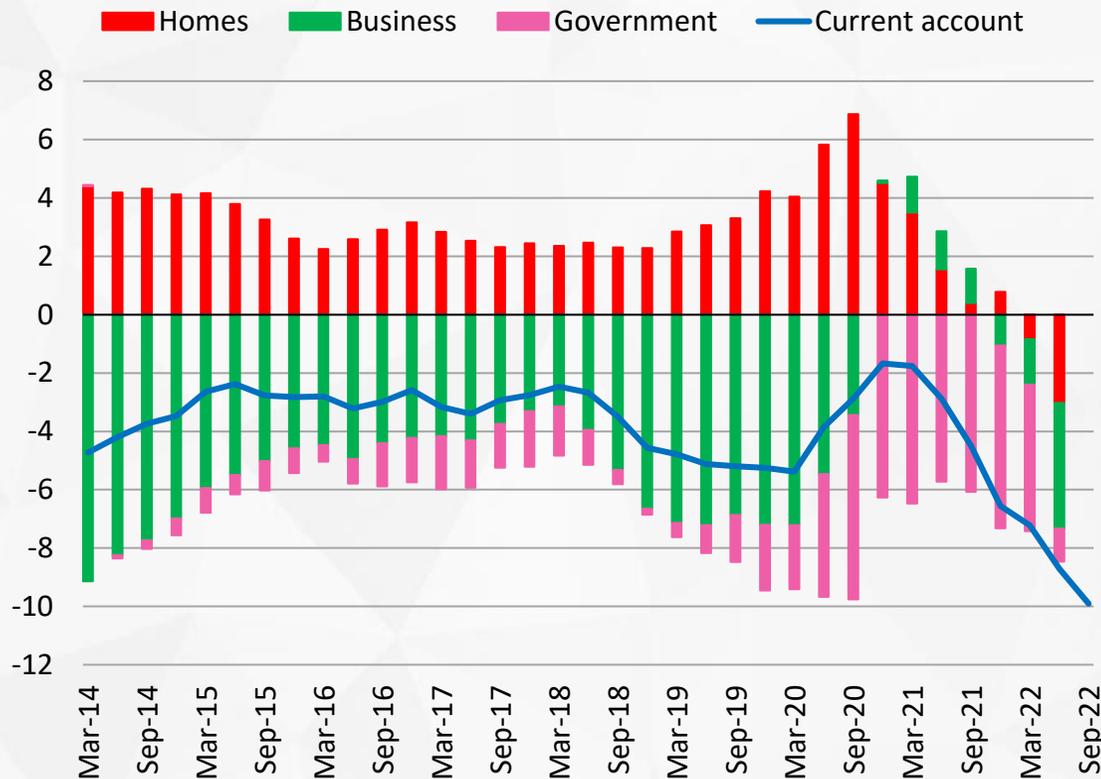
As a result of the economic cooling down, inflation reached a turning point in August, dropping nearly 1 pp since then. The contraction of domestic demand, lower international prices of food and energy and the appreciation of the local currency, will ensure a consistent inflation decline



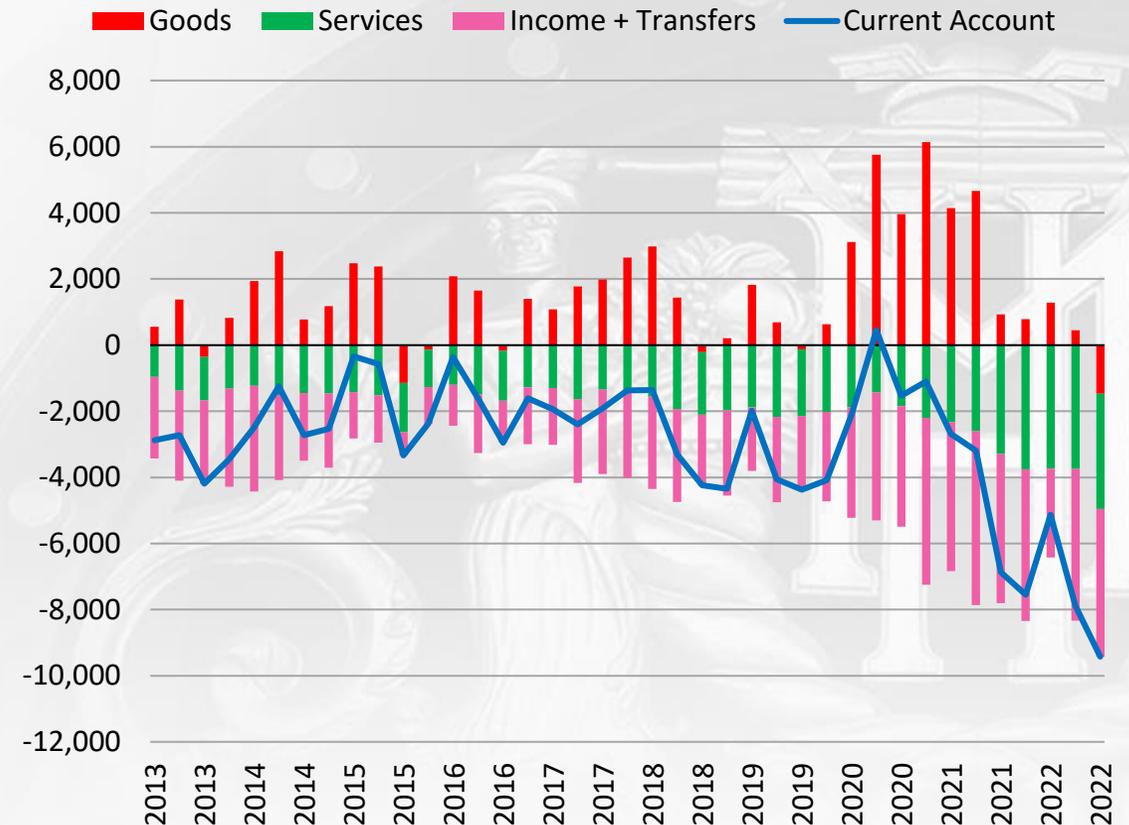
Source: National Statistics Institute.

The current account deficit widened due to high import levels, energy prices, and a deficit in services. As demand normalizes, it will tend to close, further reducing pressures on the exchange rate.

Current account, Saving minus Investment by institutional sector
(% of GDP, annual moving average)

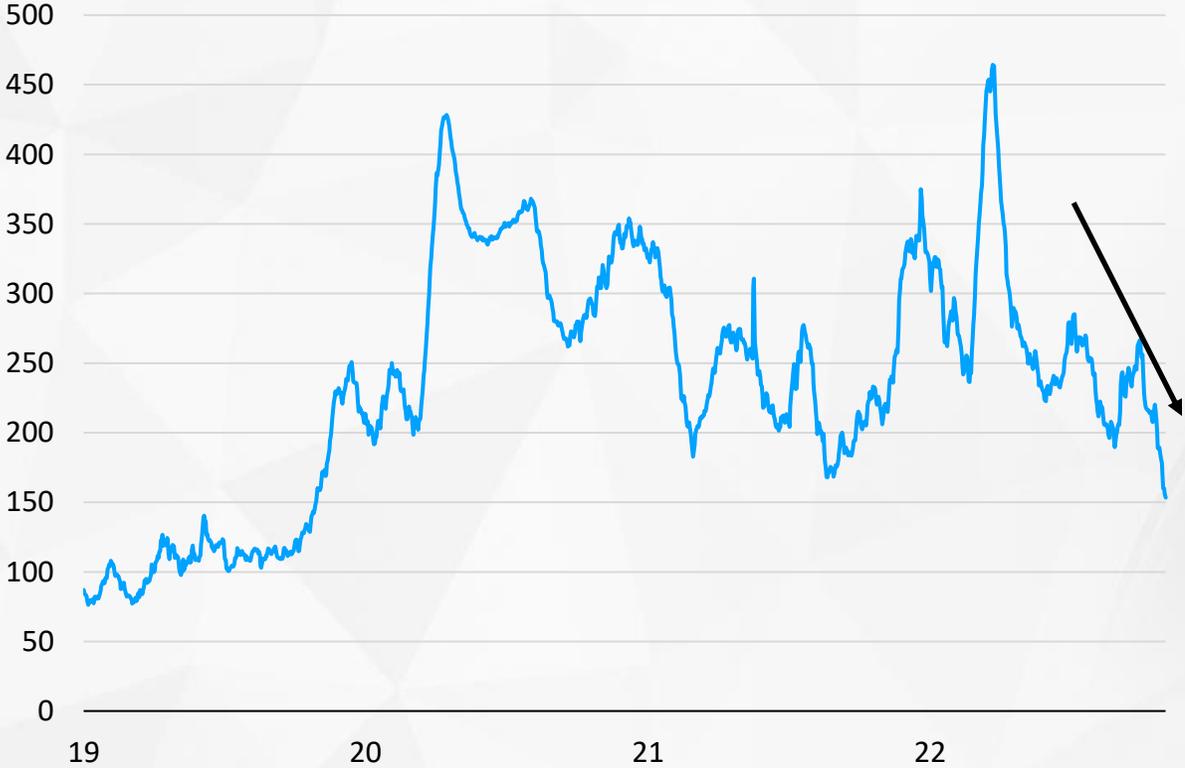


Current account by component (1)
(Millions of USD, quarterly)

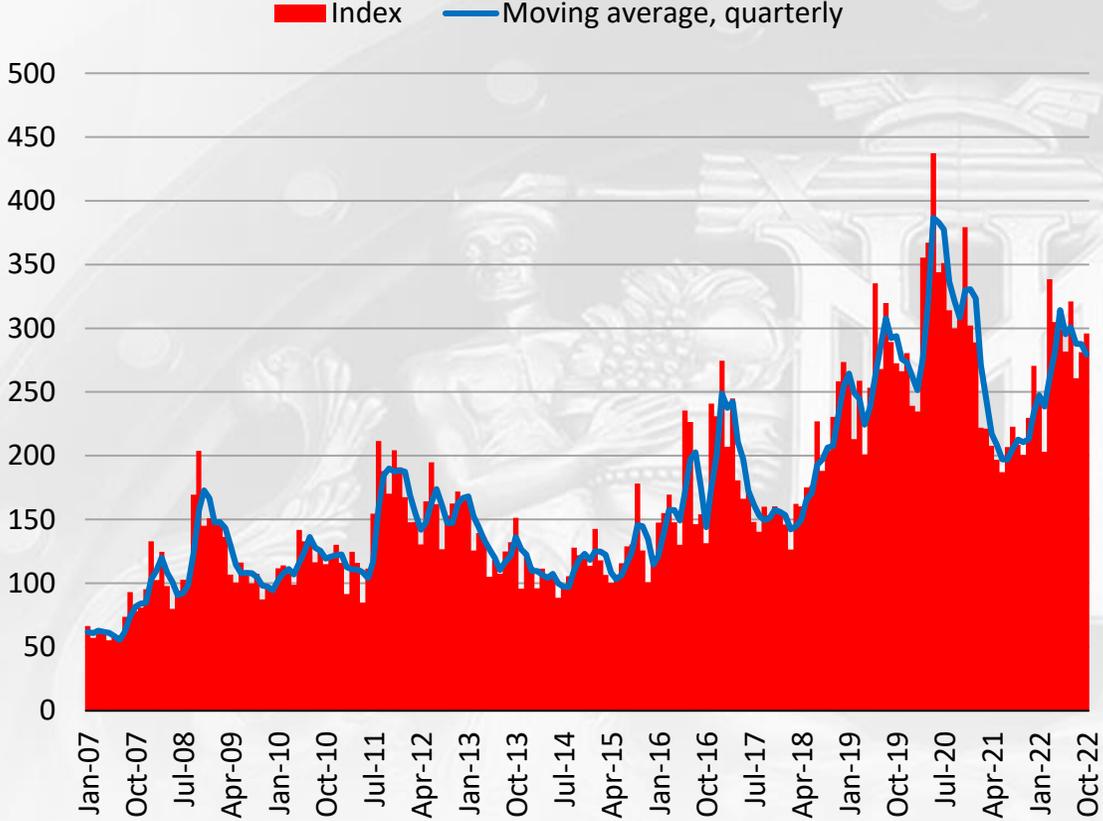


Economic uncertainty has decreased in Chile and is close to pre-pandemic levels whereas in the World it continues at high levels

Chile: Economic uncertainty index
(index)



Global Economic Policy Uncertainty
(index, adjusted by ppp)

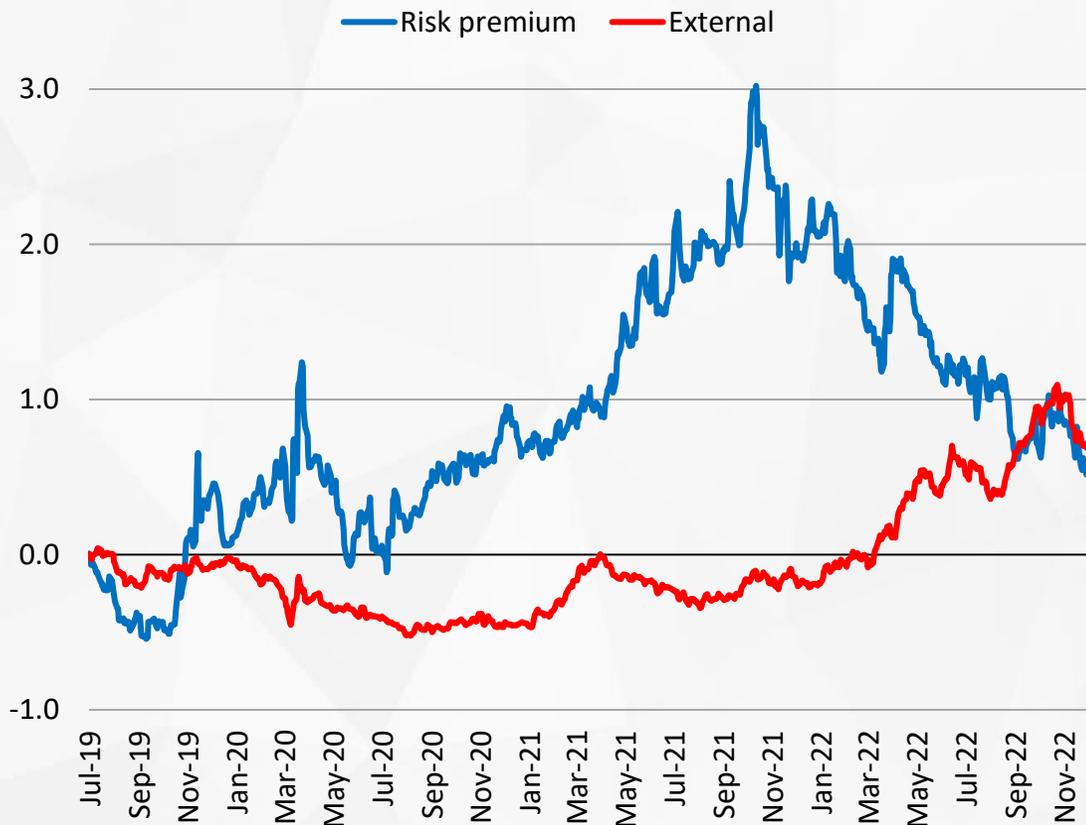


Source: Banco Central de Chile en base a Becerra y Sagner (2020), Economic Policy Uncertainty.

The risk premium component of the long-term rates has shown a sharp drop since the end of 2021

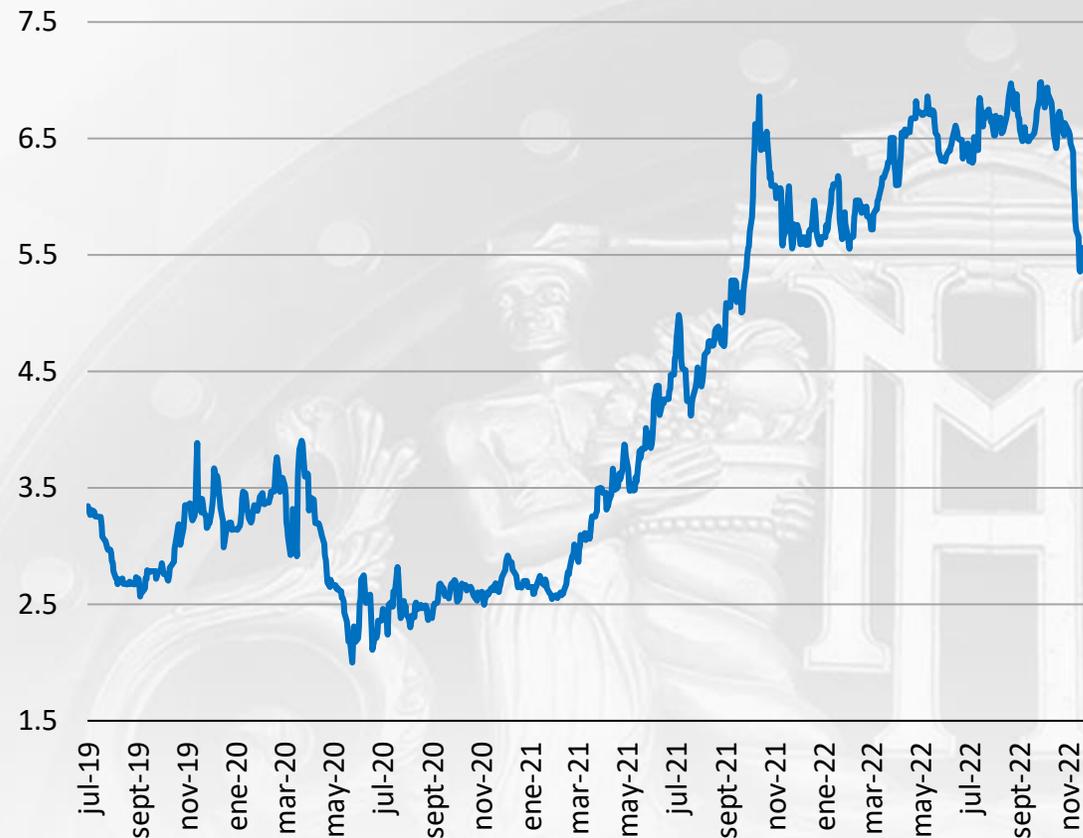
Structural decomposition of 10-year zero rate (1)

(percentage points, accumulated since 1 July 2019)



Yield on 10-year bonds

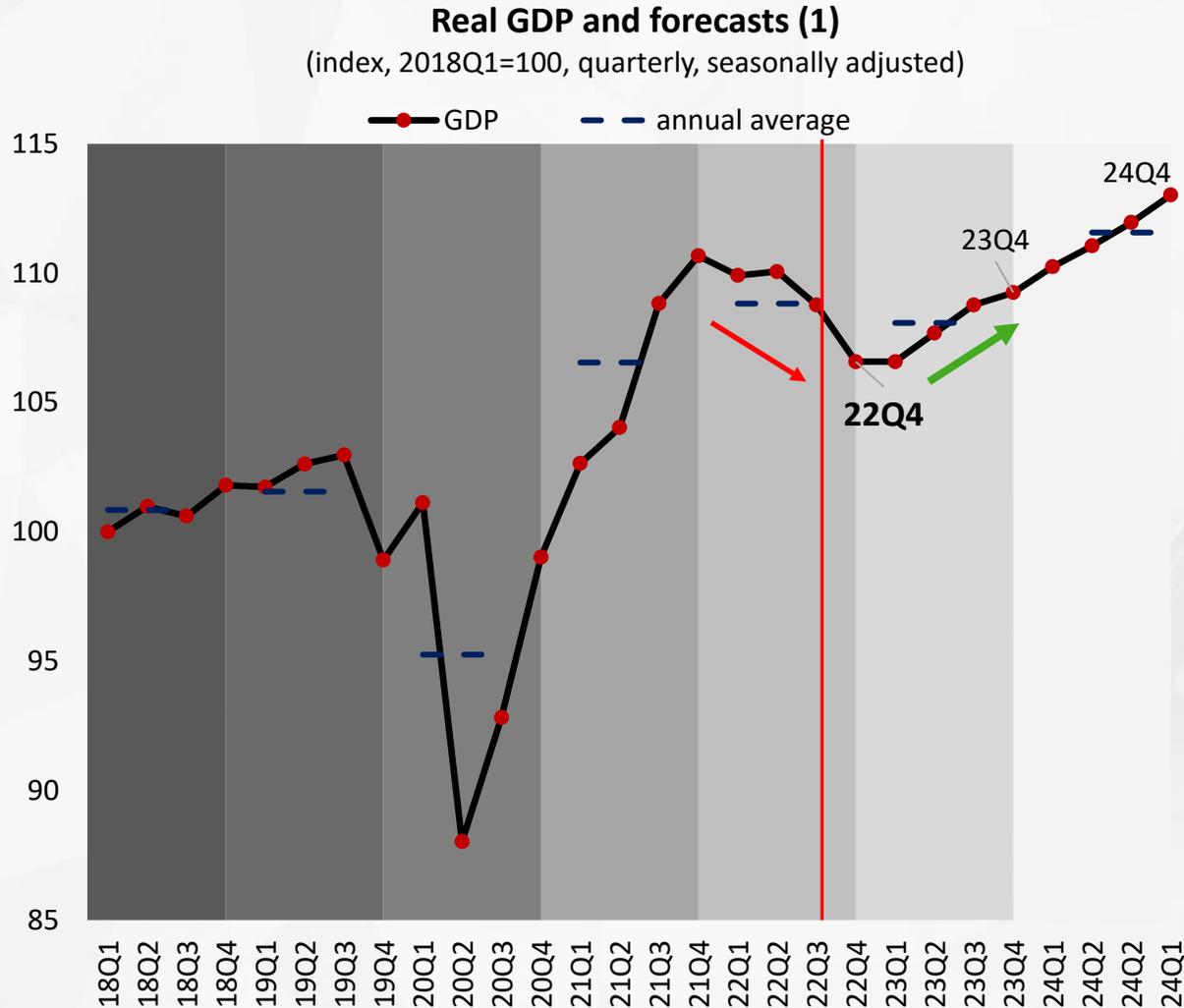
(%)



Note: The graph shows selected components of the structural decomposition of the 10-year zero rate. The original dataset -from the Central Bank of Chile- also includes other components, such as growth and monetary policy. Historical decomposition of the long rate from a BVAR based on the identification strategy proposed by Eterovic and Eterovic (2022), incorporating an external block. The exogenous block encompasses all US shocks (monetary policy, growth, risk aversion, and pure risk), which have been added for simplicity.

Source: Central Bank of Chile based on RiskAmerica.

After declining in the 2nd half of 2022, GDP is expected to resume growth in 2023Q2. Inflation will be declining at the same time

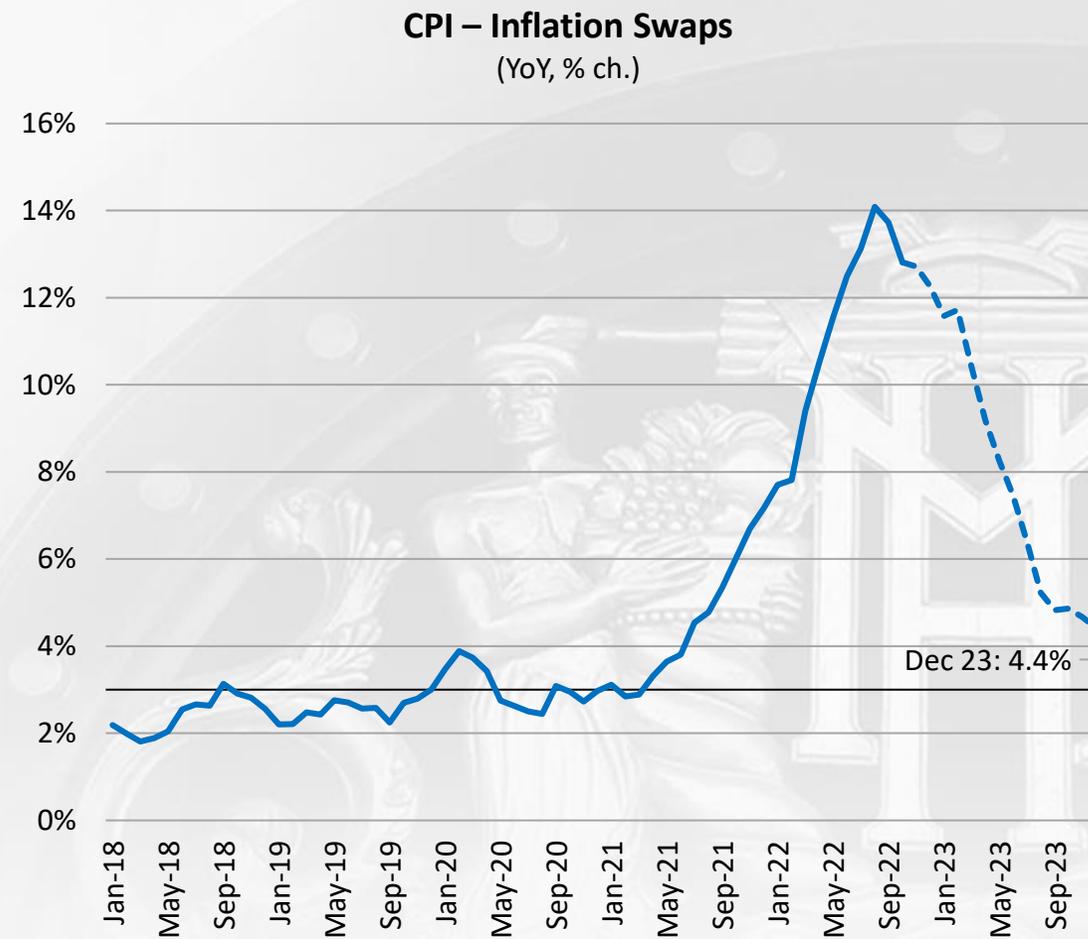
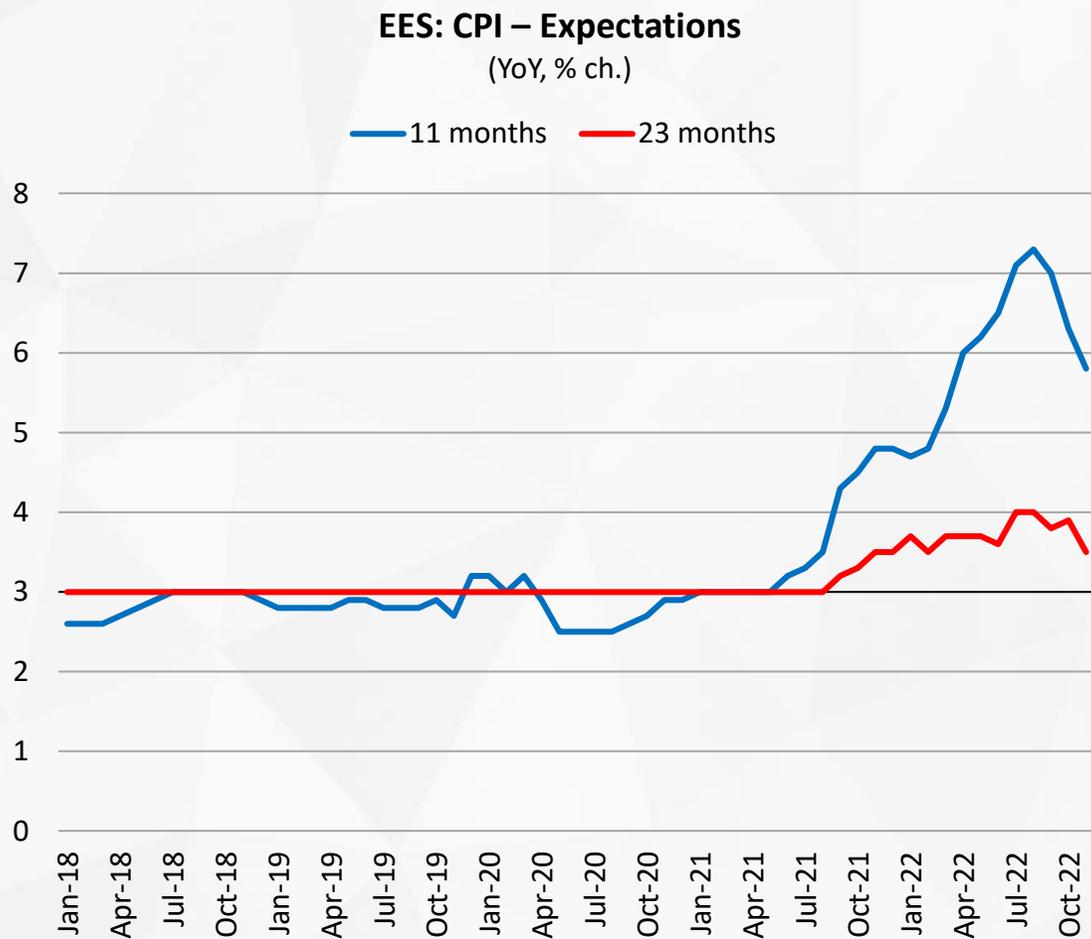


	Forecasts		
	23Q2	23Q3	23Q4
GDP (Central Bank, 22Q3 IPoM) (YoY % change)	-2,5%	-0,6%	1,1%
GDP (Ministry of Finance, 22Q3 PFR) (YoY % change)	-1,9%	0,6%	2,3%
GDP (Ministry of Finance, 22Q3 PFR) (QoQ % change, SA)	1,0%	1,0%	0,4%
Inflation (Central Bank, 22Q3 IPoM) (YoY % change)	7,4%	4,6%	3,8%
Inflation (Market) (2) (YoY % change)	8,3%	5,5%	4,6%

Note: (1) Forecasts from 2022Q4 with PFR 2022Q3 data. (2) Market inflation with December 05 data.

Source: Central Bank of Chile and Ministry of Finance.

Markets validate the prospect of declining inflation, pointing to a convergence to the 3 per cent target in 2024

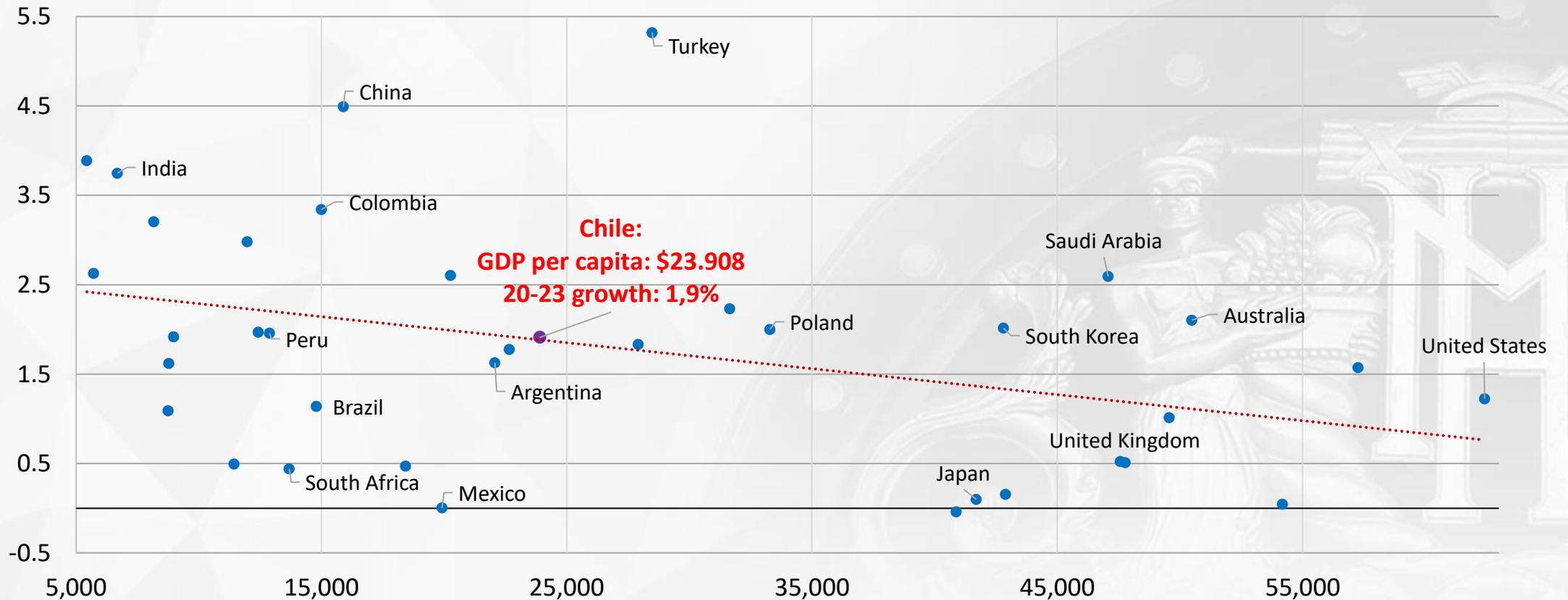


Note: inflation swaps of December 05.

Source: Central Bank of Chile.

On balance, Chile's average growth between 2020-2023 would be aligned with its per capita GDP in comparison with a large group of countries

GDP per capita vs. Average 2020-2023 growth: Latam and main Economies (1)
(percentage, 2017 international dollar purchasing power parity)

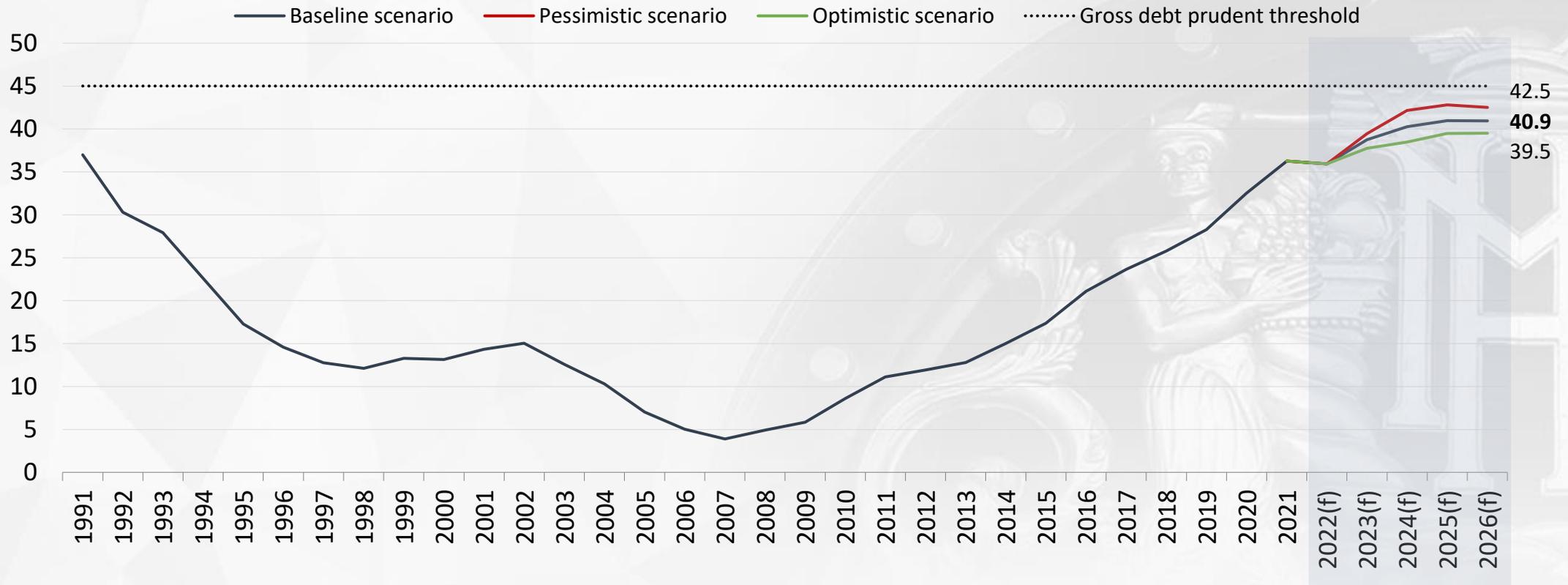


Note: Chile's 2022 and 2023 growth from Ministry of Finance forecasts. (1) Selected countries are: United States, Netherlands, Germany, Australia, Canada, France, United Kingdom, Saudi Arabia, Italy, Korea, Japan, Spain, Poland, Panama, Türkiye, Malaysia, Chile, Uruguay, Argentina, Costa Rica, Mexico, Thailand, China, Colombia, Brazil, South Africa, Peru, Paraguay, Indonesia, Ecuador, Philippines, El Salvador, Bolivia, Guatemala, India, Honduras and Nicaragua

Source: International Monetary Fund.

The new fiscal policy framework aims at stabilizing gross debt/GDP in the course of the current Administration. The committed policy path means that this should happen at a little over 40%, well below the policy threshold of 45% of GDP

Central Government Gross Debt
(% of GDP)



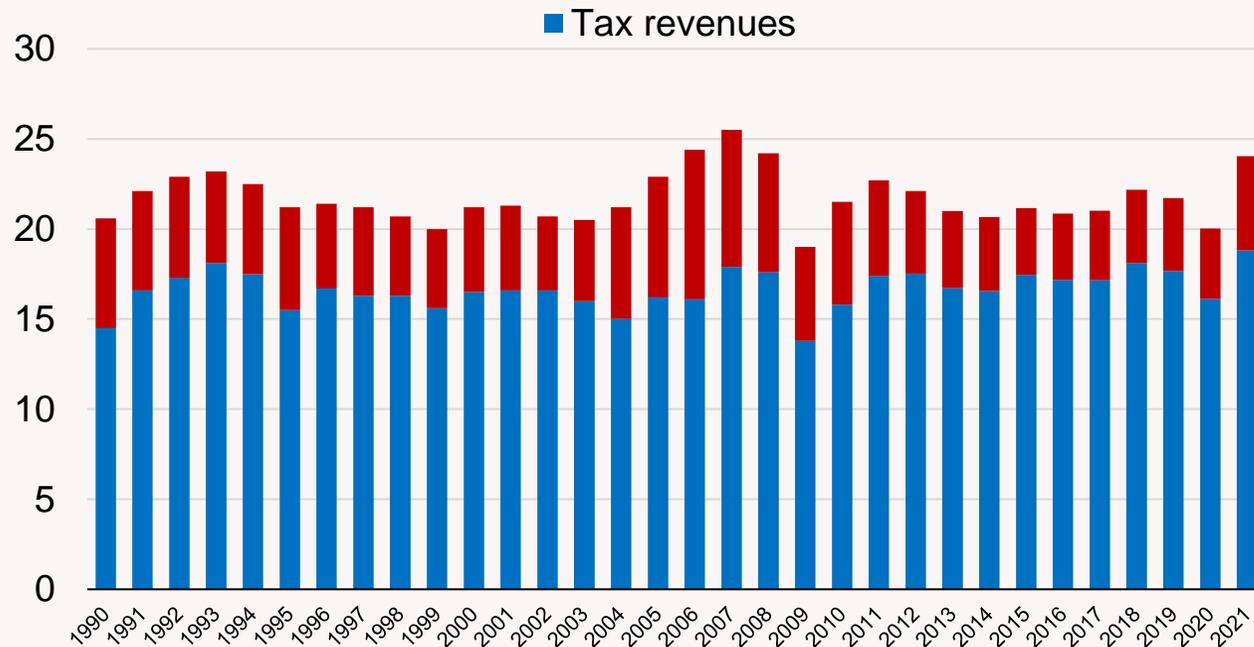
Note: (f): forecast.
Source: Budget Office.

- At the outset of the Covid-19 crisis, the Chilean economy was featured as one of the most vulnerable to a global shock, given its openness and coming from a idiosyncratic shock as the social unrest of end-2019.
- Recovery in 2021 was fueled by massive fiscal transfers and pension fund withdrawals that injected 35% of GDP in liquidity to households. This overheated the economy and added to global inflationary pressures.
- A timely and bold macro policy response is addressing these unbalances and putting the economy in a stabilization path. The economy is responding well to these policies and inflation has already reached a turning point.
- The economy will continue normalizing well into 2023, when it will be able to return to a long-term path. In the meantime, the Government will continue supporting low- and middle-income households and most affected sectors to ensure that nobody is left behind in the recovery.
- From 2023 onwards, economic developments will critically depend on the reform agenda and the ability to reap on new emerging opportunities. Investment, productivity and innovation should bring together the private sector, foreign investors and the government.

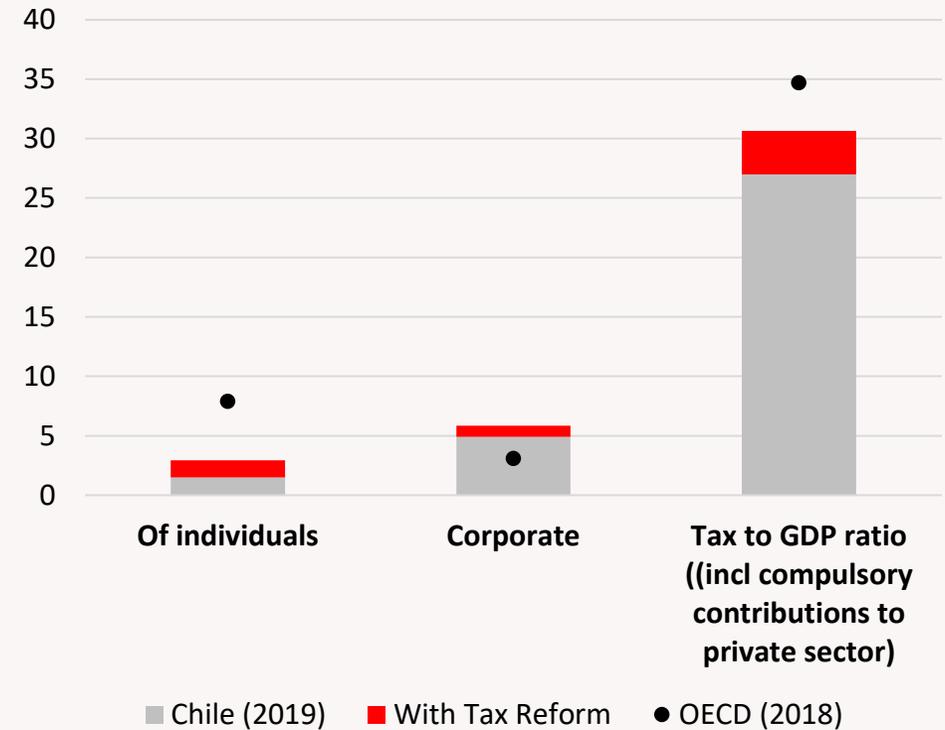
The reform agenda

Tax burden in Chile is comparatively low and has changed very little over the last 30 years. The Reform aims at reducing the gap with OECD economies

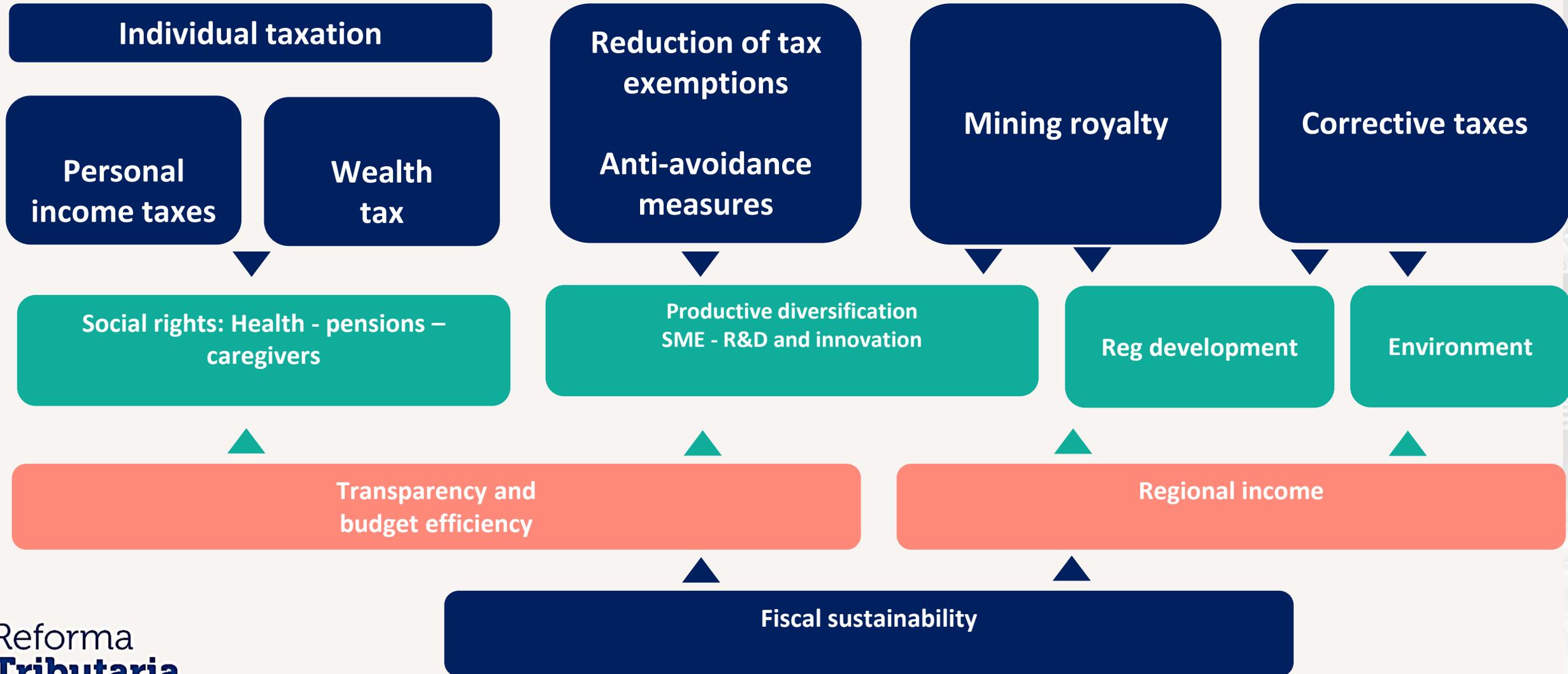
Central Government operating income
(GDP %)



Tax to GDP Ratio
(% of GDP, 2019)



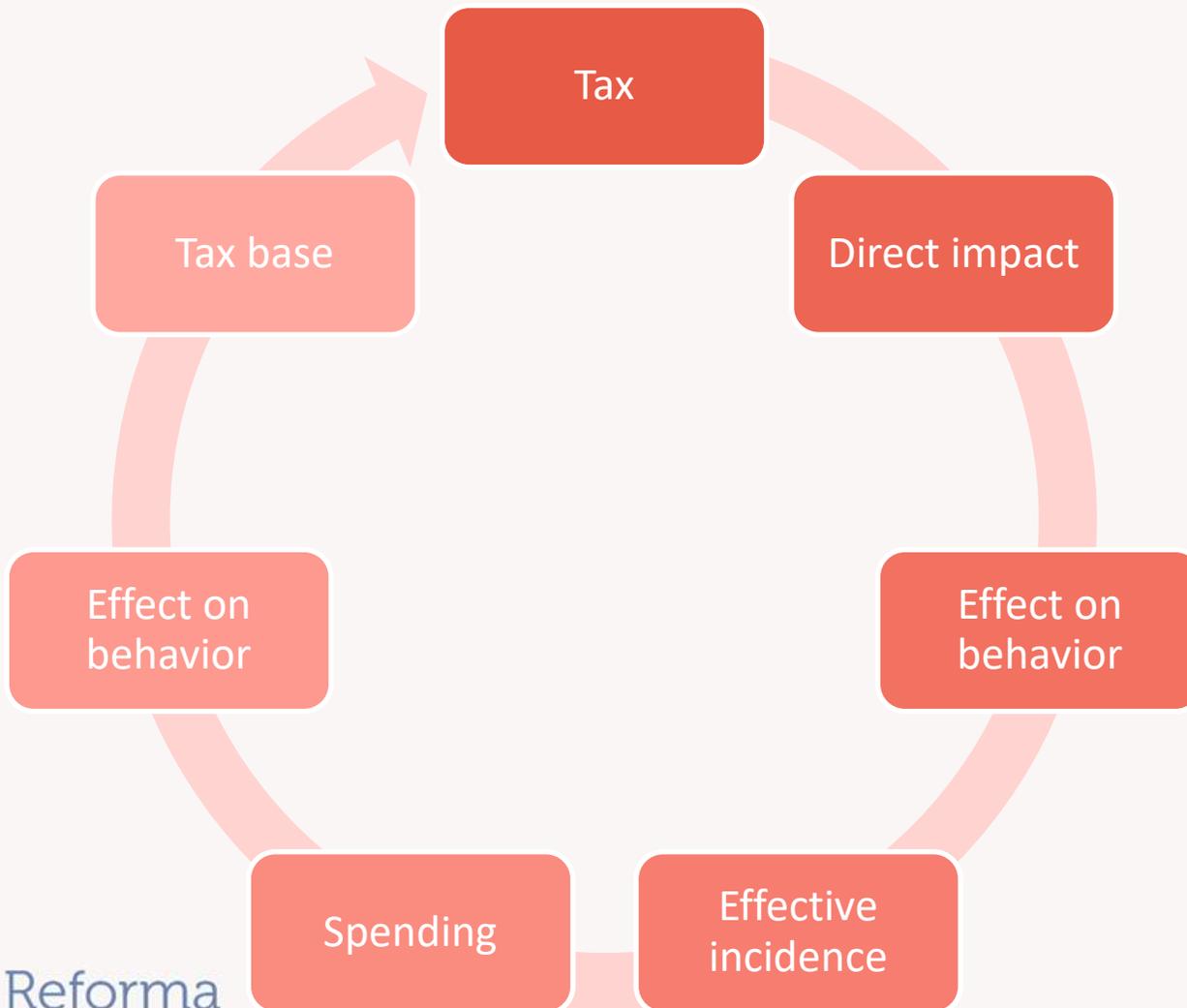
Tax Reform Structure



Tax Reform is making good progress

- **Personal income tax, Wealth tax, reduction of tax exemptions and anti-evasion measures project**
 - The vast majority of the measures against evasion and avoidance, the new dual system and the final tax deferral rate have already been voted (Chamber of Deputies's Treasury Commission).
 - Almost all norms proposed by the Executive have been approved, many of them with broad support.
 - Wealth tax, reduction of tax exemptions and benefits for the middle class votations are pending.
- **Mining Royalty**
 - Vote this week at the Senate's Mining Committee
- **Corrective taxes**
 - To be submitted in the first quarter of 2023

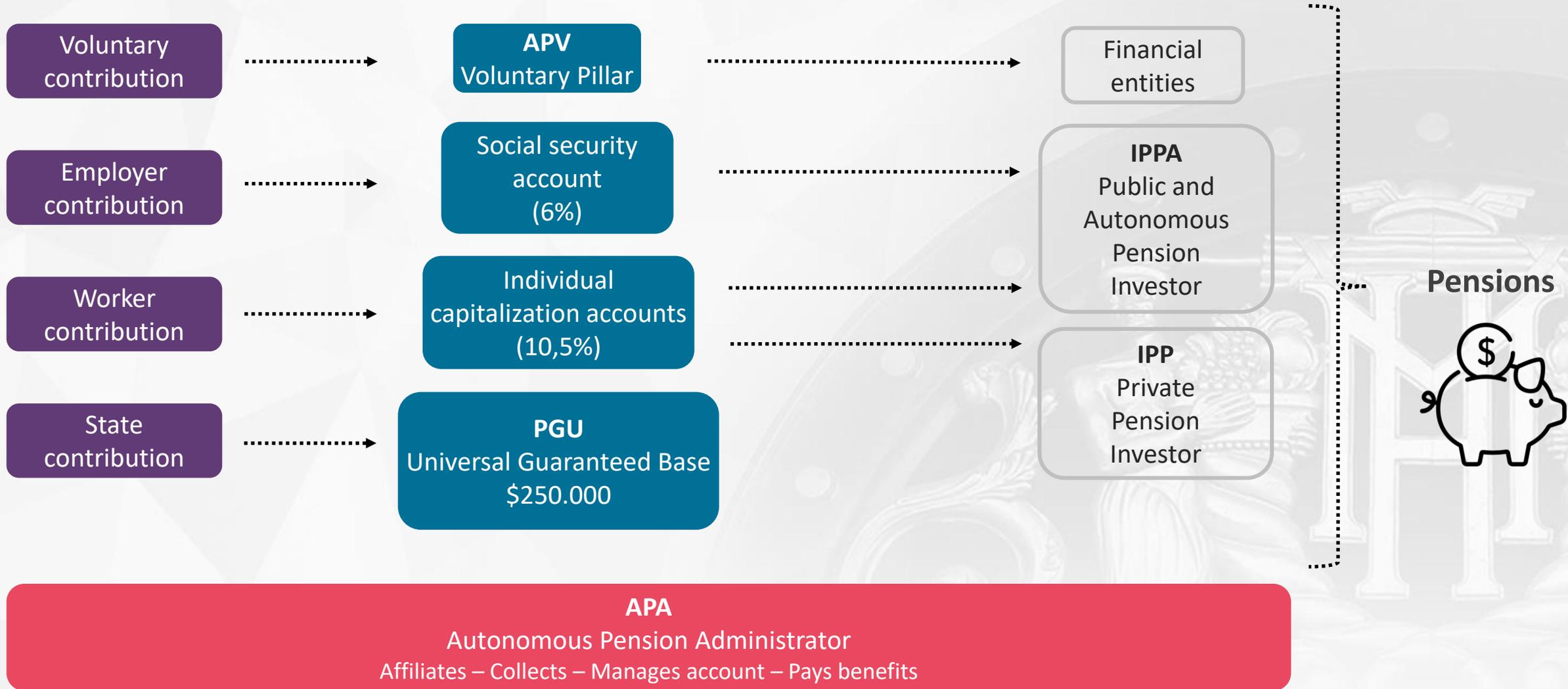
Economic impact must consider both the revenue and the spending side



Tax policy	Total effect on GDP per capita – Long run (%)
Corporate tax	-0,84%
Wealth tax	-0,82%
Personal Income tax	-1,04%
Reduce tax evasion and tax avoidance	0%
Total	-2,7%
Tax expenditure	Total effect on GDP per capita – Long run (%)
Increase R&D expenditure	3,2%
Family benefits in kind	0,7%
Education	0,3%
Pensions	0,3%
Total	4,5%

Note: in the case of higher health spending and PGU, the macroeconomic impact is not evaluated. Although there is evidence that higher health spending can have a positive impact on economic growth through increased life expectancy, labor productivity and human capital accumulation (Bedir, 2016), the empirical evidence shows mixed results and we take a conservative stance.

Pension reform



Note: Acronyms come from the spanish translation.
Source: Ministry of Finance.

Pension Reform will increase pensions while allowing to recover the long-term private savings base of the economy and increase the depth of the capitals market

Effective contribution to the pensions system
(% gross income, 2020)



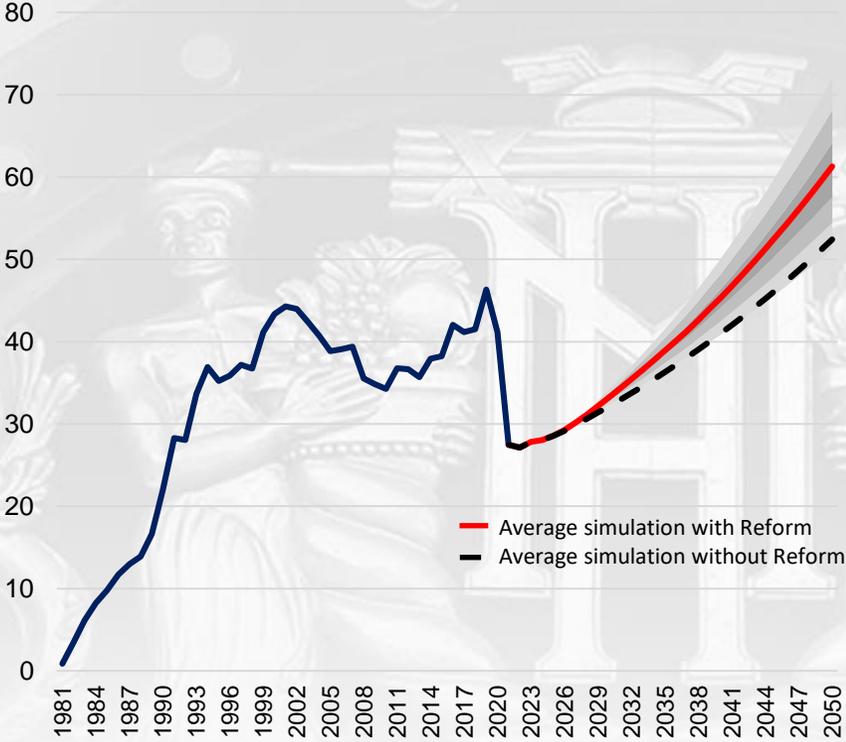
Note: Green column stands for the OECD average and the red column for Chile. In Chile, figures includes the disability insurance and fees paid to AFPs.
Source: OECD

Impact on future pensions

Pensión year	Increase (in UF)	Without Reform (Median)	Additional pensión with Reform (Median)
2065	Total pension	11,6	
	Increase PGU		1,0
	Increase PAFE (reorg. industrial)		1,4
	Increase 6% benefit		3,0
	Total increase		5,6 (48%)

Source: Superintendencia de Pensiones

Domestic Assets of Pension System
(% GDP)



Note: Simulations assuming different scenarios of increases in pension contributions, growth, domestic investment, decrease in contribution gaps, etc. The results of the minimum and maximum scenarios are plotted in the light gray area while the dark gray areas represent more central scenarios. The red line corresponds to the average of all the simulations. The dotted black line corresponds to the projection of assets in the absence of the pension reform.
Source: Ministry of Finance, Chile's Pension Supervisor (SAFP), Budget Office (Dipres)



Fostering investment:

The government presented a plan to boost investment and the economy. The “Let’s Invest in Chile” plan has six pillars and 28 specific measures

- The plan was set in motion in September 2022.
- The plan has an estimated impact of a five percentage points increase on investment in 2023, with additional spillovers for 2024.
- In addition, it will generate between 50,000 - 70,000 new job positions.
- The measures are based on recommendations from Chilean and international institutions, and on proposals from trade associations to boost the country’s economy.

Let’s Invest in Chile Plan



Some of the 28 measures

1. Tax Incentives for Private Investment

- Tax incentive for investment projects with a multiplier and green effect.
- A temporary semi-instantaneous depreciation mechanism will be applied during 2023.
- Extend the reduction in the first category tax for SMEs for two years.

2. Improvements in access to financing

- The State will guarantee financing of 10% of the mortgage deposit for buying a first home.

3. Improving public investment

- Increase public investment in 2023 and improve administrative processes.
- Recovery of unfinished public works.
- Extension of the polynomial readjustment coverage.
- Accelerate the construction of high standard bike lanes.
- Confirming (Reverse factoring)

4. Promoting foreign investment

- Reopening of investment attaché offices abroad.
- The investment promotion team will be strengthened.

5. Improvements in the effectiveness of regulation and permit procedures

- Fund for the strengthening of critical services in the processing of projects.

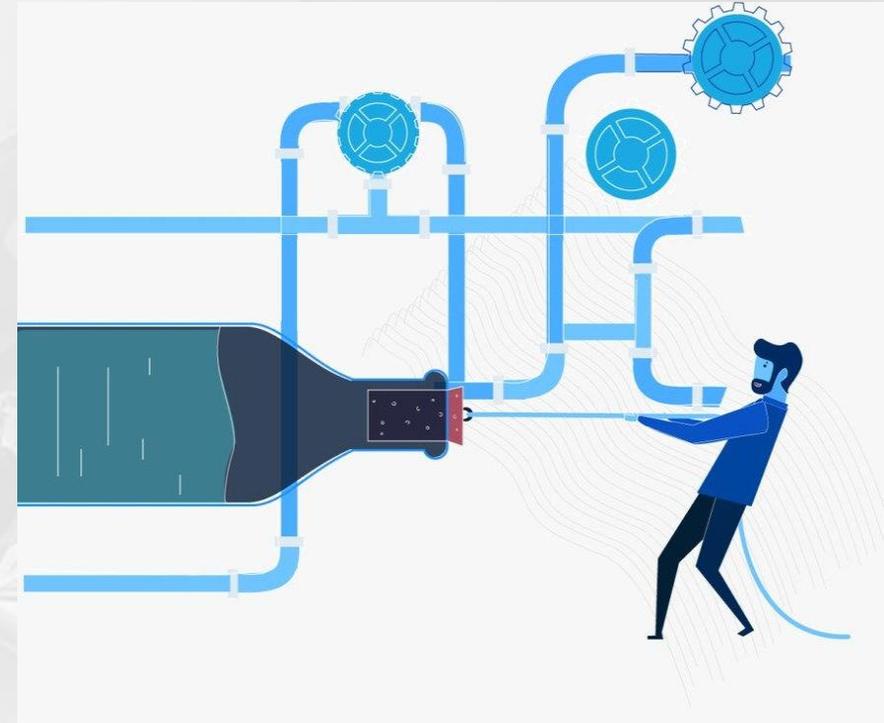
6. Public-private partnerships for investment

- Public-private efforts to promote investment.



Productivity Agenda: Since June, a Productivity roundtable has systematically reviewed improvement options

1. Tackle administrative and regulatory obstacles to trade
2. Investment streamlining
3. Improve operating conditions for productive SMEs
4. Improve competition conditions in financial markets
5. Primary Health Care Management improvement
6. Improve the Notary and Registry system
7. Address R&D gap
8. Improve business environment and development of strategic sectors
9. Address labor informality and its effects on development



By end-January, administrative, regulatory and legislative proposals will be proposed

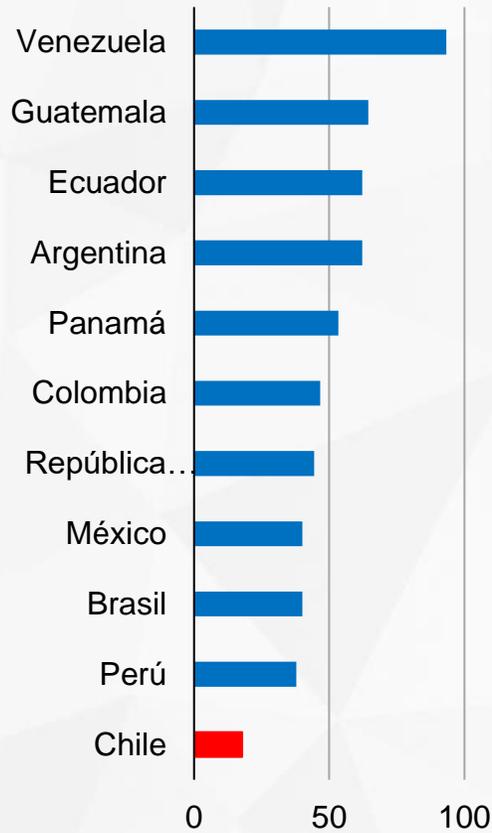
- **Economic reforms are usually featured as necessary to foster long-term growth.**
- **This is especially so when they address long-term constraints to competition, environmental sustainability, innovation, productivity, investment, human capital and social inclusiveness.**
- **The Chilean reform agenda is aimed at building a new social contract and to set the basis for sustainable, inclusive growth.**
- **All the major components of this agenda –progressive personal income taxation, multi-pillar pension systems, social care, public health-- can be traced to well-known building blocks of social protection and innovation systems in market-based economies.**
- **To secure consistency between social and economic development, a pro-investment agenda and a productivity agenda are being added by the Government**
- **These reforms are featured against the backdrop of a global environment that is becoming more favorable to Chile, creating the opportunity for new public-private cooperation**



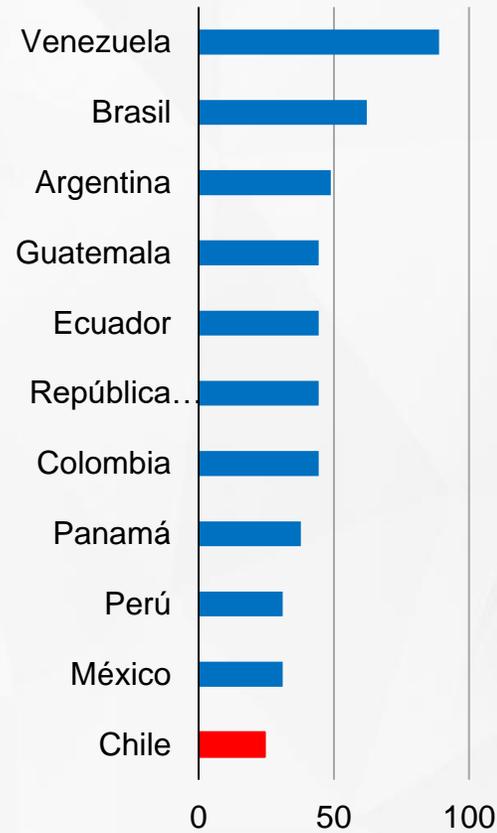
Future prospects and emerging opportunities

Chile continues to be one of the safest and more stable countries in the Region

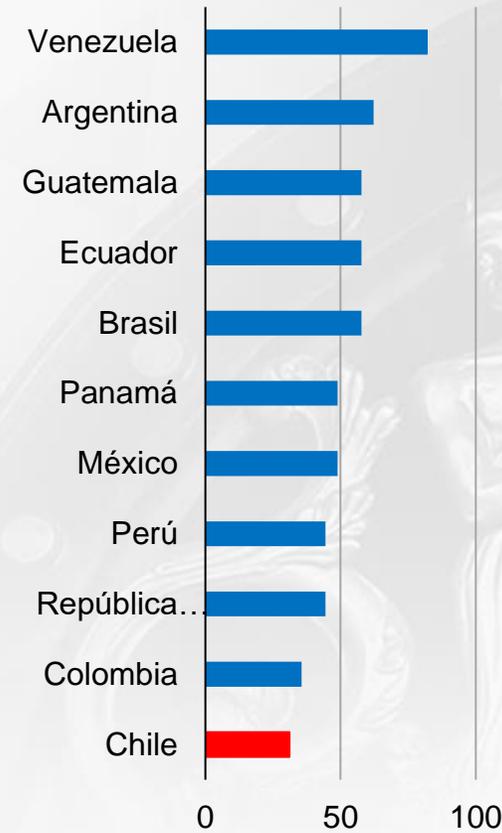
Regulatory and Legal Risk
(0 to 100 index, 100 = riskier)



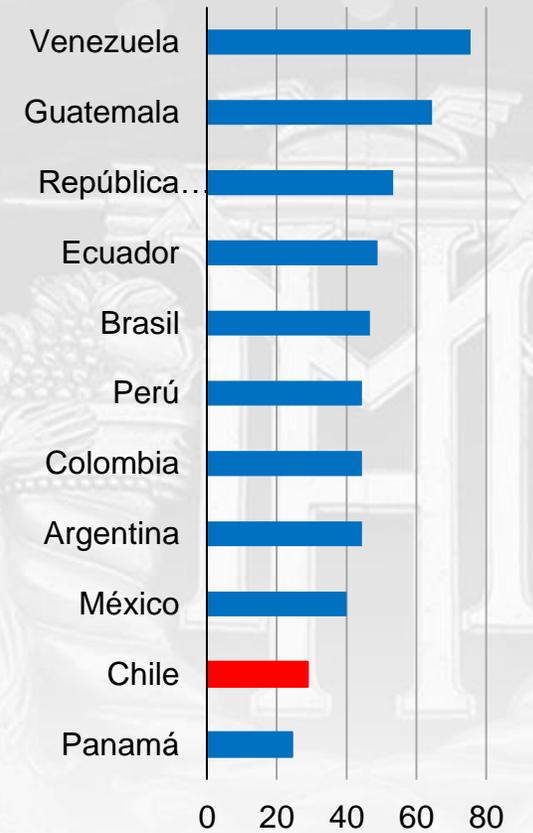
Tax Policy Risk
(0 to 100 index, 100 = riskier)



Labor Market Risk
(0 to 100 index, 100 = riskier)



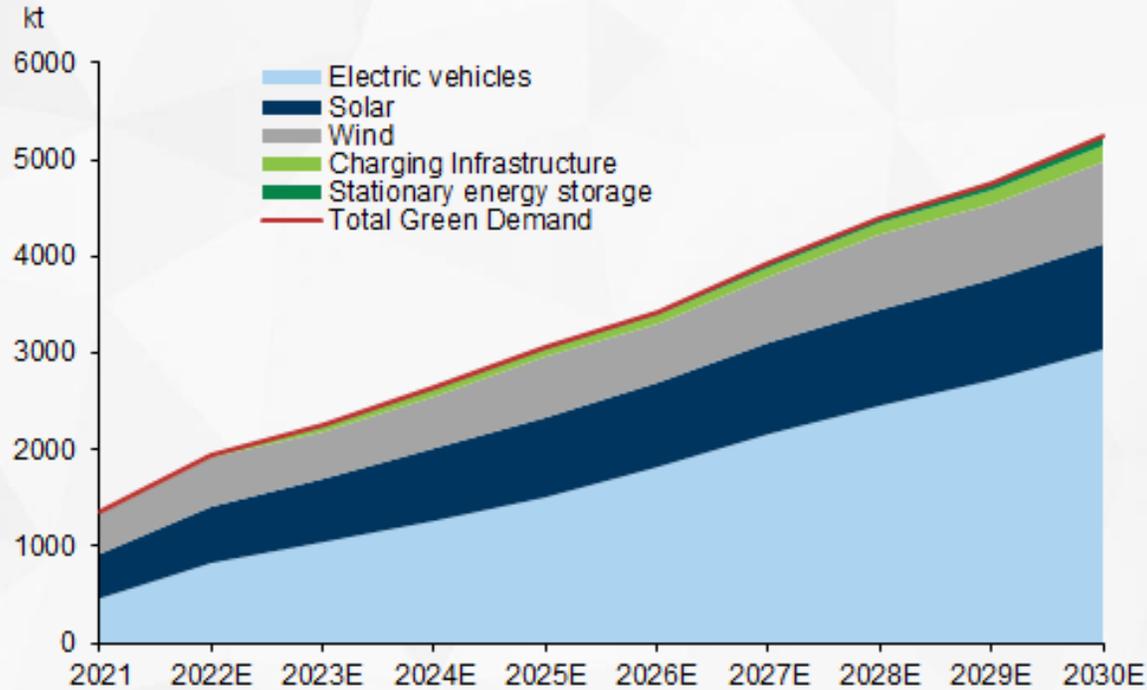
Infrastructure Risk
(0 to 100 index, 100 = riskier)



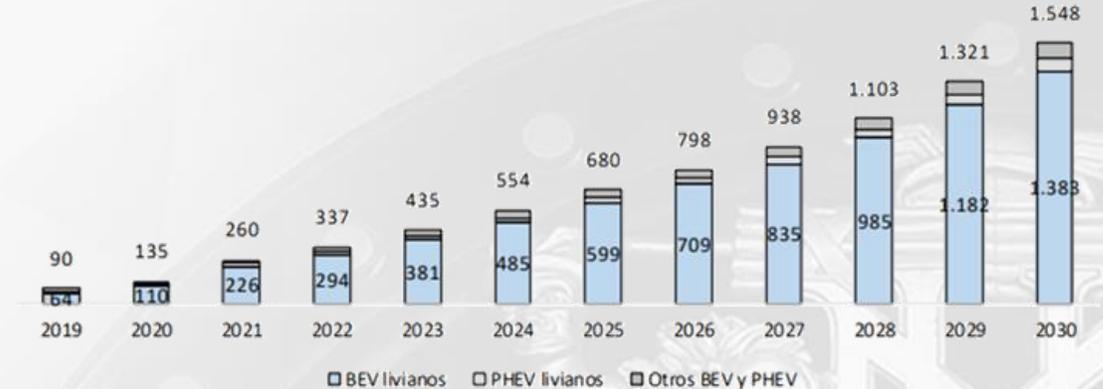
Source: The Economist Intelligence Unit (EIU). A number closer to 100 represents higher risk.

A greener global economy will increase demand for Chilean commodities

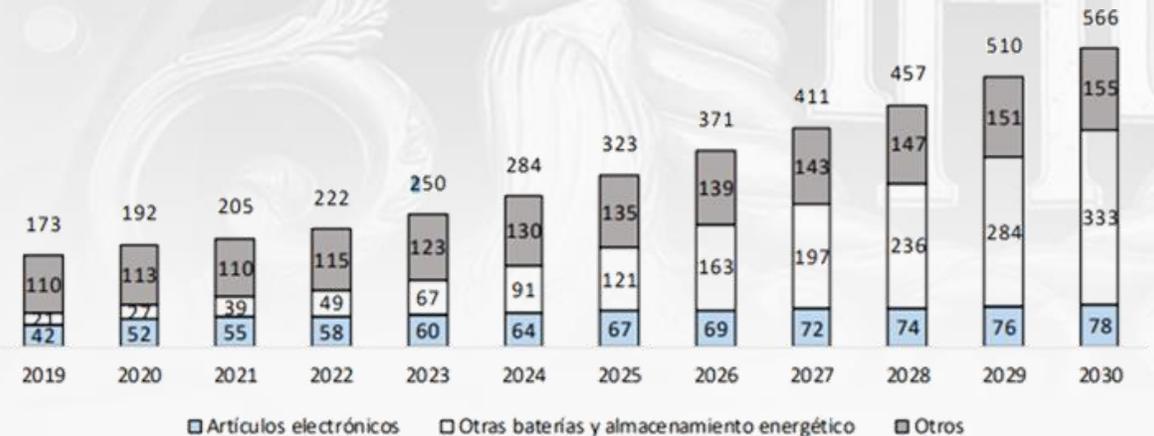
Copper demand from “green factor”
(Goldman Sachs estimates)



Lithium demand for electric vehicles forecast
(kt LCE, 2019-2030)



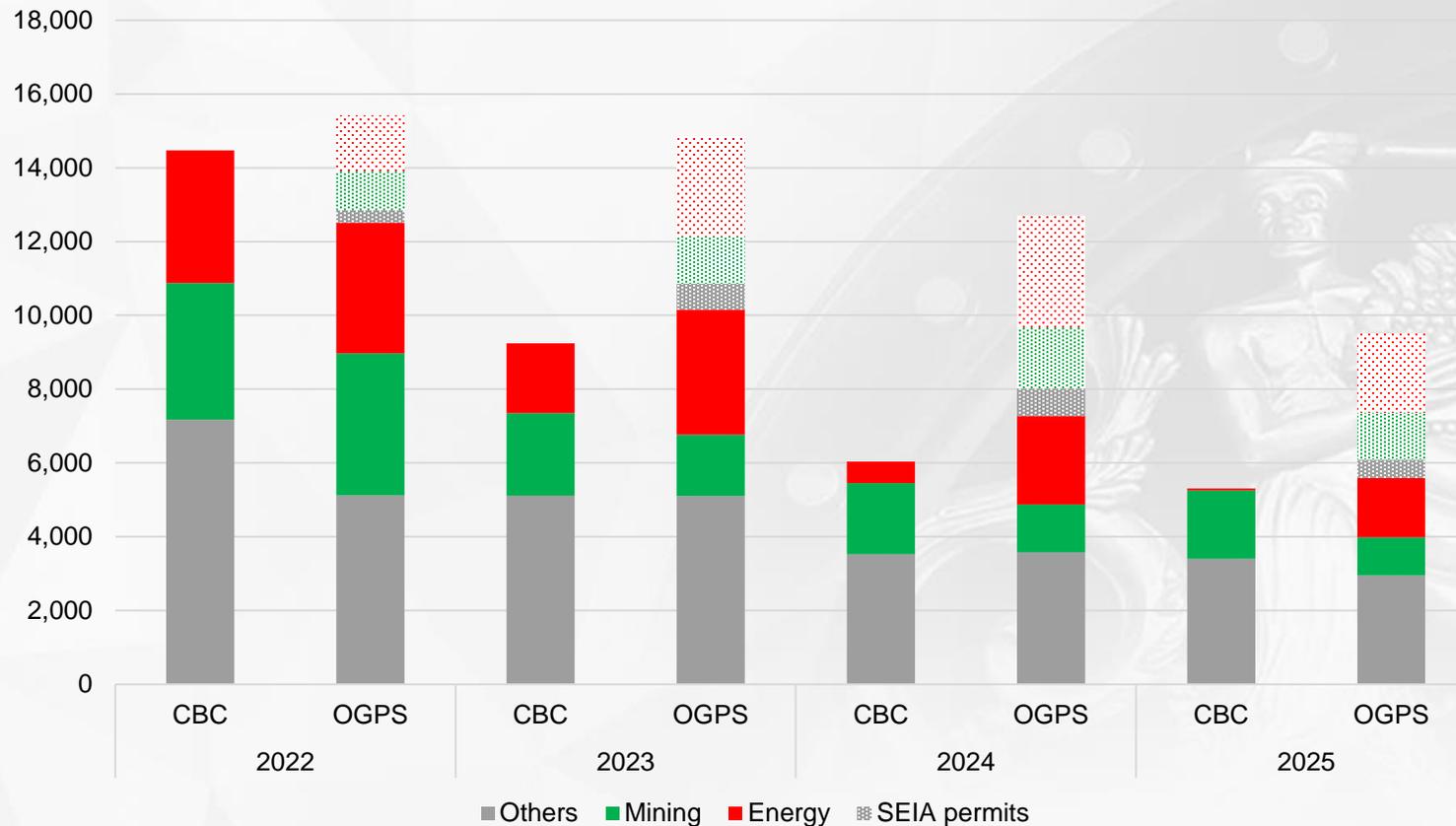
Lithium demand not associated with electric cars forecast
(kt LCE, 2019-2030)



Source: Goldman Sachs Global Investment Research, Cochilco.

Surveys indicate that there are many projects that could materialize in the following years once approved in terms of environmental compliance

**Survey of the Capital Goods Corporation (CBC),
vs Office of Major Projects (OGP) survey**
(Millions of US\$)



Source: Office of Major Projects (OGP) of the Ministry of Economy Chilean Chamber of Construction and Corporation of capital goods (CCG).

Infrastructure Plan, Public-Private Partnerships by US\$ 13,258 million

The infrastructure plan, **Public-private partnerships 2022-2026**, includes **43 tenders and 52 projects**, with an estimated investment of **US\$ 13,258 million**. The Plan has four pillars:



I. Chile's Pan-American road:

12 tenders with an estimated investment of US\$ 4,552 million.



II. Better cities:

25 tenders and 31 projects, with an estimated investment of US\$ 7,639 million.



III. A better airport service:

4 tenders and 7 projects with an estimated investment of US\$ 618 million.



IV. Water Security:

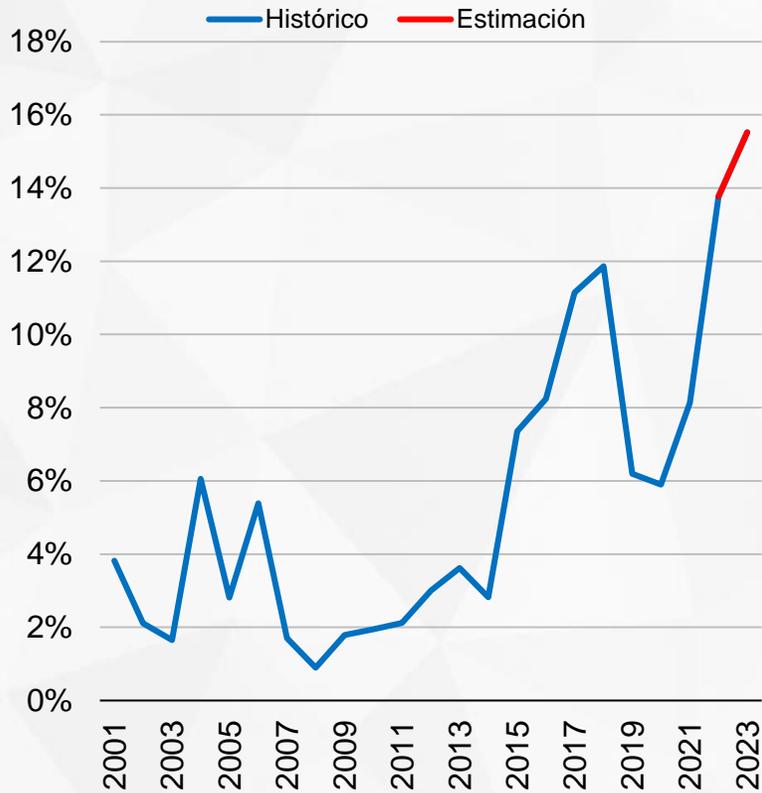
2 tenders with an estimated investment of US\$ 449 million.

Chile is deepening its integration into the World economy. Recent developments include legislative approval to join CPTPP and a landmark agreement to modernize the Agreement with the European Union

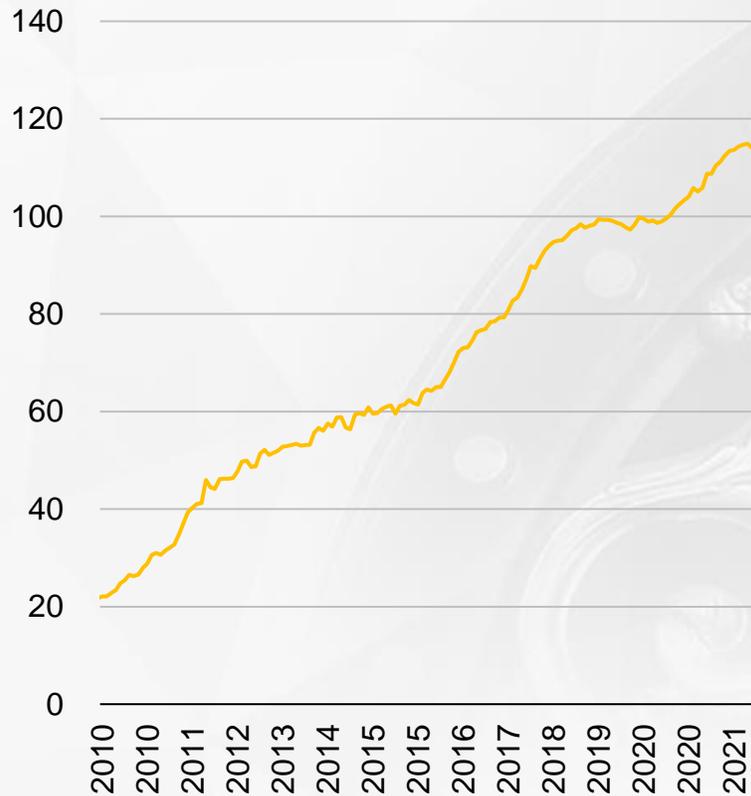
- Chile holds 28 Free Trade Agreements, with market access to 64 economies, comprising 88% GDP.
- On October 2022, Chile's Congress passed a vote allowing Chile to enter the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP)
 - It has been adhered by 11 countries.
 - Trade equivalent to 16% of Chile's exports (over 3,000 Chilean products), 13% of GDP, and reaches 498 million people. Chile receives 32% of FDI from region
 - Benefits surpass trade; data protection, environment, gender, among others
- On December 6, Chile signed the Political Agreement for the Modernization of European Union Agreement (negotiated since 2017, initiated by Bachelet 2015).
 - An interim Trade agreement will now go to European Parliament, and then member countries will ratify, as well as Chile's Congress, expected by Nov.23
 - 15 bilateral Investment Agreements will be replaced.
- Accession process of Chile began as a Full Member of the Development Bank of Latin America (CAF) as part of the integration and cooperation process in the region, which constitutes a priority for the government.
 - Could reach loan stock US\$ 4.500 (at most 15% of CAF portfolio). Regional office in Chile. Technical assistance particularly to building region capacity

Chile has been increasing investment in digital infrastructure and connectivity to provide services to the world

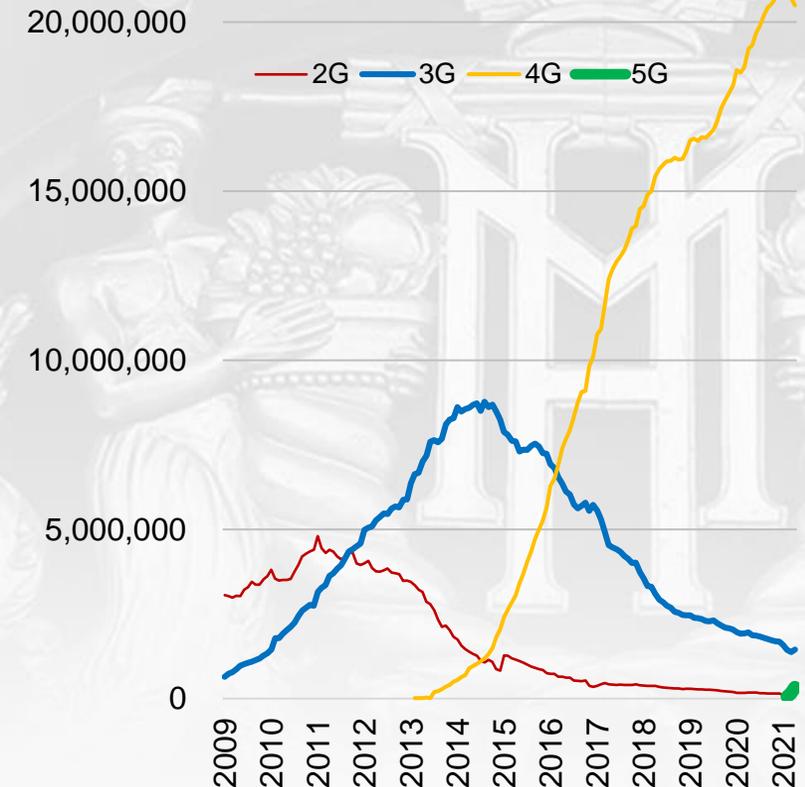
Participation of the technology sector in private investment
(% of total private investment)



Internet Access Service: Total Mobile Connections
(Total Penetration per 100 inhab.)



Internet Access Service: Mobile Connections by Technology
(number)

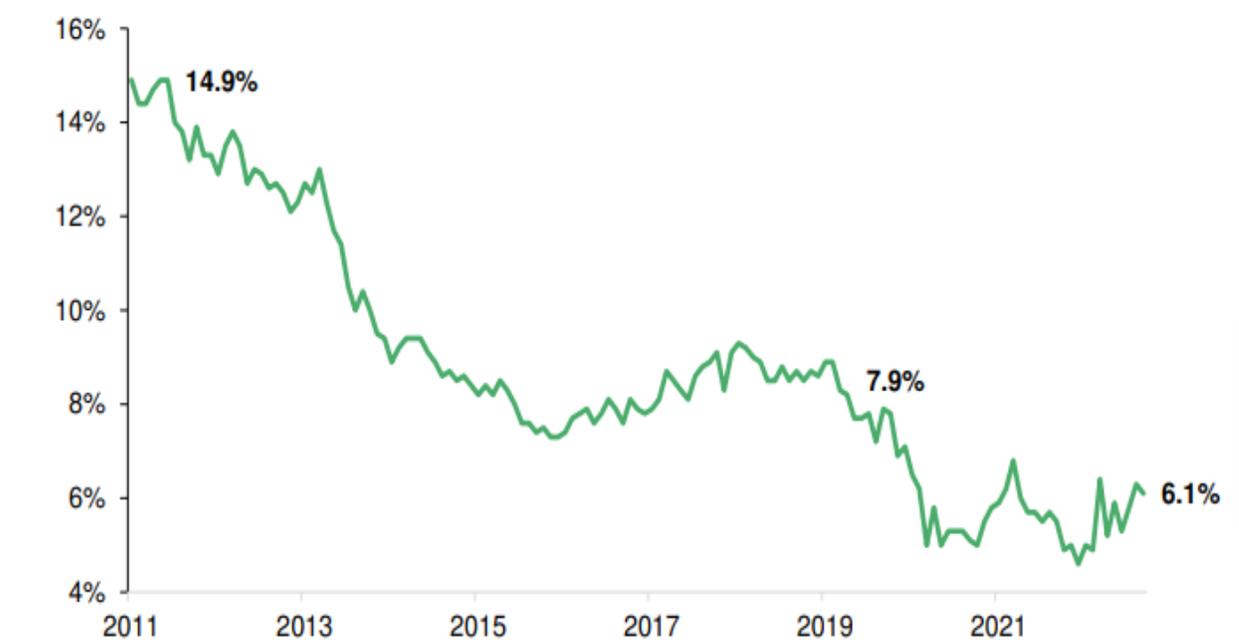


Several ongoing initiatives will promote further progress towards deeper, more stable, and inclusive capital markets

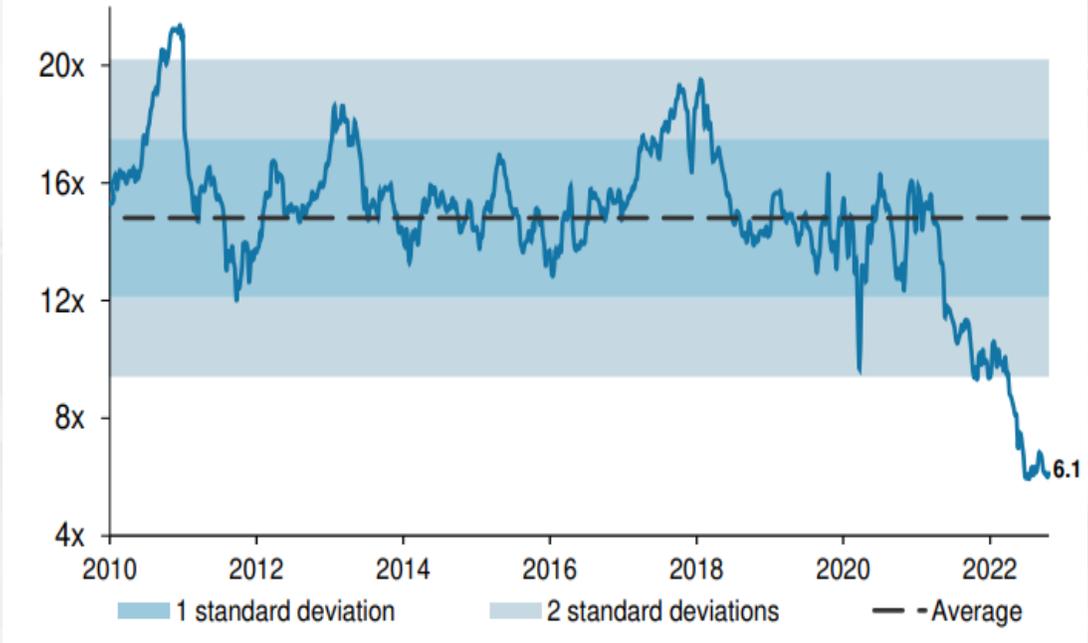
- **Financial Innovation Law (Fintech):** will bring certain groups of fintech services to the regulatory perimeter of the Commission for the Financial Market ("CMF")
- **Open Finance:** the recently approved Fintech Law also includes open finance provisions that would allow further competition in the financial services industry
- **Internationalization of the CLP (simplified RUT):** will stimulate greater competitiveness and efficiency in local financial markets, removing obstacles for non-residents to act as players in the local market.
- **Resilience of the financial system and its infrastructure:** a draft bill proposes to allow the Central Bank to grant liquidity to non-bank financial players
- **4-part model for retail payments:** The M4P sought to end the integration between issuers and acquirers, also promoting the entry of new acquiring or sub-acquiring actors
- **Pension fund management:** the vertical disintegration of the AFP model will create the opportunity for new actors in pension fund management
- **Derivatives market:** a new repository to derivatives is being implemented, allowing a broader span of cross-border operations counterparts to interest rate and FX derivatives.
- **Market makers program:** for government bond issuances.

The allocation of local pension funds to domestic equities has rebounded. Yet it remains a historically attractive valuation

Chile pension fund allocation in local equities
(% of total AUM)



Chile IPSA consensus 12-month forward looking P/E



Source: Morgan Stanley, Spensiones and Bloomberg

Green Growth Opportunities

Supply of critical raw materials

Carbon emissions reduction targets and absorption

Unlimited renewable energy

Green Hydrogen

Chile is committed to confront Climate Change, with relevant changes in the energy matrix towards renewable sources, including hydro, solar and wind power. In ten years, Chile will stop depending on imported fossil fuels entirely

Regulatory Framework

- **Framework Law on Climate Change** : setting goals, institutions and tools.
- **Energy Efficiency Law**: focus on the industrial, mining and transport sectors, in order to reduce emissions by 2% per year.

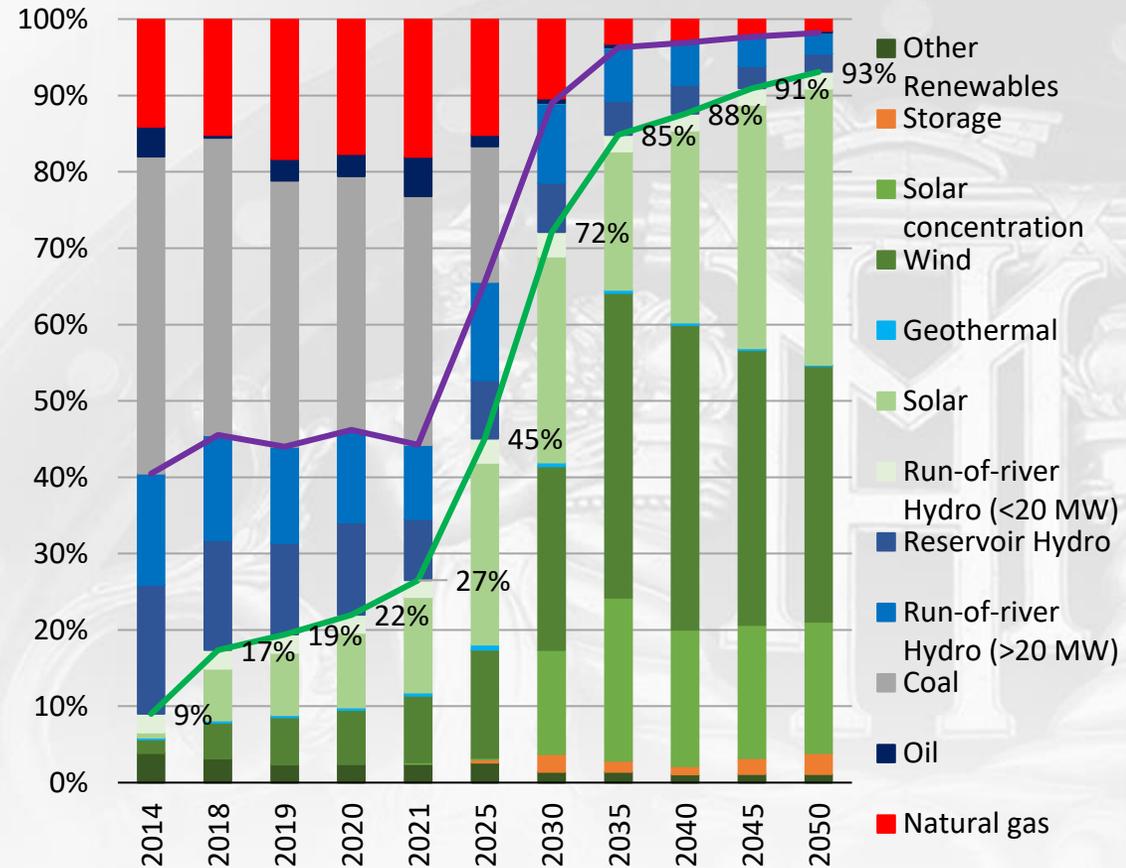
Objectives and Goals

- **NDC 2020.**
- Chile committed to a gross carbon budget of no more than 1,100 MtCO₂eq for the period 2020-2030, reaching a peak in 2050, and a level of 95 MtCO₂eq in 2030.
- Others: reduce at least 25% of carbon emissions by 2030; sustainable management and recovery of 1,100 hectares of native forest by 2030; creation of marine protected areas.
- **Long-Term Climate Strategy, with goals to 2050.**

Public Policies

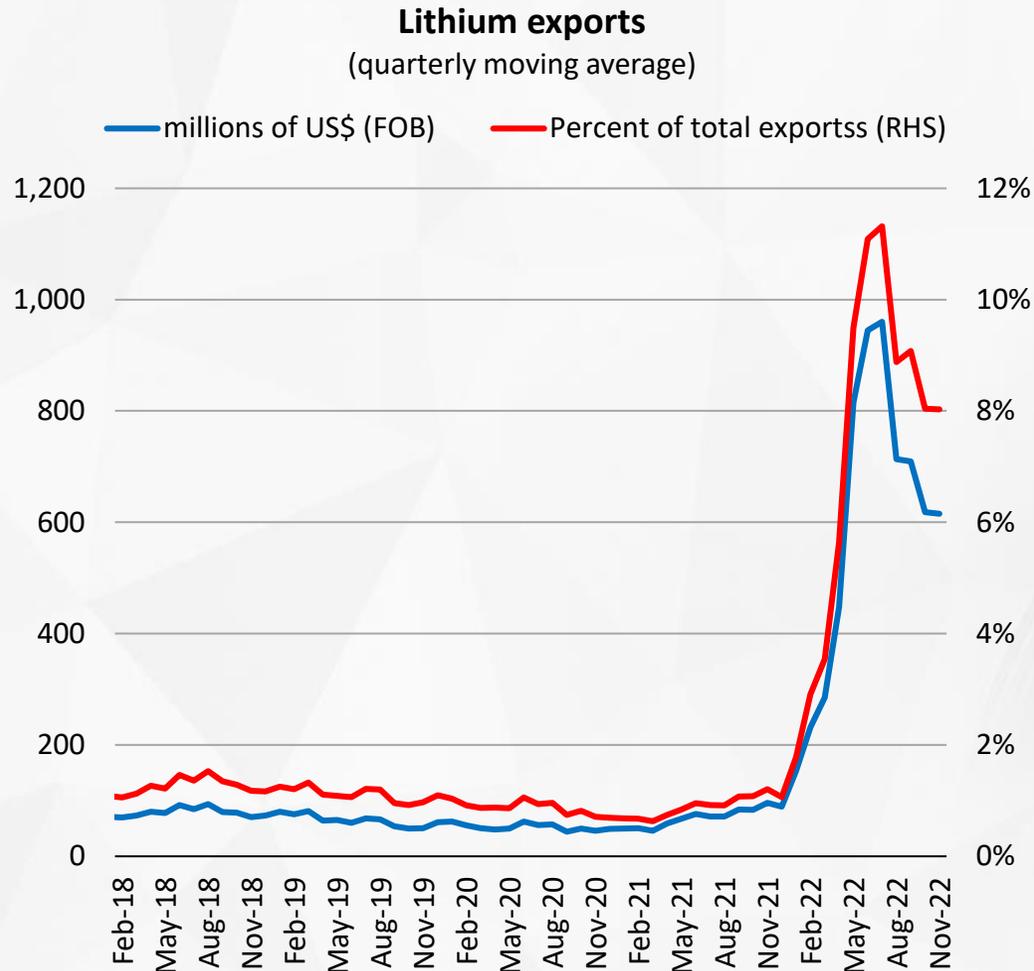
- **Long-Term Energy Planning**: every five years, in order to foresee long-term scenarios (30 years).
- **Electromobility Law.**
- **National Green Hydrogen (H₂V) Strategy**:
 - (i) Domestic consumption.
 - (ii) Transportation and export.

Energy matrix and NCRE participation



Source: Ministry of the Environment and Ministry of Energy.

Lithium exports are booming. The 2023 Budget Law includes a program to reallocate revenues from lithium to the development of Green Hydrogen and a sustainable productive diversification

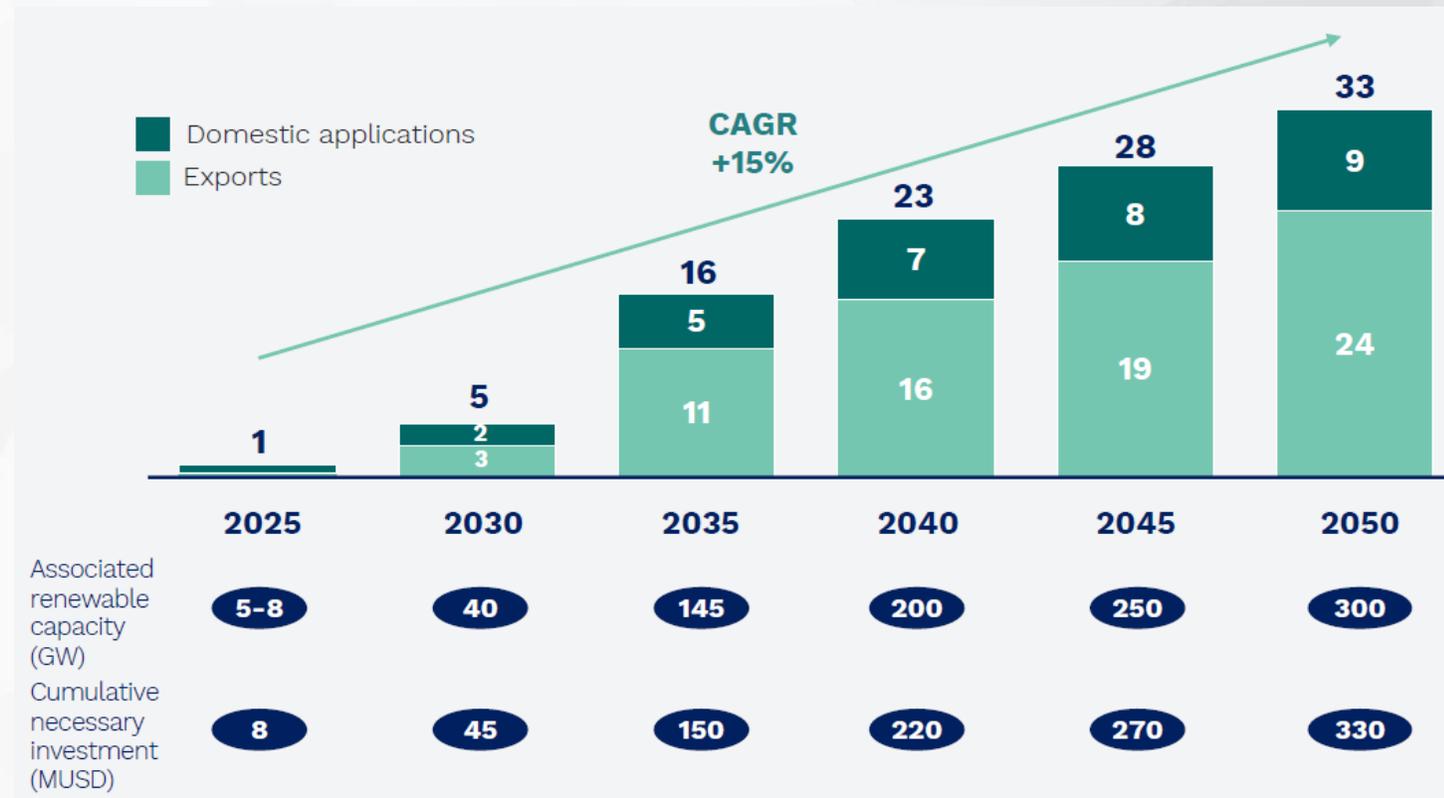


- Part of the lithium revenue will be invested in a new program called “Sustainable Productive Development”.



The competitiveness of Chile in renewable energy production and the global need for clean energy carriers will open the door for Green Hydrogen to match the size of the Chilean mining sector

Chilean markets for Green Hydrogen and its derivatives forecast
(USD billions, McKinsey & Company estimates)



Source: National Green Hydrogen Strategy, Energy Ministry of Energy.

Green Hydrogen makes an emblematic case of productive transition

- **Chile has privileged conditions** worldwide for energy production:
 - Sunlight reception, rare earths, wind potential.
 - Potential to produce renewable energy at a **much lower cost** than in other countries.
 - Projections of significant growth in the capacity to generate this kind of energy, especially **solar (concentration) and wind power**.
- **State-level priority:** Interministerial Committee (11 ministries and Corfo), with the aim of developing the industry.
- **National strategy** includes recognition of territoriality and sustainability, environmental assessment, planning of common infrastructure, engine of innovation and incorporation of technologies.
- **Energy Independence:** Transition from an economy that imports fossil fuels, to one capable of producing, being self-sufficient, and eventually exporting Green Hydrogen, a source of green energy.
- **Public-private alliances**, and the role of multilaterals, for development, accompaniment and financing. Support for companies that in turn support “green”, as part of a coordination with the industry and local demand. Strategic alliances with potential buyer countries and technology providers.

National Green Hydrogen Strategy

2025



Top destination for green hydrogen investment in LATAM



Electrolysis capacity operating and under development



Production in at least 2 Hydrogen valleys in Chile



Leaders in export of Green hydrogen and derivatives



The cheapest green hydrogen on the planet



Leaders in production of green hydrogen via electrolysis

2030

- **After more than a decade of declining potential growth and stagnant productivity, Chile can largely benefit from technological change and the greening of the World economy**
- **This will add to well-known institutional strengths, an open economy and a deep domestic capitals market**
- **The Government's agenda is well aligned with global developments, including strong commitments to environmental sustainability, inclusiveness and productive diversification**
- **Recent and ongoing measures will open new opportunities for competition in financial services**
- **Private investment –domestic and foreign– will be key in realizing these opportunities**
- **Investments, research, development and innovation can draw from incentives recently announced by the Government**



The Chilean economy: recent developments and emerging opportunities

Chile Day - London

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Mario Marcel | Minister of Finance