BBVA Research

Peru Economic Outlook

October 2022

Creando Oportunidades

BBVA Research

Contents

Key messages

Global and domestic situation

Growing signs of a global economic slowdown. Inflation remains at high levels and is proving to be more resistant to ease than expected. Accordingly, central banks have been tightening monetary conditions more aggressively, raising fears of recession and financial volatility. Uncertainty remains high, mainly due to the war in Ukraine.

Domestically, economic activity is also losing momentum, which was even more pronounced at the beginning of the third quarter. This lower economic dynamism is taking place amid social unrest affecting mining production, the dwindling “rebound effect” arising from the easing of sanitary isolation measures, high inflation, increasing interest rates, and persistently low confidence.

Global macro outlook

Inflation will decline only gradually (it will remain high, above central bank targets, at least until 2024), so monetary conditions will continue to tighten, dampening demand. Global growth is thus expected to decline from 6.2% in 2021 to 3.2% in 2022 and 2.4% in 2023. In the particular case of the United States, the FED's monetary tightening (the policy rate is likely to reach 4.75% in early 2023) will lead to a slowdown in growth in the coming quarters and even to a mild recession in mid-2023.

Key messages

Domestic macro-economic outlook: economic activity

After growing 3.5% year-on-year in the first half of 2022, activity will lose dynamism in the second half of the year, with growth for 2022 as a whole standing at 2.3%. This forecast is consistent with the deterioration of the global macro environment, the waning “rebound effect” from the normalization of economic activities that were most affected by the health isolation measures, social unrest that will likely continue to affect mining & oil activities, less favorable financing conditions, and business confidence stuck in pessimistic territory. All this will more than offset the availability of extra funds for households arising from the sixth withdrawal of funds from the private pension system, the rebound in public investment, and the start of production at the Quellaveco copper mine.

In 2023, GDP is expected to increase by 2.5%. On the positive side, this forecast reflects that Quellaveco will reach its full operational capacity (contributing between four and five tenths of a percentage point to the year's growth rate) and the recovery of tourism, whereas on the negative side it considers that global growth will be weaker and that public investment will experience a slump after the change of authorities at the regional and municipal level.

Domestic macro-economic outlook: foreign exchange

The domestic currency will tend to weaken in the coming months as the interest rate differential between soles and dollars will narrow, risk perception will be a greater (in a context of slowing global growth), the current account of the balance of payments will show some further deterioration (from the 3.6% of GDP it reached in the second quarter), and the environment for financing this external deficit will be more challenging. We therefore forecast that the foreign exchange will end 2022 within 3.90 to 4.00 soles to the US dollar, while in end-2023 it will be between 4.00 and 4.10 soles to the US dollar.

Key messages

Domestic macro-economic outlook: inflation

We expect inflation to end the year around 7.5% and next year around 3.5% in a scenario in which the year-on-year comparison base is high, world food and oil prices are trending downward in projection, domestic economic activity is weak, and even though inflation is reluctant to ease, especially in the short term (due to local supply shocks and unanchored inflation expectations).

Domestic macro-economic outlook: monetary policy rate

Against a background of high inflation that is reluctant to ease, as well as inflation expectations for the end of 2024 that remain above the target range, we do not rule out that the central bank will raise its policy rate somewhat further before the end of the year (restrictive monetary stance), despite the slowdown in economic activity. Later, in mid-2023, when inflation is on a clear downward path and the Fed has paused, the central bank will find room to start normalizing the monetary stance. We estimate that it will do so cautiously at first because inflation will still be above the target range, sharp policy rate cuts would weaken the domestic currency, and markets are likely to be sensitive in an environment of global economic slowdown. Rate cuts will accelerate in 2024.

Risks

The main external risk is that inflationary pressures will require sharper interest rate hikes, pushing the global economy into a deep recession and increasing the likelihood of financial turbulence. An eventual deterioration of the war in Ukraine and other geopolitical tensions are also latent external risks. Domestically, the main risks are a more complicated political environment (increased populism), further weakening the environment for doing business, and a more negative impact due to social unrest.

BBVA Research

01

International context: financial markets and activity

The persistence of inflation forces central banks to front-load interest rate hikes, contributing to both financial volatility and recession fears

RECENT DEVELOPMENTS IN THE WORLD ECONOMY

GROWTH MODERATION
On inflation, monetary tightening, the UKR war and covid (mostly in China), despite labor markets' relative strength.

DISRUPTION IN GAS MARKETS
Sharp rise in prices in Europe due to remarkable Russia's supply cuts.

COMMODITIES (EX-GAS)
Prices are high, but declining on weaker growth prospects.

SUPPLY BOTTLENECKS
Still at high levels, but easing, mainly in the US.

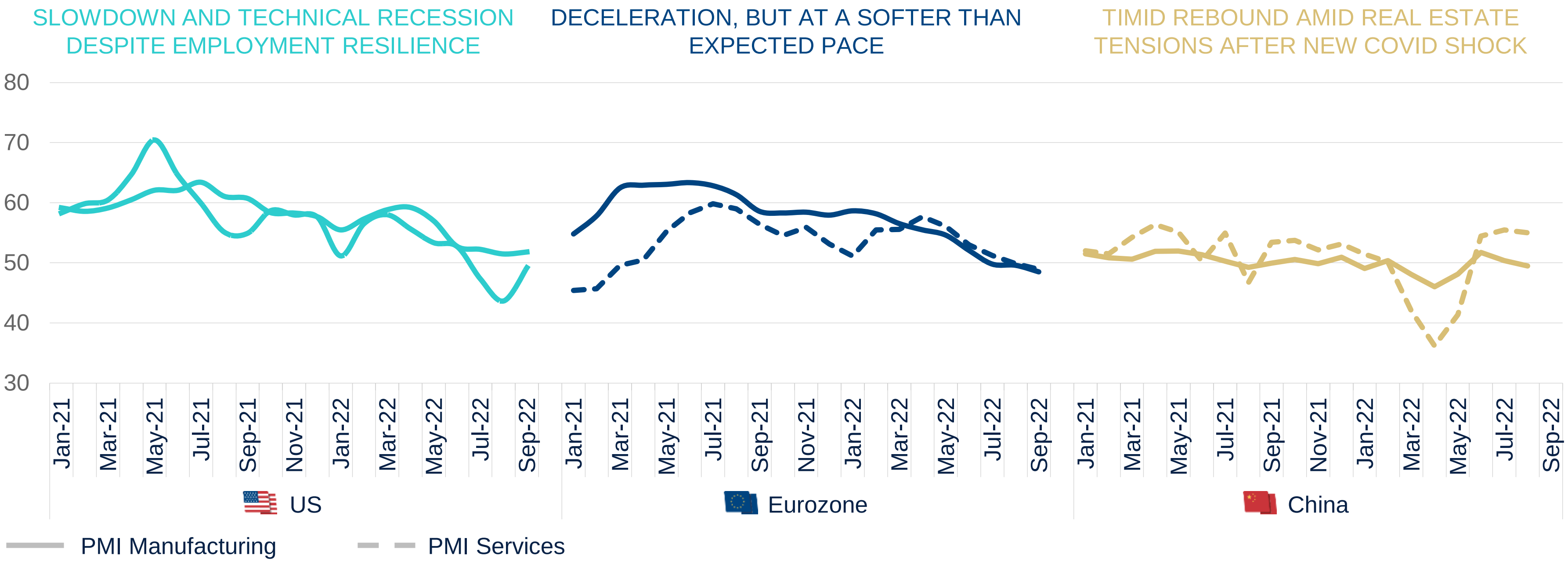
STILL HIGH INFLATION
Inflation continues to surprise upwards, but moderation signs suggest it may soon peak.

FRONT-LOADING OF INTEREST RATES HIKES
Faster and sharper monetary tightening than expected as central banks' commit to price stability.

Growth is losing momentum as reopening effects fade and inflation, monetary tightening, gas disruptions in Europe and covid in China weigh negatively

PMI INDICATORS

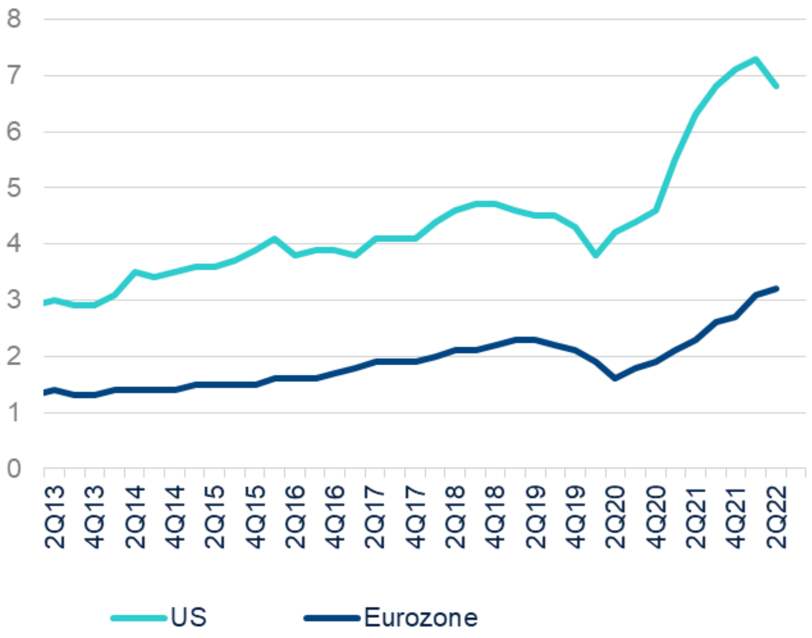
(MORE THAN 50: EXPANSION; LESS THAN 50: CONTRACTION)



Source: BBVA Research based on data from Haver.

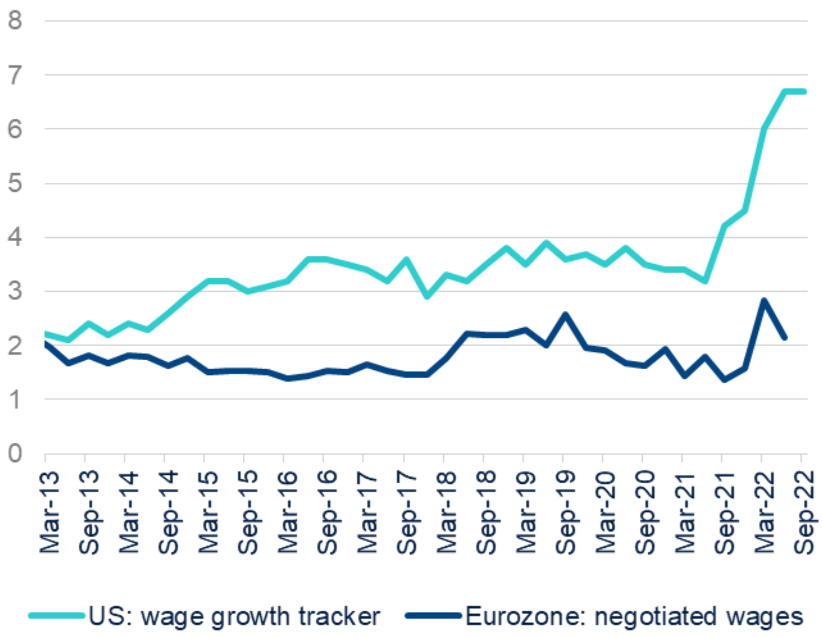
Labor markets exhibit strength despite the ongoing activity deceleration; wages are growing, but at a slower pace than inflation

LABOR MARKET: VACANCY RATE
(%, QUARTERLY AVERAGES)



* Vacancies as a proportion of the sum of total employment and the number of vacancies.
Source: BBVA Research based on data from Haver.

WAGE GROWTH INDICATORS
(% YoY, QUARTERLY DATA)

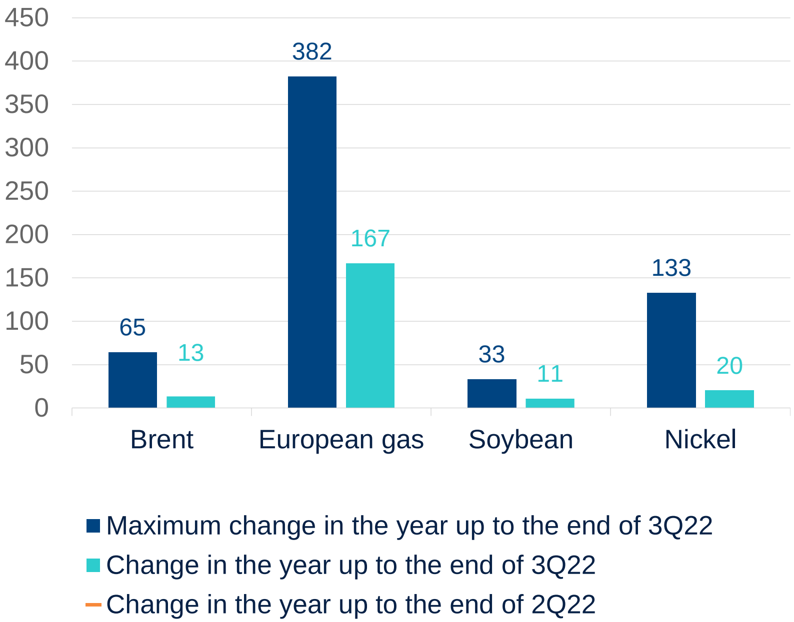


Source: BBVA Research based on Atlanta Fed and ECB data

Gas prices have skyrocketed on Russia's supply cuts, but other commodity prices have eased recently in line with concerns on global moderation

COMMODITY PRICES

(%)

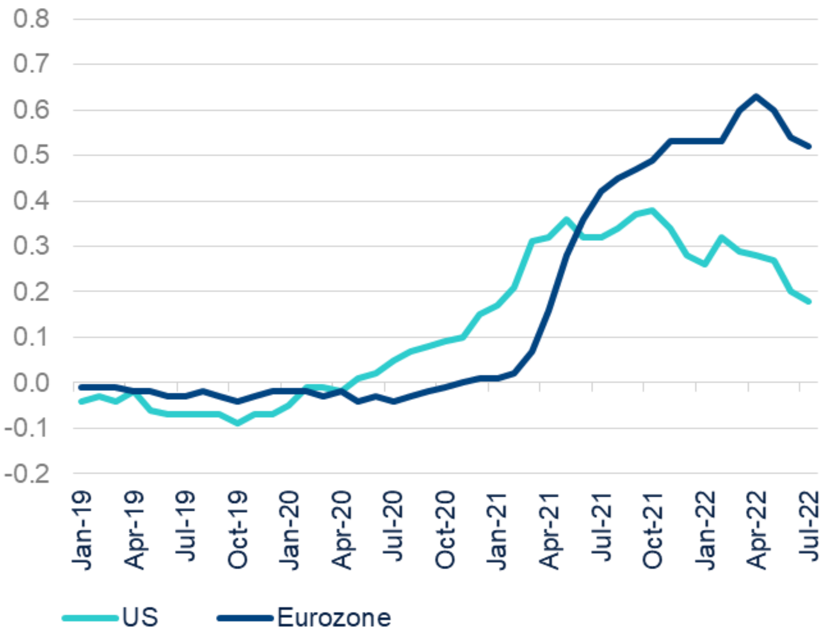


Source: BBVA Research based on data from Haver.

- Natural gas prices in Europe jumped 31% in the 3T22 on decreasing supply from Russia.
- Oil, food and metal prices eased from the middle of the year on worse prospects for global demand; supply issues prevented a sharper correction.
- Brent prices declined 23% over the 3T22 despite the announced production cut by the OPEC and the EU embargo on Russia's oil exports.
- The recent deal to unlock Ukraine grain exports has helped to drive down prices.

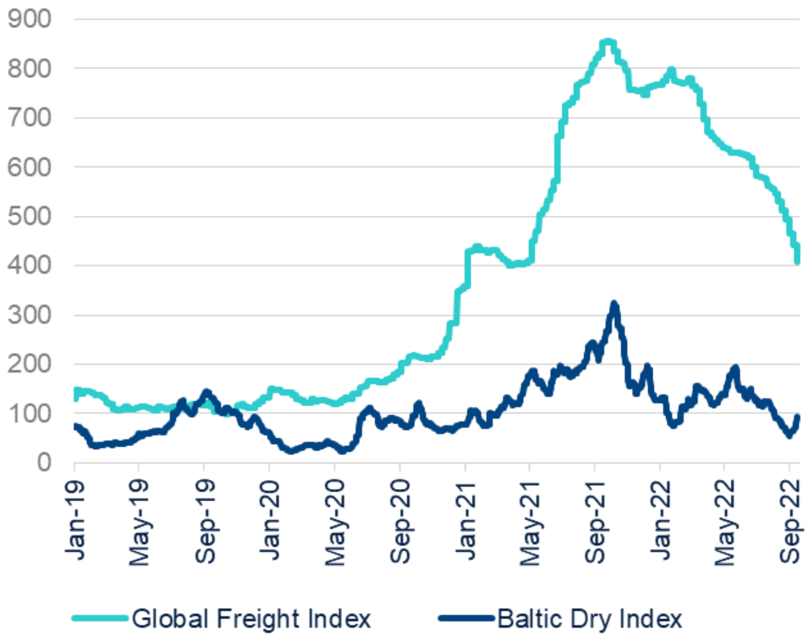
Bottlenecks are easing, but remain at very high levels, mainly in Europe

BBVA RESEARCH BOTTLENECK INDEX
(INDEX: AVERAGE SINCE 2003 = 0)



Source: BBVA Research.

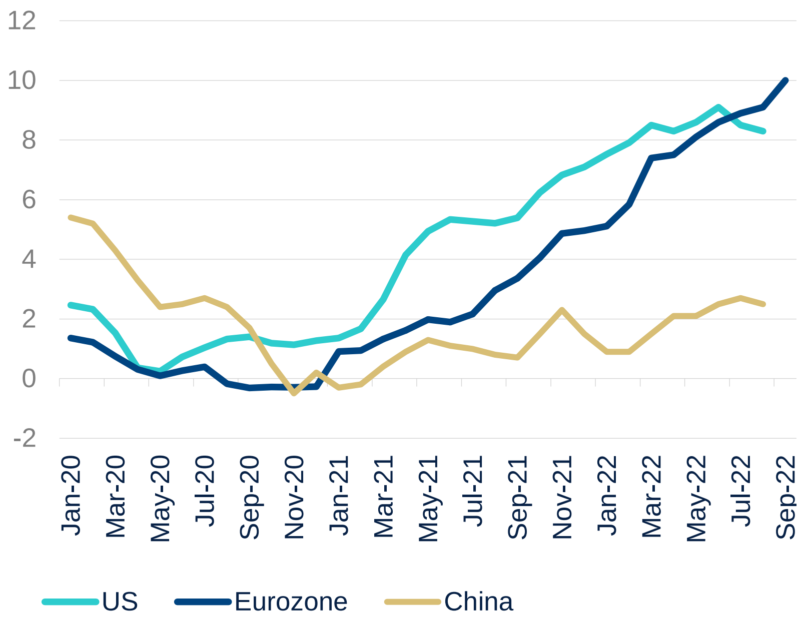
CONTAINER FREIGHT RATES: GLOBAL AND BALTIC
(INDEX: 2012 = 100)



Source: BBVA Research based on data from Haver.

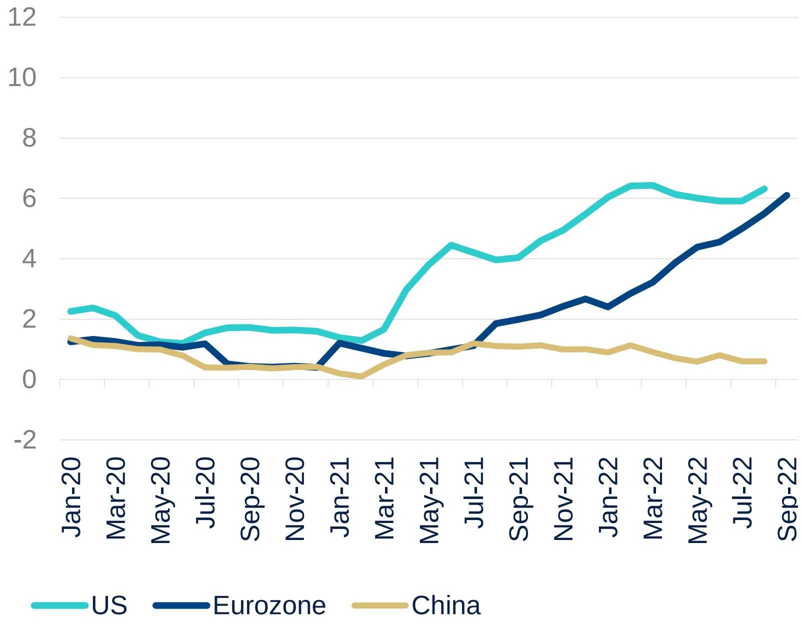
Inflation remains very high and continues to surprise to the upside, but there are increasing signs of moderation

INFLATION: CPI
(Y/Y %)



Source: BBVA Research based on local statistics.

CORE INFLATION: CPI
(Y/Y %)

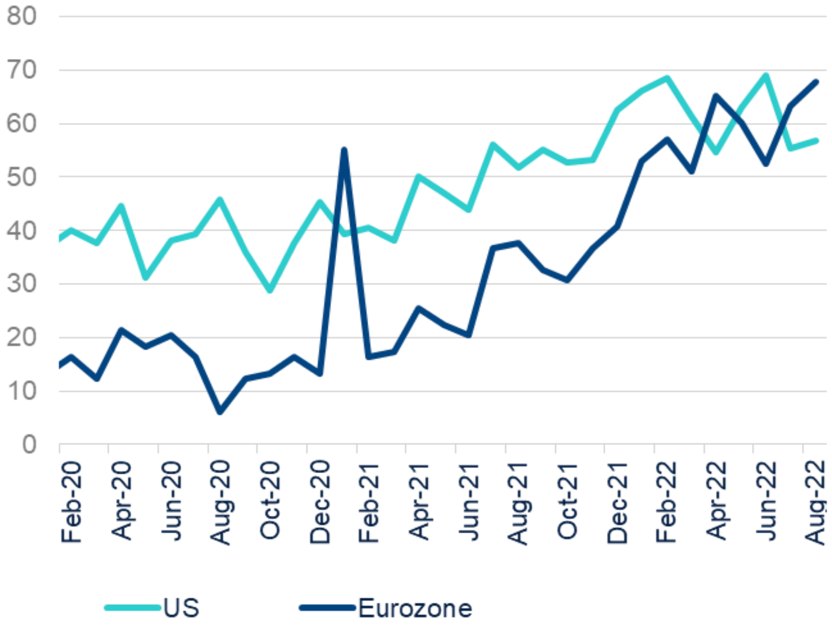


Source: BBVA Research based on local statistics.

Price adjustments have become more widespread and more frequent

ITEMS OF THE CPI BASKET WITH ANNUALIZED MONTHLY INFLATION HIGHER THAN 4%

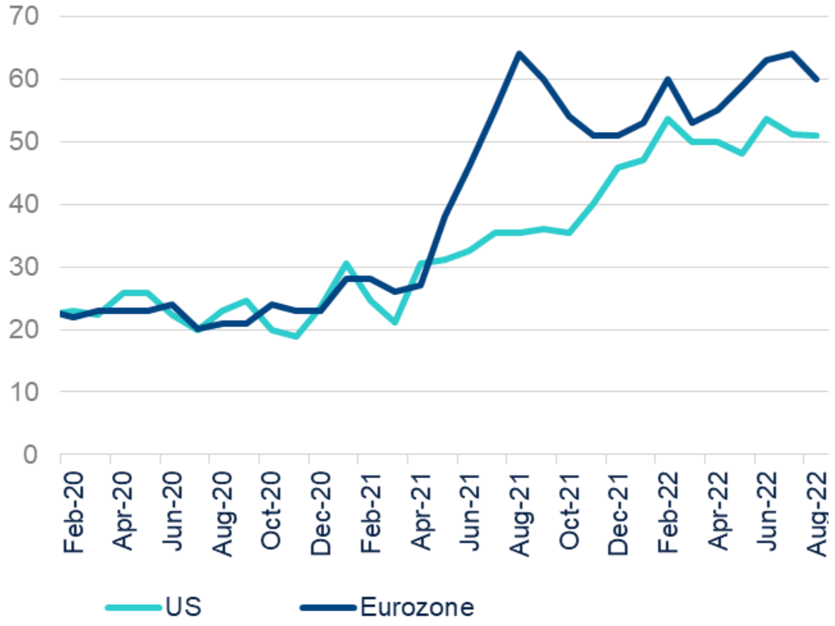
(SHARE OF TOTAL 2-DIGIT CPI ITEMS)



Source: BBVA Research based on local statistics.

ITEMS OF THE CPI BASKET WITH THREE CONSECUTIVE MONTHLY PRICE RISES

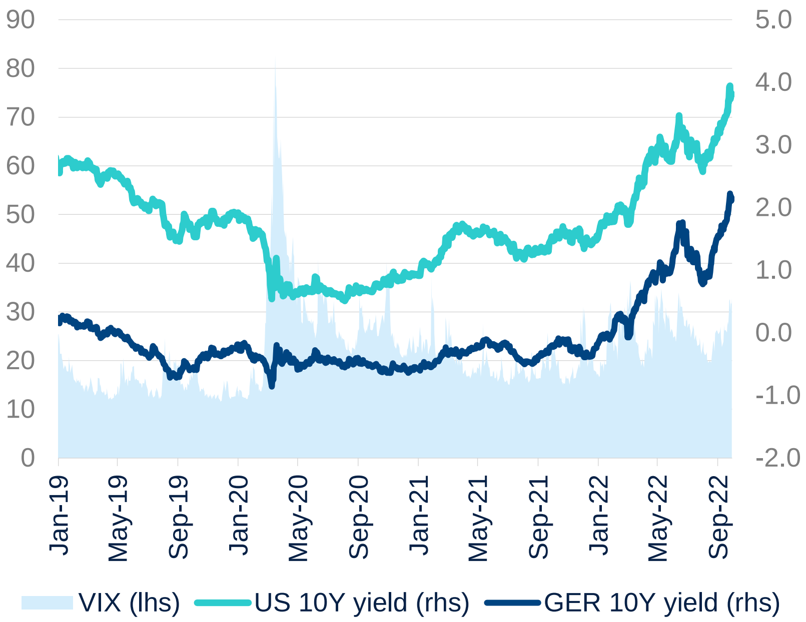
(SHARE OF TOTAL 2-DIGIT CPI ITEMS)



Source: BBVA Research based on local statistics.

The front-loading of interest rate hikes has generated financial volatility; sovereign bond yields moved sharply up, and the US dollar strengthened

10Y SOVEREIGN YIELDS AND VOLATILITY
(YIELDS: %, VOLATILITY: VIX INDEX)

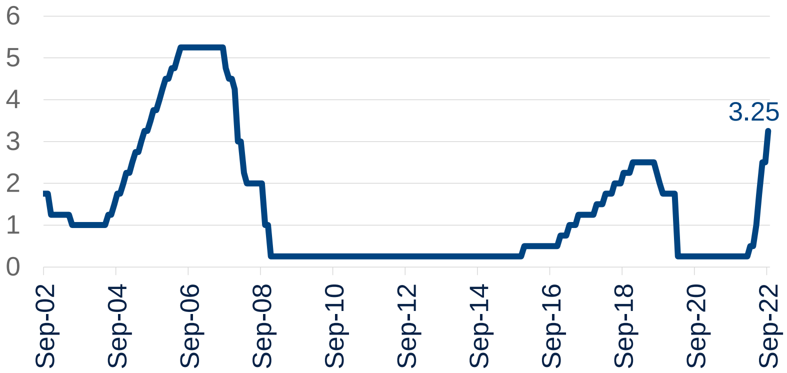


Source: BBVA Research based on data from Haver.

- A hawkish Fed has adjusted interest rates, so far, in the year to date by 300bp to 3.25% and has paved the way for extra tightening ahead.
- The ECB has abandoned negative rates; refi rates have reached 1.25% and are set to increase further ahead; a new asset-purchase program (TPI) will help to address fragmentation risks within the region.
- Most currencies have weakened against the dollar, reinforcing inflationary pressures and the risk of financial stress.
- Volatility, sovereign yields and risk premia have increased quickly on prospects of tighter monetary policy, war-related uncertainty and the recent financial stress in the UK.

FED raised rate by 75bp (to 3.25%) in September, in line with expectations, but delivered a more hawkish message than anticipated

UNITED STATES: FED RATE
(%)



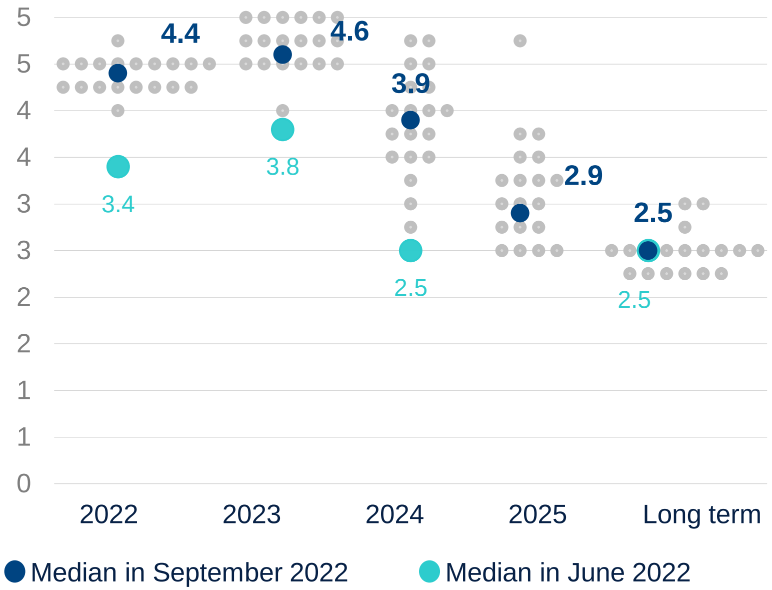
FED FORECASTS (%; MADE ON 21/09)

	2022	2023	2024	2025	Long term
GDP**	0.2 (1.7)	1.2 (1.7)	1.7 (1.9)	1.8	1.8 (1.8)
Unemployment	3.8 (3.7)	4.4 (3.9)	4.4 (4.1)	4.3	4.0 (4.0)
Inflation	5.4 (5.2)	2.8 (2.6)	2.3 (2.2)	2.0	2.0 (2.0)
Core *inflation*	4.5 (4.3)	3.1 (2.7)	2.3 (2.3)	2.1	

* In parenthesis the previous forecast (June 2022) ** Year-on-year growth in the fourth quarter.

Source: FRED

UNITED STATES: APPROPRIATE LEVEL FOR THE FED RATE ACCORDING TO FOMC PARTICIPANTS
(DISTRIBUTION OF THE OPINION OF 19 PARTICIPANTS AT THE SEPTEMBER 2022 MEETING)

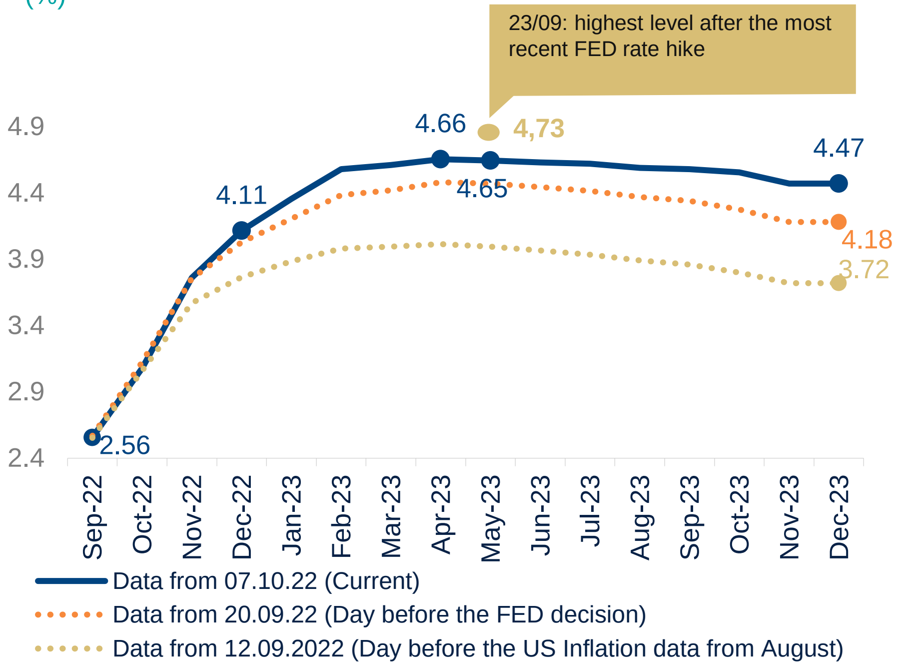


Source: BBVA Research and FED.

Markets: expectations align with the Fed statement and the inversion of the yield curve is accentuated (anticipating a recession in 2023).

FED: IMPLIED POLICY RATE FOR FUTURES

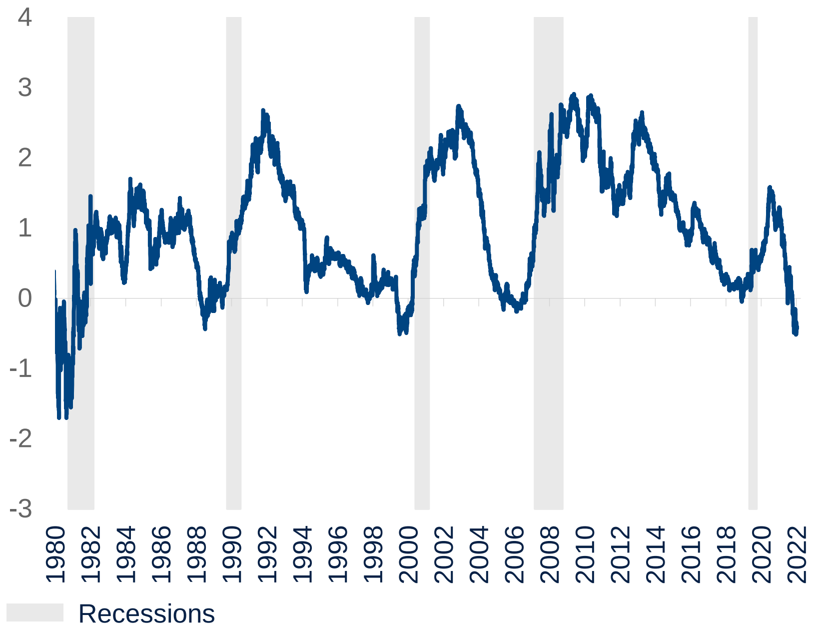
(%)



Source: Bloomberg.

UNITED STATES: YIELD CURVE SLOPE

(DIFFERENCE BETWEEN YIELD OF T10Y - T2Y)



Source: Bloomberg and NBER.

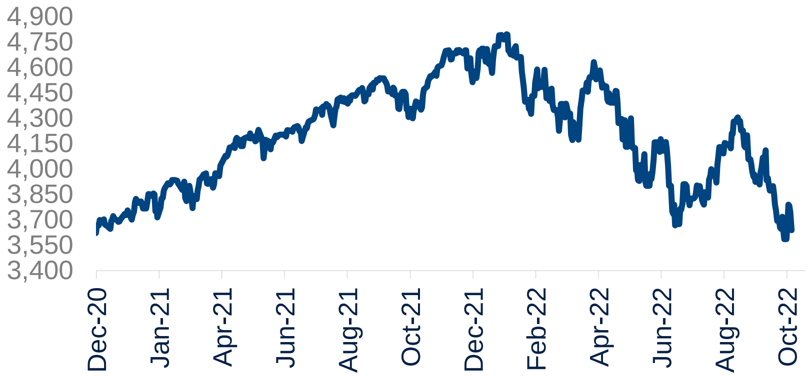
Markets: Against this backdrop, dollar hits 20-year highs against other currencies and asset prices are hit by the possibility of a recession

DXY
(INDEX)

10.07.22	Cum. chg. year 2022 [1]	Cum. chg. since 09.20.22 [1] (day before the FED's decision)
	(%)	(%)
DXY [2]	17.9	2.3
Euro	-14.3	-2.3
Yen	-20.8	-1.0
Sterling	-18.1	-2.6

1: Exchange rate: USD vs. local currency unit (negative = depreciation of local currency).
2: Positive sign reflects strengthening of the USD against a basket of currencies.
Source: Bloomberg

S&P
(INDEX)

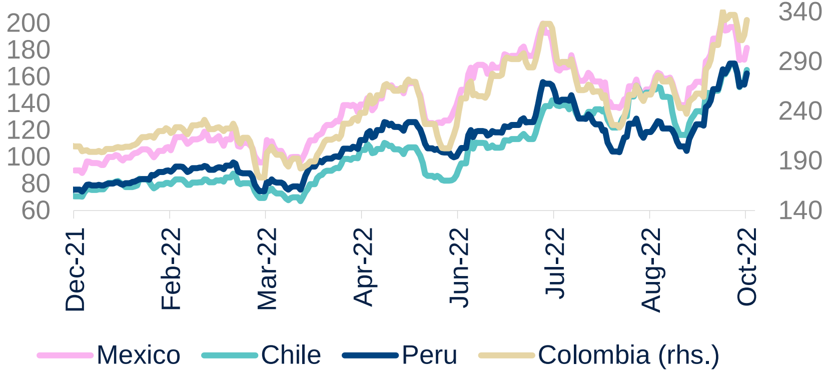


10.07.22	Cum. chg. year 2022	Cum. chg since 09.20.22 (day before the FED's decision)
	(%)	(%)
S&P 500	-23.6	-5.6
EuroStoxx 50	-21.5	-2.6
MSCI EM	-27.1	-5.1
	(points)	(points)
VIX	14	4

Source: Bloomberg.

Markets: risk premiums rise in Latin America and capital outflows from Emerging Economies

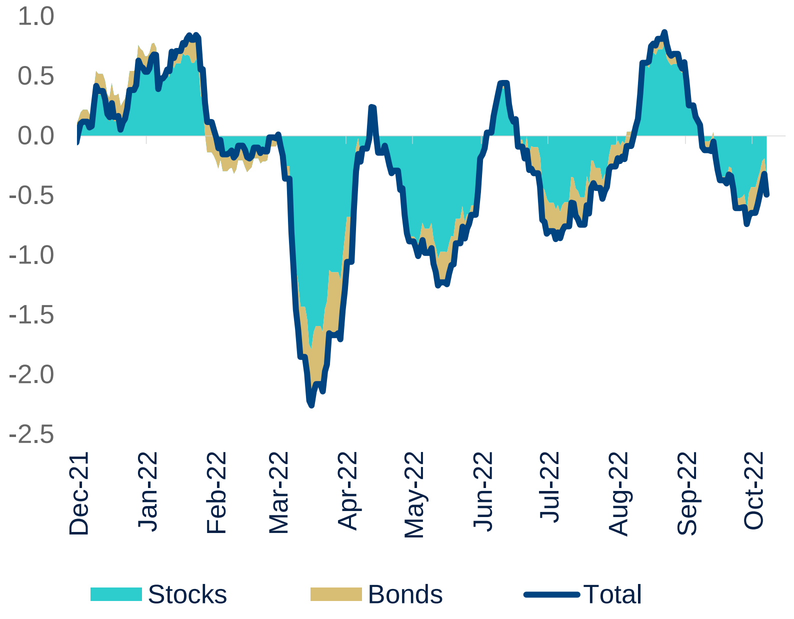
CDS
(BASIS POINTS)



10.07.22	Cum. chg. year 2022 (bp)	Cum. chg. since 09.20.22 (day before the FED's decision) (bp)
Mexico	92	10
Colombia	127	50
Chile	95	17
Peru	87	25

Source: Bloomberg

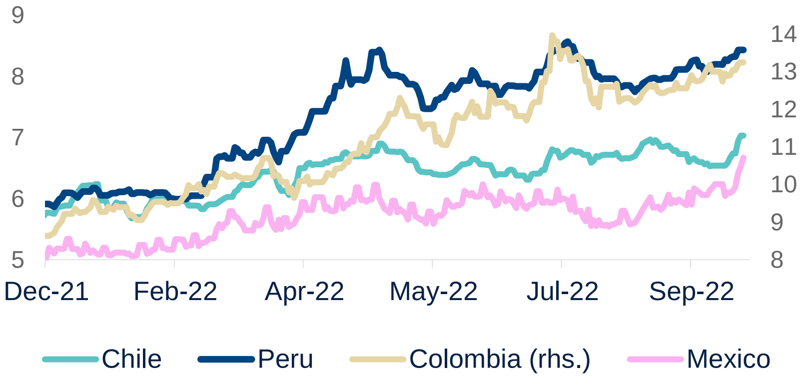
CAPITAL INFLOWS TO EMERGING MARKETS
(BILLIONS OF USD, 28-DAY MOVING AVERAGE)



Source: IIF

Markets: in Latam, sovereign yields rise (investors offload positions), while currencies depreciate

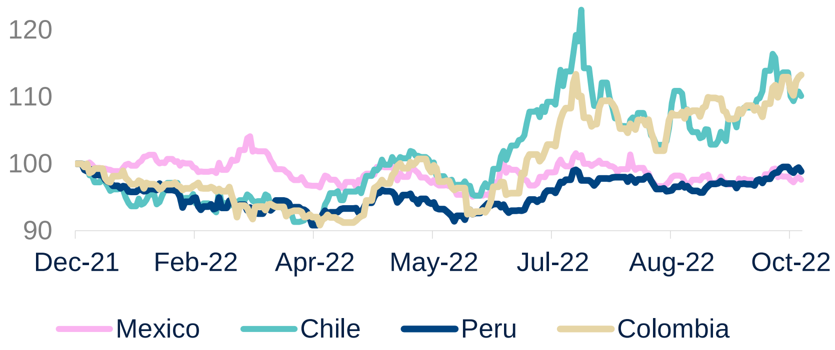
RETURNS ON 10-YEAR SOVEREIGN BOND
(%)



10.07.22	Cum. chg. year 2022 (bp)	Cum. chg. since 09.20.22 (day before the FED's decision) (bp)
Mexico	209	36
Colombia	504	72
Chile	126	49
Peru	280	44

Source: Investing

EXCHANGE RATE
(LOCAL CURRENCY UNITS PER USD, INDEX: DEC.31.2021 = 100)

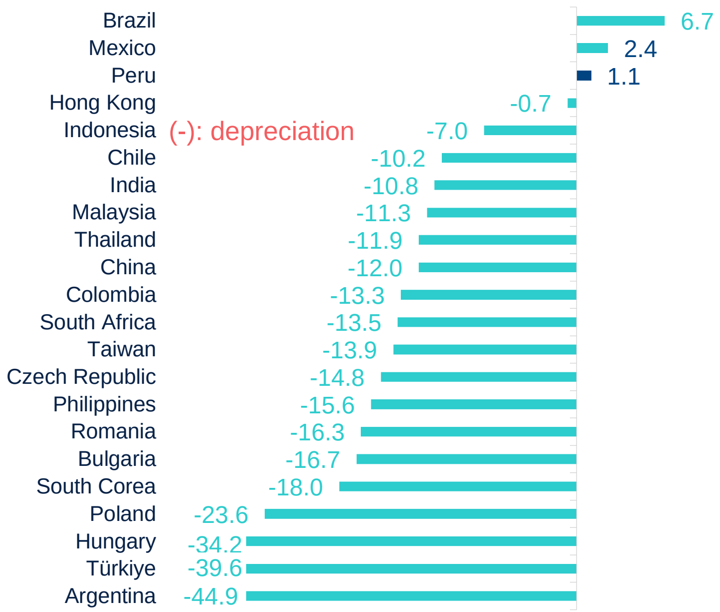


10.07.22 Currencies [1]	Cum. chg. year 2022 (%)	Cum. chg. since 09.20.22 (day before the FED's decision) (%)
Mexico	-2.4	0.2
Colombia	13.3	4.5
Chile	10.2	0.5
Peru	-1.1	1.4

1: Exchange rate: local currency vs. USD (positive = depreciation)
Source: Bloomberg.

Markets: some economies in the region are better positioned to cope with current volatility (early monetary tightening or structural factors)

EXCHANGE RATE OF EMERGING ECONOMIES
(% CHANGE COMPARED TO YEAR-END 2021)



Source: Bloomberg.

- In the past, aggressive monetary tightening by the FED has generated great tensions in Latam financial markets: the FED bull cycle of the early 80s (Latin American debt crisis) or that of 1994 (exchange rate crisis in Mexico).
- Many things have changed in Latam: (i) independent central banks (with price stability objective), (ii) sound financial systems, (iii) flexible exchange rates and (iv) stronger public finances (possibility to implement counter-cyclical policies and avoid "fiscal dominance" over monetary policy "financial repression").
- Financial turbulence cannot be avoided, but this time Latam will be more resilient.

Research

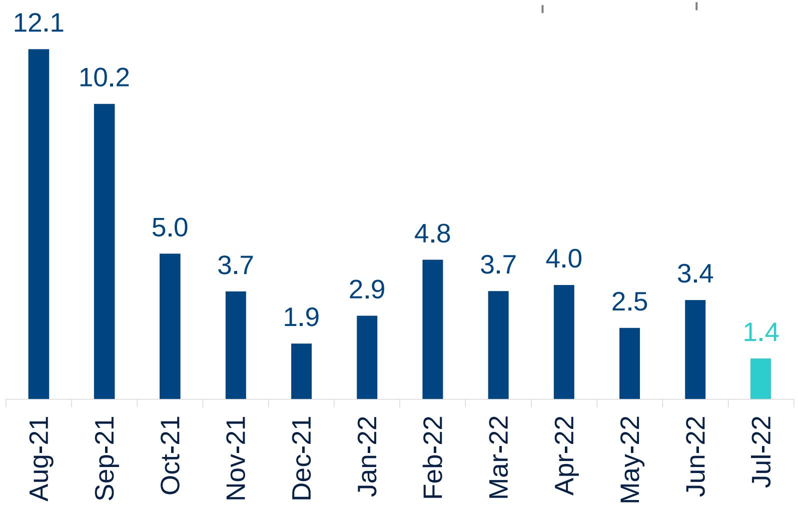
02

Domestic context: activity and employment

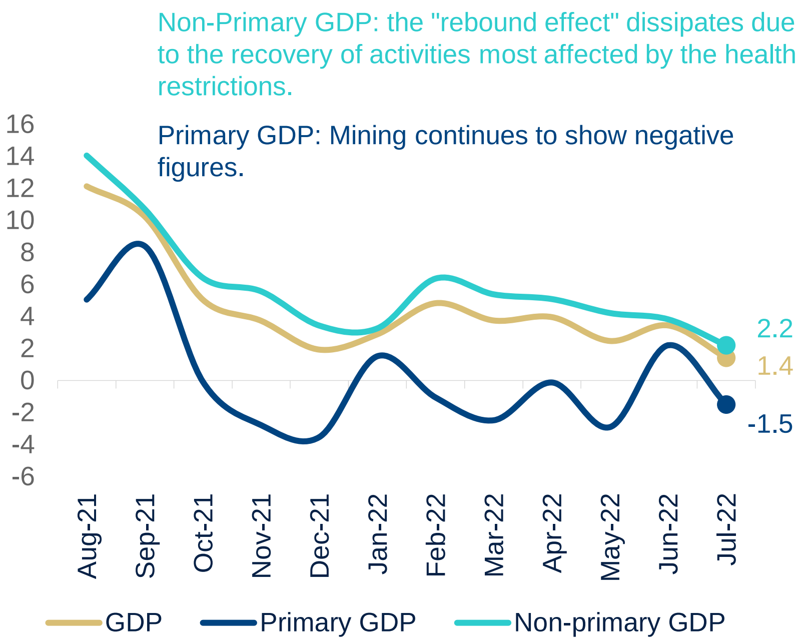
Economic activity slows down: after growing 3.5% in the first half of the year, it began the second half of the year with an expansion of 1.4% in July

GDP
(% CHG. Y/Y)

(% chg. y/y)	1Q-22	2Q-22	1H-22	Jul-22
Total	**3.8**	**3.3**	**3.5**	**1.4**
Primary	-0.7	-0.3	-0.5	-1.5
Non-primary	5.0	4.4	4.7	2.2



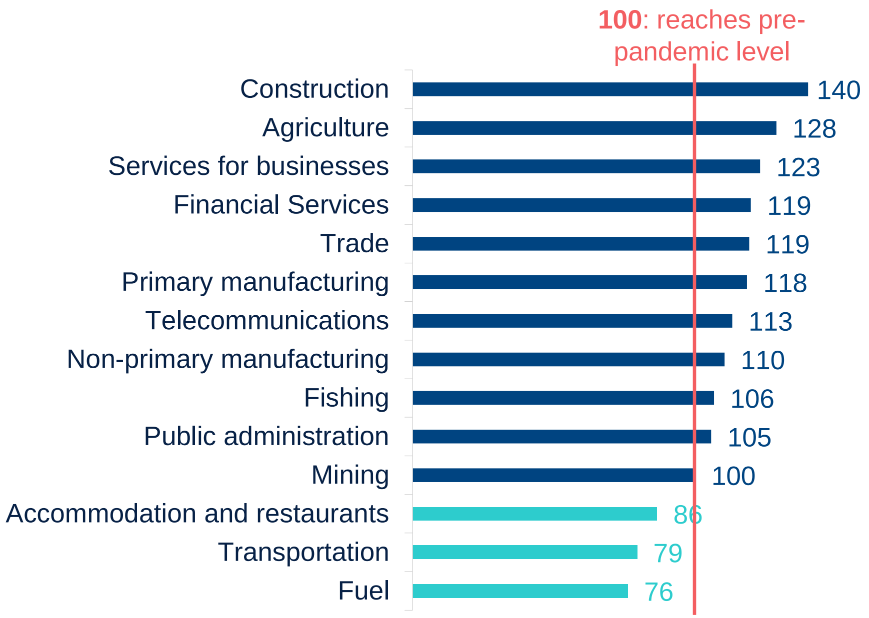
PRIMARY AND NON-PRIMARY GDP
(VAR. % INTERANUAL)



Source: INEI.

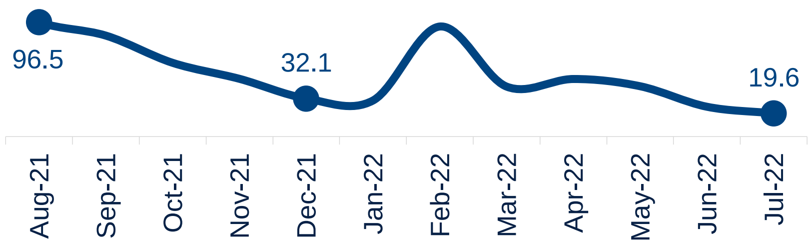
Non-Primary GDP: the "rebound effect" due to the recovery of activities most affected by sanitary restrictions dissipates

GDP BY SECTOR JUL2022
(INDEX: FIRST BIMESTER 2020 =100)



Source: INEI.

ACCOMMODATION AND RESTAURANTS
(VAR. % INTERANUAL)



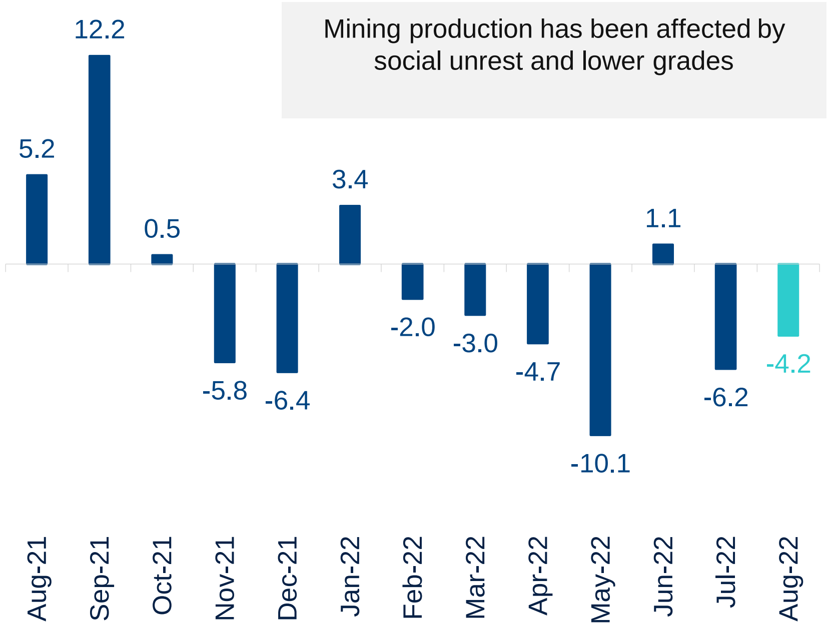
TRANSPORT
(% CHG. Y/Y)

The Accommodation and Restaurants, and Transport sectors contributed 1.4 percentage points (pp) to GDP growth in 1H22, compared to 0.8 pp in July.

Source: INEI.

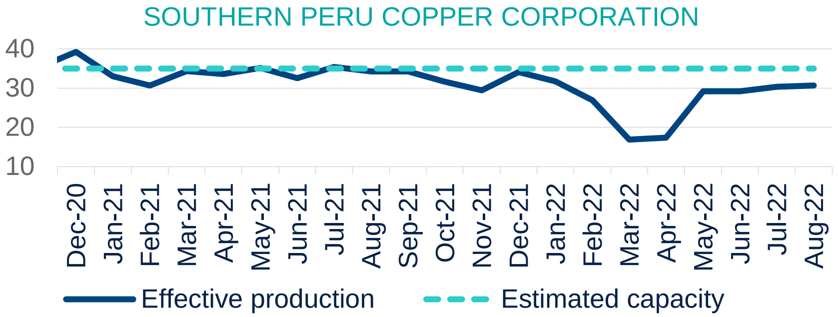
Primary GDP: Metal Mining continues to show negative figures and some operations are not recovering their estimated total production capacity

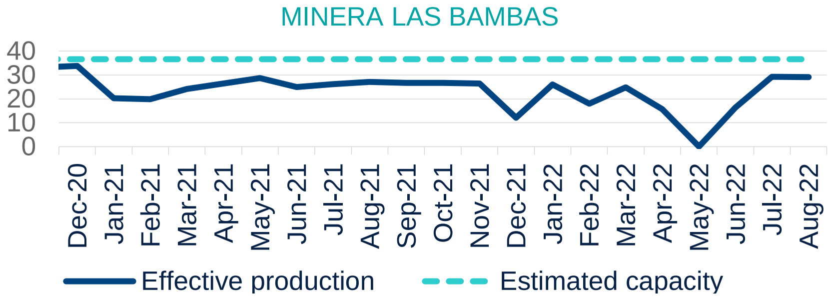
METAL MINING
(VAR. % INTERANUAL)



Source: INEI.

COPPER PRODUCTION
(THOUSANDS OF MT/MONTH)

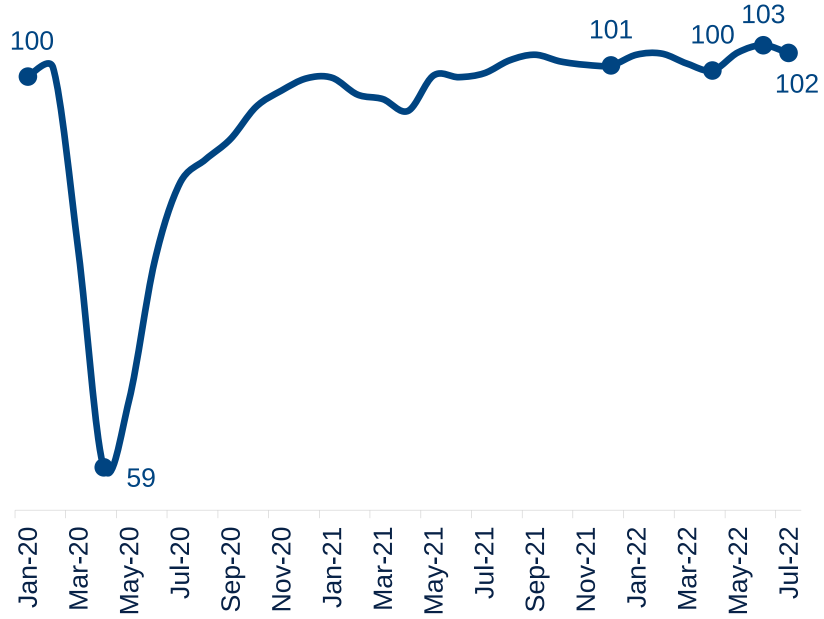




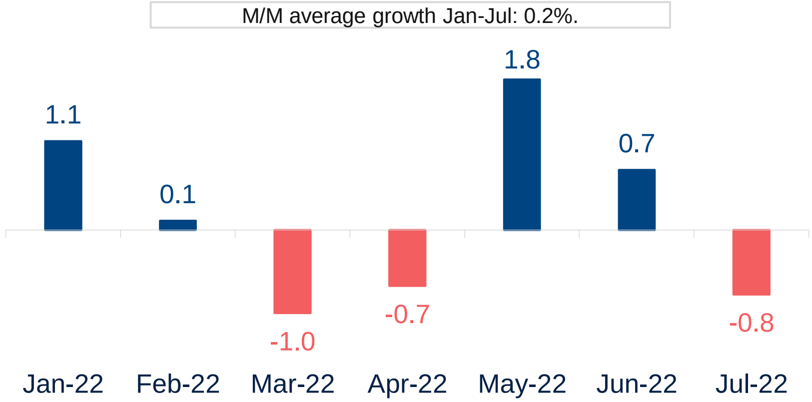
Source: MINEM.

The monthly sequential analysis (with seasonally adjusted GDP) shows that activity is contracting again

SEASONALLY ADJUSTED GDP
(INDEX: FIRST BIMESTER 2020 =100)



SEASONALLY ADJUSTED GDP
(% CHG M/M)



- If the level of activity reached in July is maintained (carry over), growth in 2022 would be: **2.2%.**
- If a m/m growth of 0.2% (similar to the Jan-Jul average) is assumed, growth in 2022 would be: **2.4%.**

Source: INEI.

Factors to consider in the short term: Business confidence remains pessimistic, with production costs under pressure

BUSINESS CONFIDENCE
(POINTS)

Source: BCRP.

3-MONTH CONSUMABLES PRICE
(POINTS)

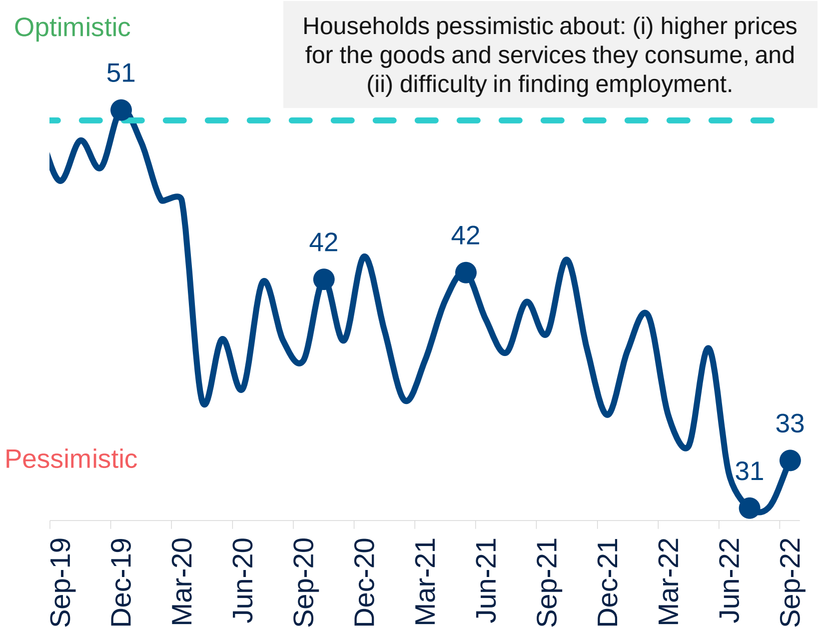
Source: BCRP.

Deterioration of confidence due to:

- Political noise
- Mismanagement of social unrest affecting mining operations and threatening others (Quellaveco)
- Low legal, contractual, licensing certainty and operating permits granted
- Anti-corporate rhetoric

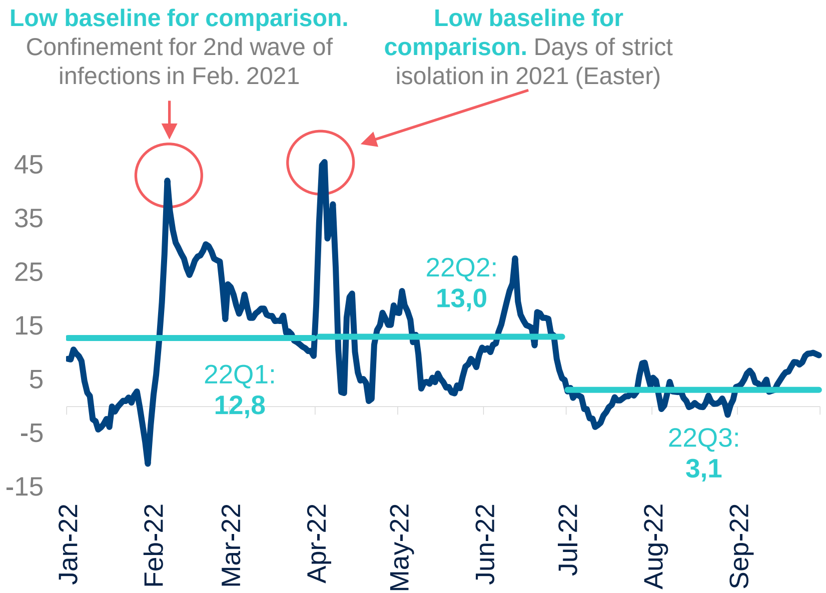
Factors to consider in the short term: household confidence at rock bottom and consumer spending slowing in the third quarter

CONSUMER CONFIDENCE
(POINTS)



Source: Apoyo Consultoría and BBVA Research.

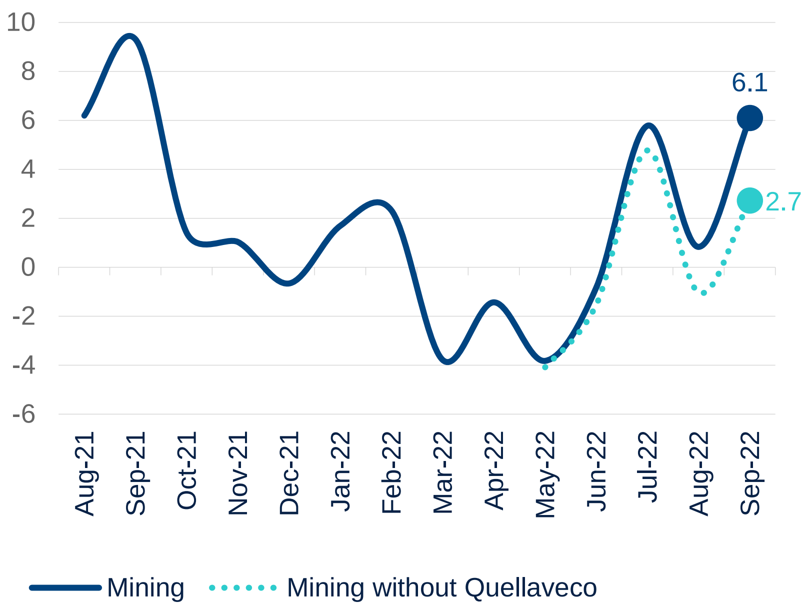
CONSUMER BIG DATA INDEX[1]
(Y/Y % CHANGE, IN REAL TERMS, 7 DAY AVERAGE)



1: Information on deposits to the accounts of selected companies is used. Information as at 19 September.
Source: BBVA Research, information from BBVA.

Factors to consider in the short term: Quellaveco's entry into production will support growth

ELECTRICITY DEMAND IN THE MINING SECTOR[1]
(% CHG. Y/Y)



1: Uses electricity demand information from mining companies that are Free Users.
Source: COES.

Factors that will support growth:

- Quellaveco (copper project) received authorization to commence operations in September. Its economic impact:
- Under normal conditions, Quellaveco should contribute 0.3 percentage points to growth this year and between 0.4 and 0.5 p.p. next year.
- Despite complying with technical and environmental requirements, communities and some authorities have challenged the authorization of water use.
- Public investment improved over the last two readings.

Furthermore:

- High inflation has eroded the purchasing power of families.
- Higher interest rates negatively affect private spending.

Factors to consider in the short term: government launches "Impulso Perú" plan

MAIN ASPECTS OF THE “IMPULSO PERÚ" PLAN

- Improving conditions for private spending
- Accelerating public investment
- Recovery of confidence

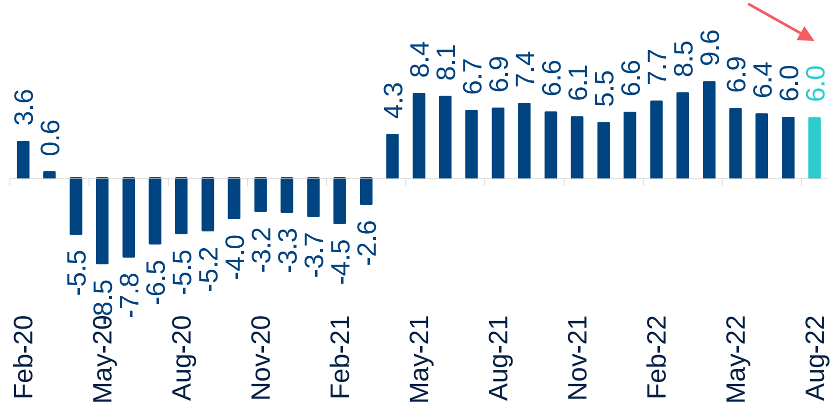
- The Ministry of Economy and Finance (MEF) stated that measures amount to S/ 13.8 billion (1.7% of GDP), but additional spending is estimated at only S/ 3.0 billion (0.4% of GDP).
- This difference is explained by the fact that half of the measures included in the plan are mainly related to unlocking private and public investment. Other measures are related to tax exemptions that are given every year.
- Implementation of several of the announced measures requires approval by Congress, which may take time (if they are finally approved) or, in the parliamentary discussion, the measures could undergo changes that limit their impact on activity.
- No u-turn was announced concerning recent measures that have been questioned for their negative impact on competitiveness (mainly in the labor field). Announcements of such revisions would have had a greater impact on restoring confidence.
- While it is important that the MEF announces a plan that contains measures that can generally be considered positive, the impact on growth is expected to be limited.

Source: MEF.

Labor market: formal job creation eases and purchasing power of salaries remains below pre-pandemic levels

FORMAL EMPLOYMENT

(% CHG. Y/Y)

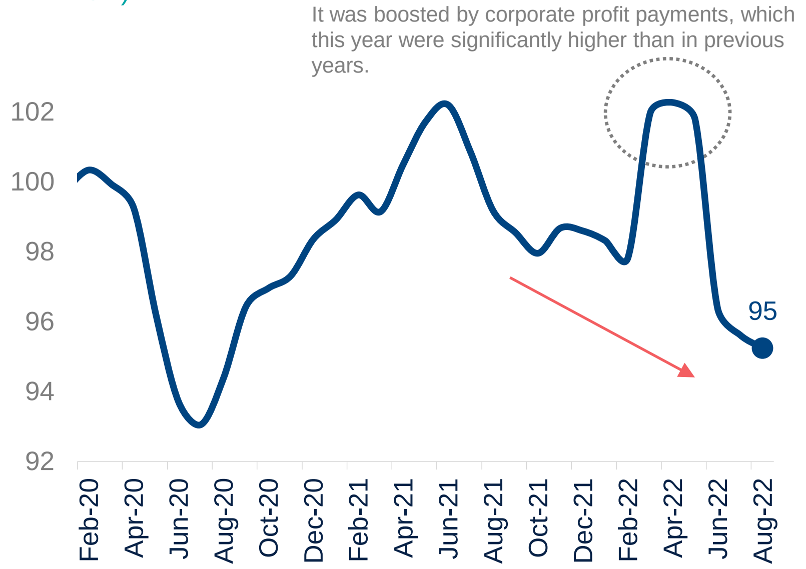


In August, formal employment was almost 6% above the level of July 2019 (pre-pandemic situation). Despite this, according to our estimates, it is still more than 1.5% (around 90 thousand jobs) below the level it would have reached had the pre-pandemic trend growth rate been maintained.

Fuente: SUNAT (Planillas electrónicas) y BCRP. Elaboración: BBVA Research.

AVERAGE WAGE INCOME (ADJUSTED FOR INFLATION) OF FORMAL EMPLOYMENT [1]

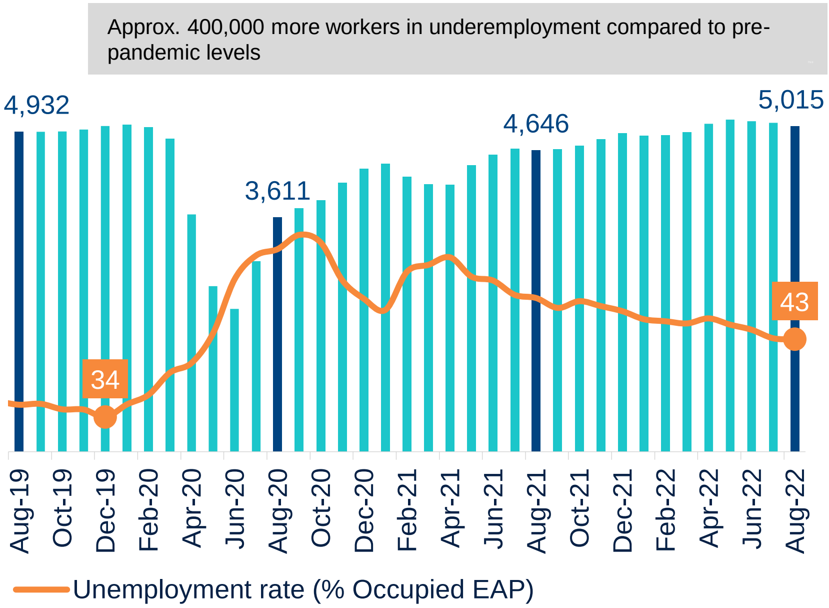
(INDEX, EVERY MONTH FOR 2019 = 100, 3 MONTH MOVING AVERAGE)



Source: SUNAT (Planillas electrónicas) and BCRP. Prepared by: BBVA Research.

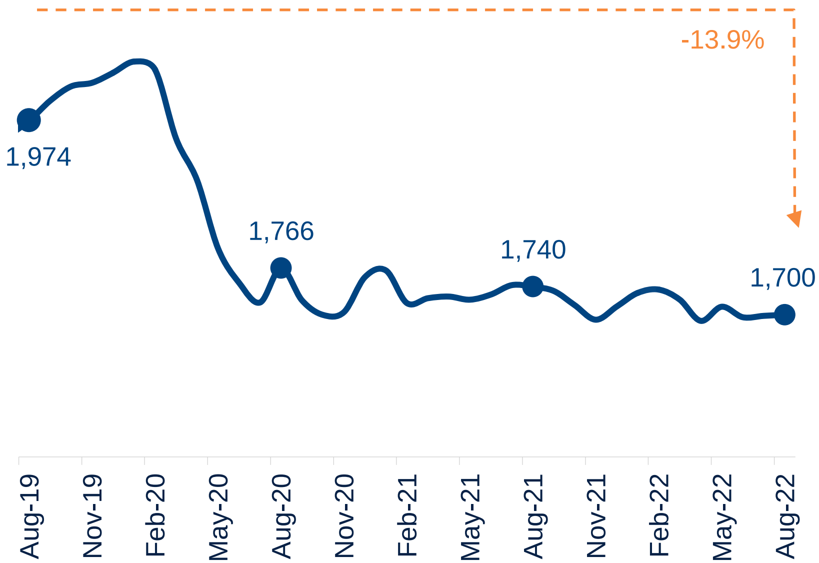
Labor market: in the city of Lima, the quality of employment remains poor, resulting in no recovery in labor income being observed

EAP AND UNDEREMPLOYMENT RATE: METROPOLITAN LIMA
(THOUSANDS OF PEOPLE, 3-DAY MOVING AVERAGE)



Source: EPE (INEI). Prepared by: BBVA Research.

MONTHLY LABOR EARNINGS: LIMA METROPOLITANA[1] (IN SOLES, AT JUN-AUG 2022 PRICES, 3-MONTH MOVING AVERAGE)



Fuente: EPE (INEI). Elaboración: BBVA Research.

BBVA Research

03

Macroeconomic outlook

3.1. GDP and economic activity

External considerations: slowdown in US growth (more restrictive monetary policy) and Eurozone (high gas prices)

BBVA RESEARCH CENTRAL SCENARIO: MAIN ASSUMPTIONS AND IMPACTS

MONETARY TIGHTENING
Interest rates remain higher for longer as central banks remain committed to low inflation

DISRUPTIONS IN GAS MARKETS
Russia's supply cuts keep prices close to current levels, but saving measures, flows from alternative sources and inventories prevent large shortages

COMMODITIES (EX-GAS)
Prices decline on decelerating global demand, but supply restrictions keep prices relatively high

SUPPLY BOTTLENECKS
Bottlenecks continue to ease gradually as the effects of ongoing shocks wane away

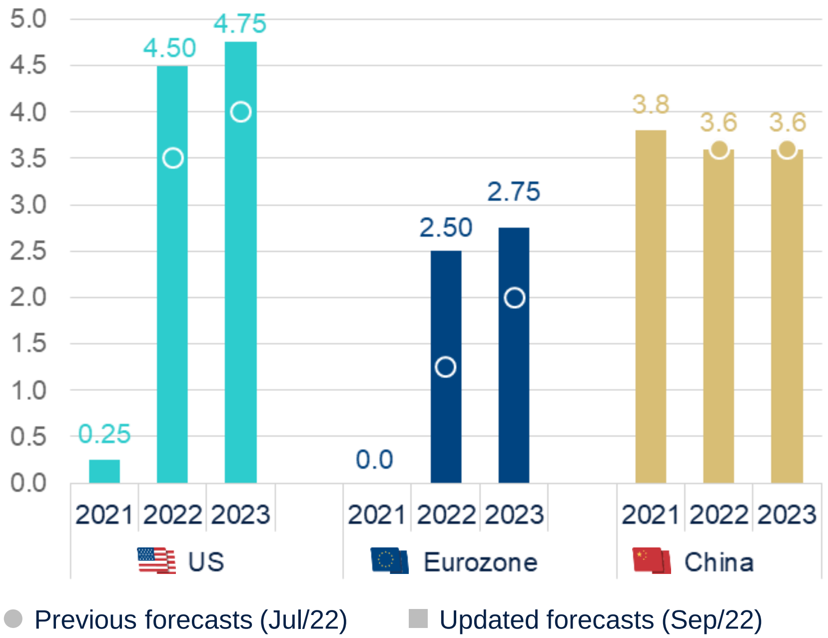
SHARP GROWTH SLOWDOWN
Global growth is forecast to ease sharply from 6.2% in 2021 to 3.2% (-0.2pp) in 2022 and 2.4% (-0.1pp) in 2023. Mild recessions in the Eurozone, due to gas disruptions, and in the U.S., due to interest rate hikes. Low growth, but no hard-landing in China.

INFLATION MODERATES SLOWLY
It remains above targets at least till 2024, but eases from 2023 as current shocks lose steam, monetary tightening reigns on expectations and no significant second-round effects emerge.

FINANCIAL VOLATILITY
Strong dollar, high risk premia, capital outflows from EM.

Central banks will keep the focus on inflation despite increasing signs of growth weakening: interest rates will remain higher for longer

MONETARY POLICY INTEREST RATES*
(%, END OF PERIOD)

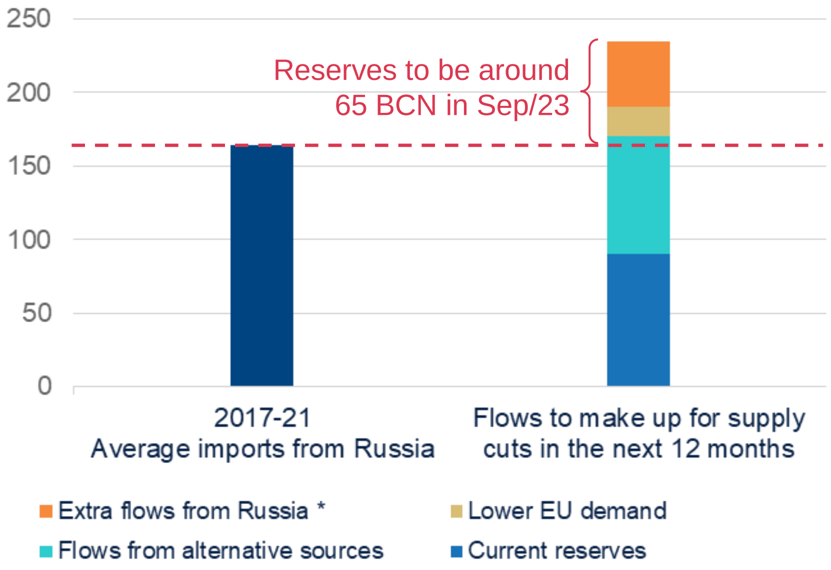


* In the case of the Eurozone, interest rates on refinancing operations.
Source: BBVA Research based on Bloomberg data.

- The Fed is likely to raise rates to 4.75%, and to keep them at that contractive level till the end of 2023 in order to engineer a slowdown of the economy, and of labor markets in particular, for inflation to converge to 2%.
- The ECB is expected to hike refi rates to 2.75%, well above neutral levels, pressured by high inflation and a more aggressive Fed, and despite the bleak growth prospects.
- Fiscal policy will be more supportive in the EZ than in the US, mostly through NGEU funds and the suspension of fiscal rules until 2023.
- In China, policies are expected to continue exhibiting a moderately expansionary tone.

European gas markets: relatively-high reserves, saving measures and flows from alternative sources are likely to prevent significant shortages ahead

EU GAS: AVERAGE IMPORTS FROM RUSSIA AND FLOWS TO MAKE UP FOR SUPPLY CUTS IN THE NEXT 12 MONTHS (BCM: BILLION CUBIC METERS)



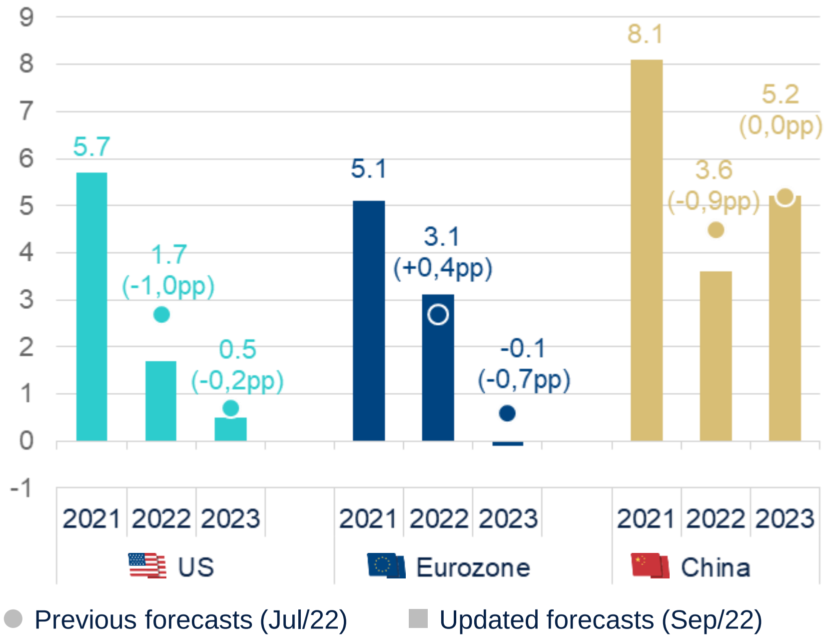
* Assuming imports from Russian remain at the current levels: around 40 BCM (25% of total supply), through pipelines inTürkiye and Ukraine and LNG shipments, but not through Nord Stream and Belarus pipelines.
Source: BBVA Research based on data by, Bruegel, EUROSTAT, ENTSOG (European Network of Transmission System Operators for Gas).

- Baseline scenario: high gas prices (close to current levels), without gas shortages as flows from other sources, inventories and saving measures are likely to offset supply cuts over 2023-24, at least if imports from Russia remain at current levels and winter temperatures are close to historical averages.
- If Russia further cuts pipeline supply, there would be enough gas for the 2023 winter, but extra rationing would be needed in 2024.
- If Russia cuts liquified natural gas (LNG) provisions, the impact would not be very significant: LNG markets are global and circular, meaning that the EU would end up importing LNG from other producers.

Global growth will ease significantly ahead on price pressures, rising interest rates, gas disruptions in Europe and idiosyncratic problems in China

GDP: ANNUAL GROWTH IN REAL TERMS

(%)

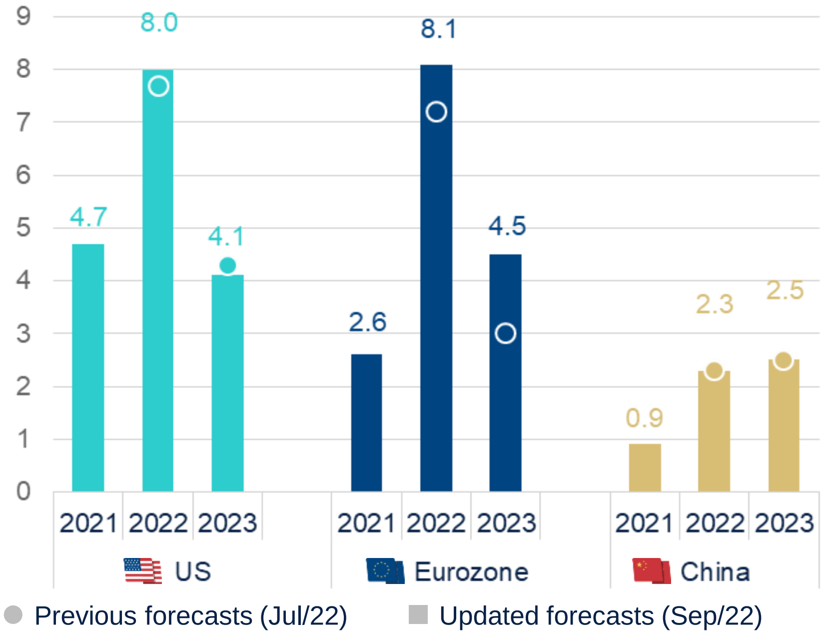


* Forecast change in parentheses.
Source: BBVA Research.

- In the US, growth is revised downwards on (surprising) GDP contractions over 1H22 and higher Fed rates; a recession coupled with a labor market easing is likely by mid-2023.
- In the EZ, positive incoming data supports an upward revision of 2022 growth, but a sharper easing ahead is expected on gas disruptions and higher rates; a recession is likely over the next few quarters.
- Recessions in the US and the EZ are set to be mild given the relative strength in balance sheets of households, firms and banks.
- In China, 2022 growth revised down on the impact of new covid waves and real estate tensions; a recovery is expected in 2023.

Inflation will remain high (more than expected) and well above central bank targets, but is still forecast to trend downwards from 2023 onwards

INFLATION:CPI
(Y/Y %, PERIOD AVERAGE)

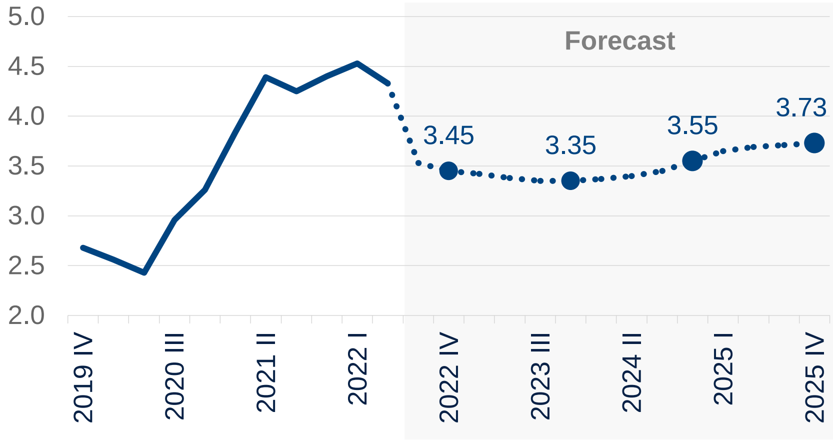


Source: BBVA Research.

- Inflation forecasts are revised to the upside, in line with evidence of more widespread and more frequent price adjustments and, in the case of the Eurozone, with prospects of higher gas prices and a weaker Euro.
- Still, recent moderation signs (mainly in the US), reinforce the view that inflation will ease ahead as current shocks lose strength and monetary conditions continue to be tightened.
- While inflation's convergence to the target will take a relatively long time, expectations are forecast to remain broadly anchored.
- Growth deceleration is expected to reduce the room for relevant wage increases, making significant second-round effects unlikely.

For the remainder of 2022 and for much of next year, downward pressure on copper prices, but constructive outlook from 2024 onward

INTERNATIONAL COPPER PRICE
(USD PER POUND, QUARTERLY AVERAGE)



COTIZACIÓN INTERNACIONAL DEL COBRE
(USD PER POUND, ANNUAL AVERAGE)

2019	2020	2021	2022*	2023*	2024*	2025*
2.73	2.80	4.22	3.96	3.38	3.44	3.70

* Forecast.
Source: BBVA Research.

- In the short term, the price drop is explained by the liquidation of speculative positions, in line with expectations of lower global growth.
- Lower world economic activity, particularly in China, will imply lower demand for copper. Also, the higher incoming supply in 2022 and 2023. In this context, the price of the red metal will be under downward pressure until the end of 2023.
- Price supports: higher production costs (energy), inventories remain tight, and production problems in some large operations.
- Once the cyclical adjustment of the economy is over, there is a more constructive outlook for the copper price from 2024 onwards: structural support from greater investment in green infrastructure and vehicle reconversion.

Risks: in the current context , a sharper slowdown in global growth and financial turmoil episodes cannot be ruled out

MAIN SHORT-TERM RISKS TO THE WORLD ECONOMY

PERSISTENT INFLATION
Second-round effects, new shocks or policy mismanagement could further spur inflation, requiring higher interest rates

UKRAINE WAR AND GEOPOLITICS
A deterioration of the war and new geopolitical conflicts; significant gas shortages in Europe are among the main risks

HARD-LANDING IN CHINA
"Zero-covid" policy coupled with real estate tensions and other local problems could pave the way for weaker growth in China

SOCIAL TENSIONS AND POPULISM
Macro weakness, political polarization, among other reasons, could trigger social unrest and populist policies

SHARPER GROWTH DECELERATION
Global growth could decelerate faster and more significantly than expected, increasing the odds of a global recession

FINANCIAL TURMOIL
Higher policy rates and risk aversion could trigger financial crises, in particular in debt and EM markets

Local considerations

BBVA RESEARCH BASE SCENARIO: MAIN ASSUMPTIONS

Factors that will support growth

Improved mining activity: Quellaveco starts operations and recovery of output levels at other operations.

Greater availability of liquidity: withdrawals from pension funds, CTS and government transfers will support private consumption.

Recovery of inbound tourism, with a positive impact on services.

Factors with a negative impact

Social unrest expected to remain active in the coming months, which will limit mining activities.

Political environment: tensions remain between the Executive and the Legislative branches, with an impact on confidence.

Higher interest rates: more challenging financing conditions for the private sector in an environment of tightened Fed and BCRP monetary policy. This would negatively affect private spending.

Slump in public investment in 2023 due to the change of subnational authorities.

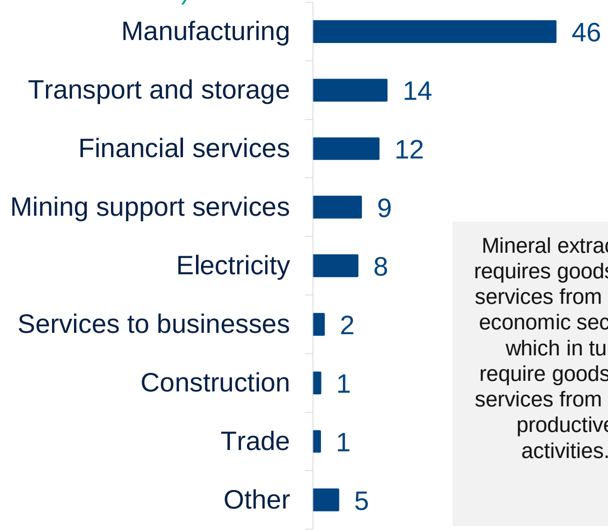
Start of operations at Quellaveco will have a positive and significant economic impact

NATURE AND EXPECTED IMPACT OF THE QUELLAVECO MINING OPERATION

- Estimated investment: approx. USD 5.5 billion.
- Among the 5 largest copper deposits in the world.
- Useful life of 30 years.
- Estimated annual production for the first 10 years:
  - 330 thousand fine metric tons (FMT) of copper (national copper production will increase by 15%).
  - 6 thousand FMT of molybdenum.
- Employment:
  - Direct: 2,500 people.
  - Indirect: 20,500 people.
- Direct impact on GDP growth rate:
  - 2022: 0.3 percentage points
  - 2023: between 0.4 and 0.5 percentage points

Source: MINEM.

MINING PRODUCTION: DEMAND FOR GOODS AND SERVICES IT PROVIDES TO OTHER PRODUCTIVE SECTORS (% OF TOTAL MINING PRODUCTION DEMAND FROM OTHER SECTORS)



Mineral extraction requires goods and services from other economic sectors, which in turn require goods and services from other productive activities.

1: Companies engaged in providing exploration services for metallic and non-metallic resources, drainage and pumping services, drilling and boring, geological observations at research sites as well as test drilling of holes.
Source: INEI 2020- Supply and Utilization Table (constant prices) and BBVA Research.

Increased household liquidity due to withdrawals from the pension system and CTS, coupled with increased inbound tourism will support growth.

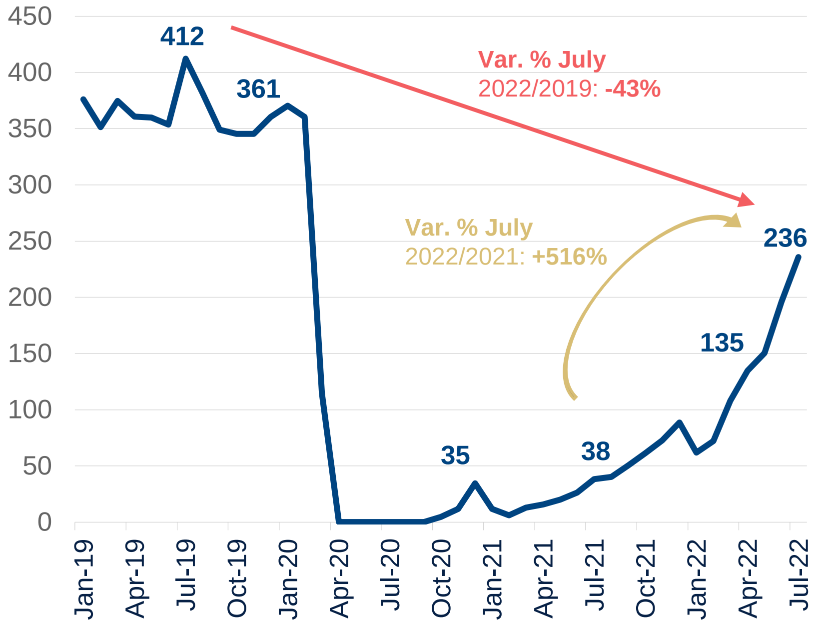
WITHDRAWAL FROM PRIVATE PENSION SYSTEM FUNDS (SPP FOR ITS ACRONYM IN SPANISH) AND COMPENSATION FOR LENGTH OF SERVICE (CTS FOR ITS ACRONYM IN SPANISH)

	2020 and 2021	**Potential withdrawal** 2022 and 2023
SPP	S/ 66 billion[1]	S/ 32 billion[3]
CTS	S/ 11 billion[2] (reduction of balance)	S/ 10 billion[4]

We estimate that around S/ 15 billion will be spent by households (on goods and services produced locally or imported) between the second half of 2022 and 2023. Upward impact on GDP would be between four and five tenths of a percentage point in 2023.

1: Equivalent to 7.2% of GDP. 2: Corresponds to the decrease in the balance of CTS in the financial system, of S/ 23 billion (December 2019) to S/ 12 billion (December 2021). CTS withdrawals were actually higher because deposits were made in those years. 3: SBS estimate. 4: Own estimate.
Source: SBS and BBVA Research.

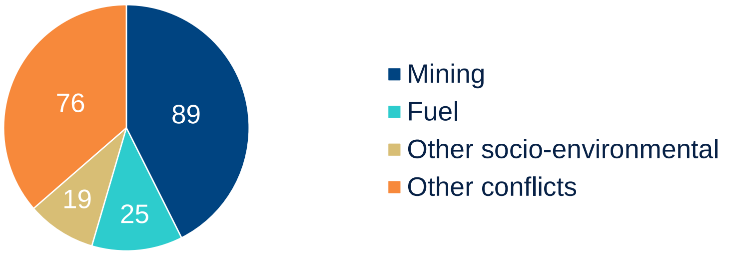
MONTHLY ARRIVALS OF INTERNATIONAL TOURISTS (THOUSANDS)

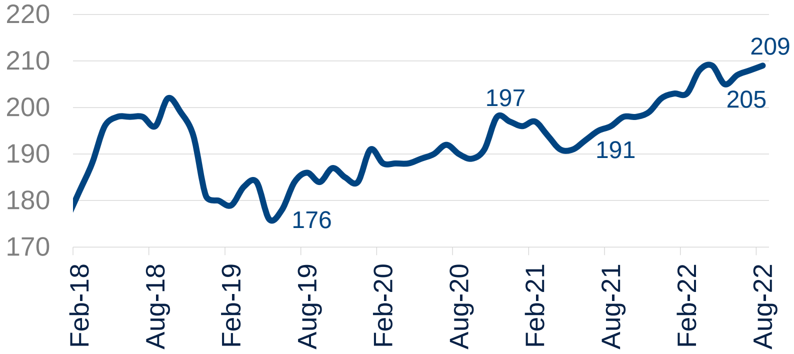


Source: INEI, MINCETUR and BBVA Research.

It is assumed that social conflicts will remain high, which will affect production at some mining units. However, Quellaveco will provide support

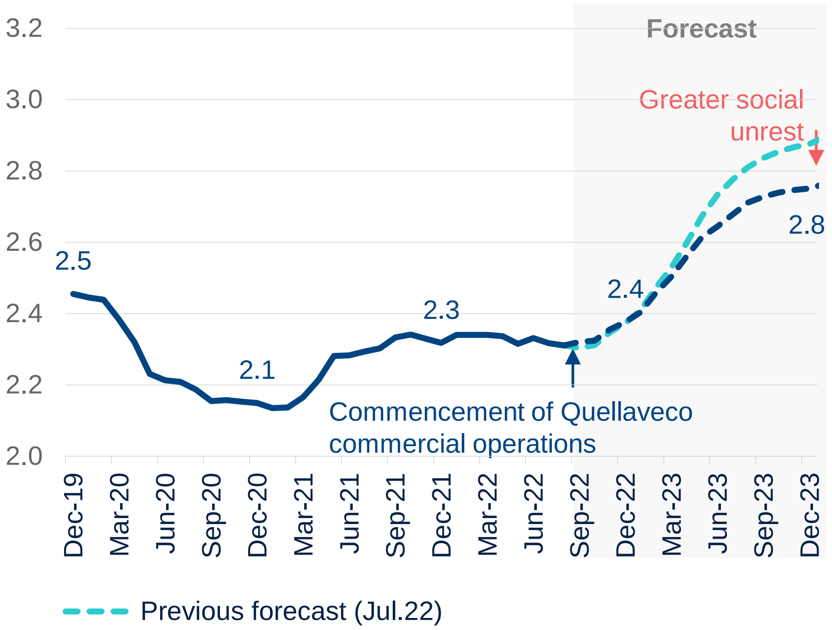
SOCIAL UNREST
(REGISTERED NUMBER OF CONFLICTS)





Source: Ombudsman's Office.

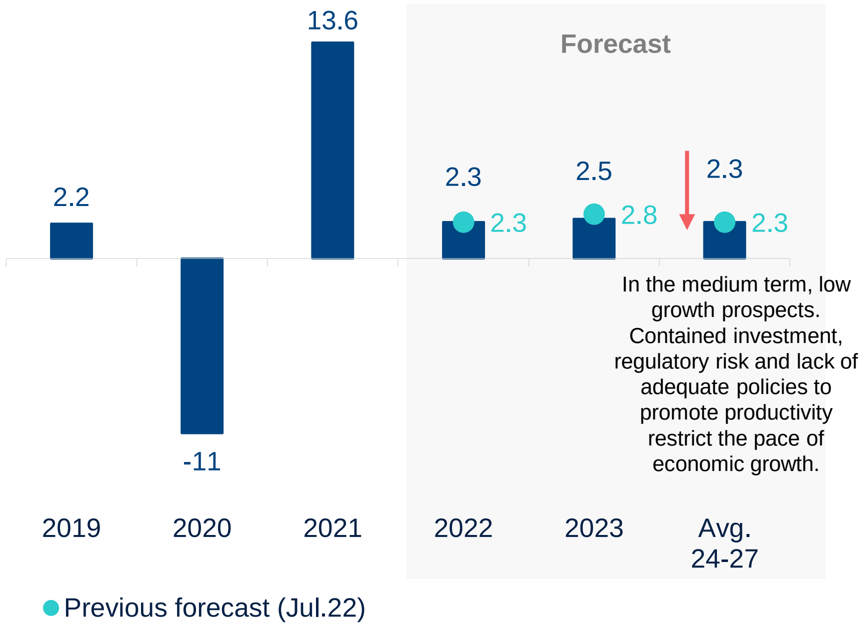
COPPER PRODUCTION
(MILLION MT, CUMULATIVE OVER THE LAST 12 MONTHS)



Source: INEI and BBVA Research.

GDP: this year's growth will be 2.3% and in 2023 2.5%.

GDP
(VAR. % INTERANUAL)

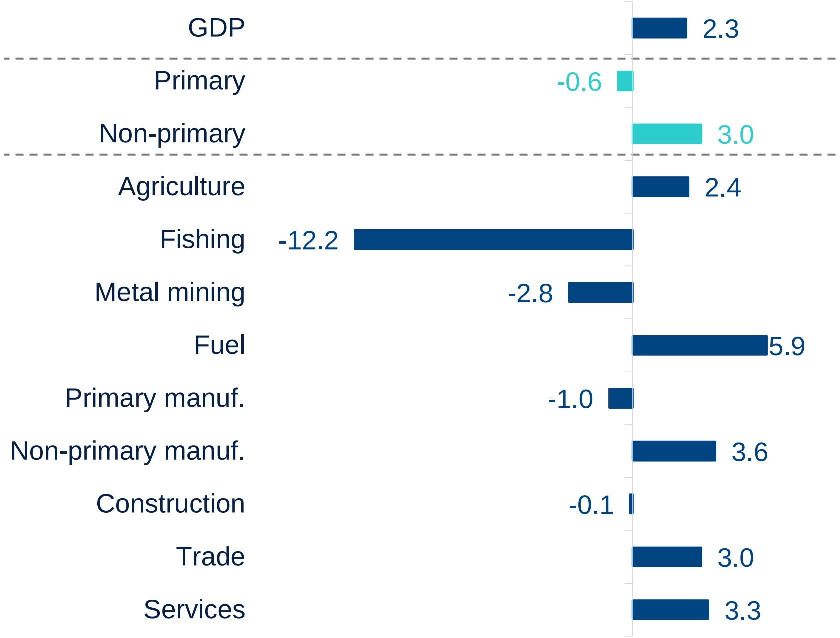


Source: BBVA Research.

- After growing 3.5% in the first half of the year, GDP will moderate in the second half of the year. The international environment has deteriorated and the "rebound effect" is wearing off at the local level. Furthermore, financing conditions are less favorable, business confidence is weak and social unrest continues to escalate. Quellaveco's production start-up will mitigate the slowdown. In 2022, GDP growth will be around 2.3%.
- For the coming year, we anticipate a GDP growth of 2.5% due to the mining recovery (full year impact of Quellaveco and production improvement of other operations), mitigated by lower world growth and the slump in public investment (new subnational governments).

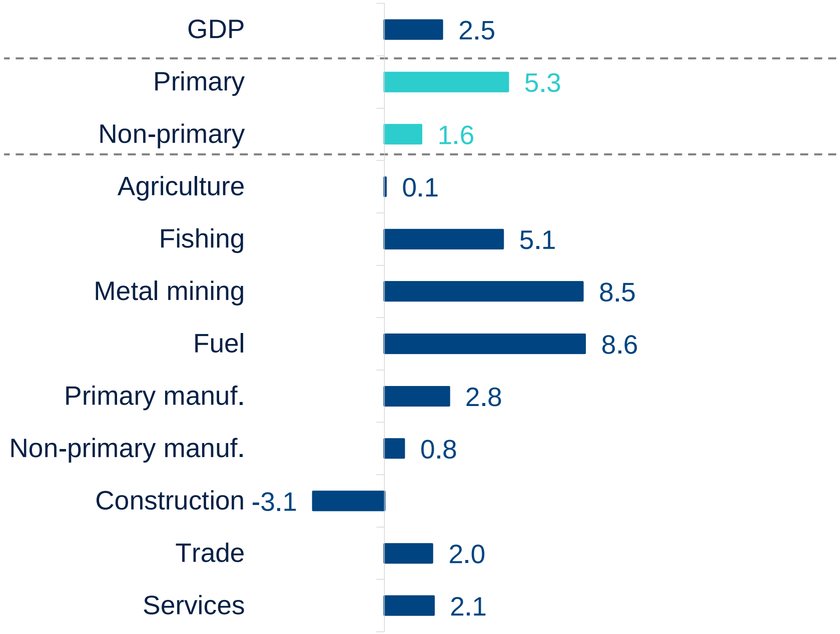
GDP: on the sectoral side, better performance in Mining will support growth in 2023

2022: GDP FORECAST FOR THE SECTOR
(VAR. % INTERANUAL)



Fuente: BBVA Research.

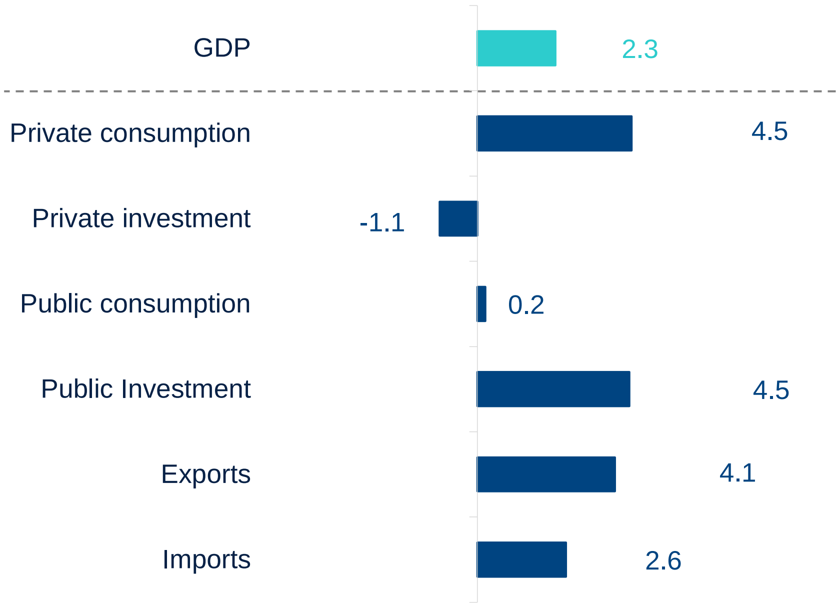
2023: GDP FORECAST FOR THE SECTOR
(VAR. % INTERANUAL)



Fuente: BBVA Research.

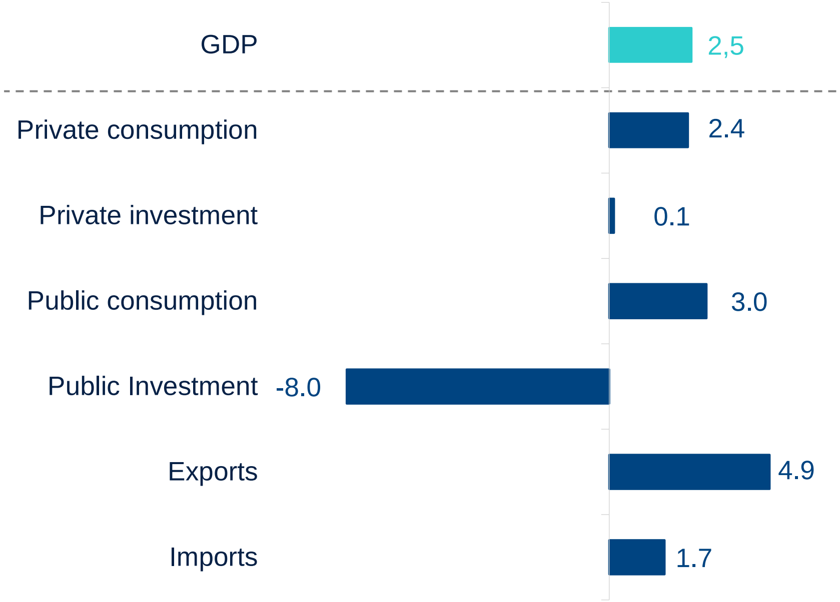
GDP: on the expenditure side, exports are projected to pick up next year (due to Mining)

2022: GDP FORECAST FOR DEMAND
(VAR. % INTERANUAL)



Fuente: BBVA Research.

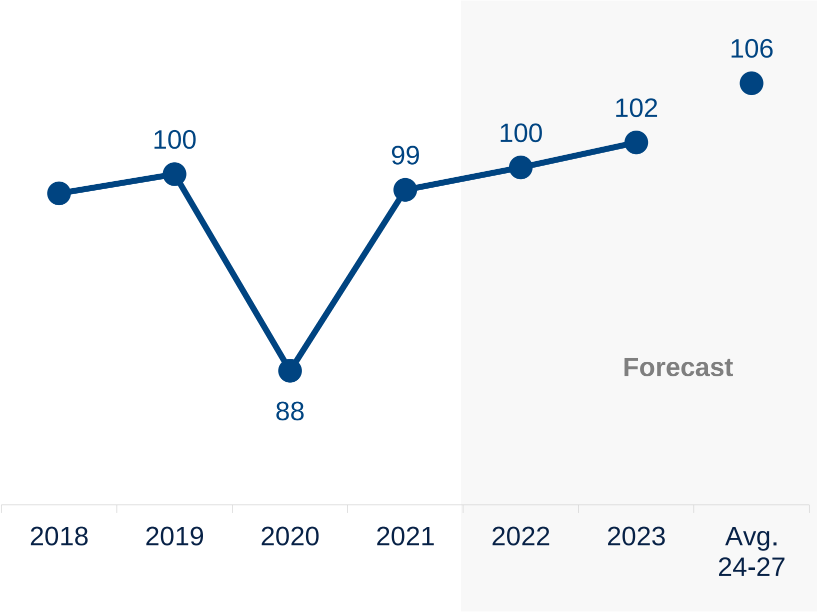
2023: GDP FORECAST FOR DEMAND
(VAR. % INTERANUAL)



Fuente: BBVA Research.

GDP per capita this year will return to a level similar to that of 2019 (pre-pandemic)

GDP PER CAPITA
(2019=100, IN REAL TERMS)

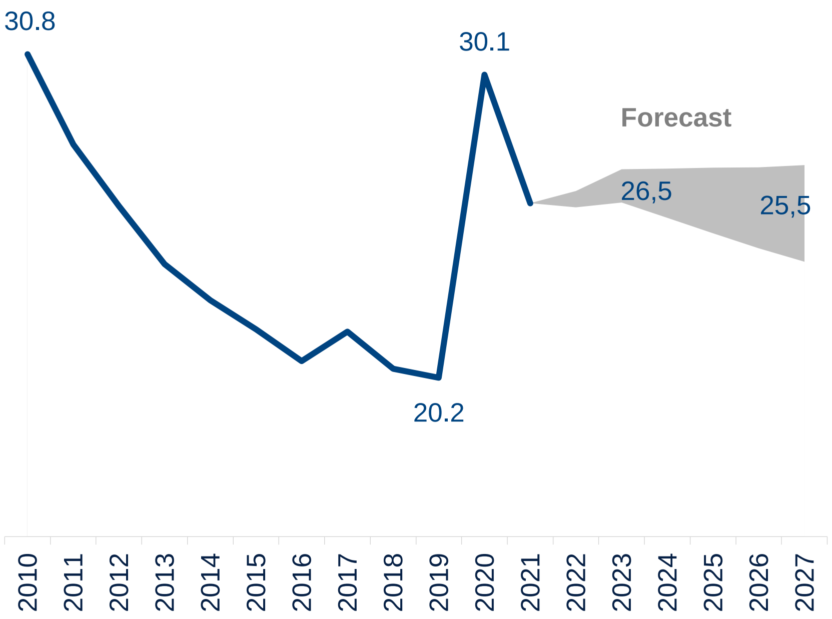


Source: BCRP, INEI (ENAHO) and BBVA Research.

- Although GDP per capita is not necessarily an indicator of social progress, the evidence indicates that these two variables are highly interrelated.
- It is therefore important to accelerate the growth of per capita income in order to improve the quality of life of the people (reduce poverty, improve education and health systems, higher life expectancy, citizen security, high protection of fundamental rights, among other positive aspects).
- In Peru today, we see that many of the factors that lead to prosperity are absent: investment to accumulate physical capital, quality education and measures to foster productivity.

In line with our growth and per capita spending projections, the poverty rate could stagnate in the next few years

MONETARY POVERTY RATE
(% OF THE POPULATION)



Source: INEI and BBVA Research

- This simulation considers the growth of private consumption, per capita spending and spending patterns by decile observed in the last 3 years prior to the pandemic.
- In 2021, the poverty rate stood at 25.9%, equivalent to 8.6 million people living in poverty.
- By 2022, we estimate that the poverty rate will stand at 26% (about 127 thousand people more than what was recorded in 2021).
- By the end of the projected period, the poverty rate would stand at 25.5%.

BBVA Research

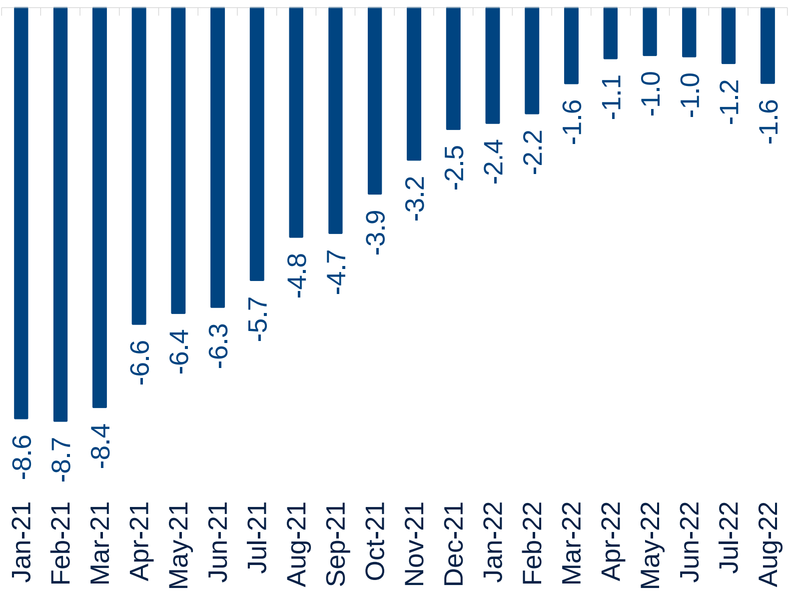
03

Macroeconomic outlook

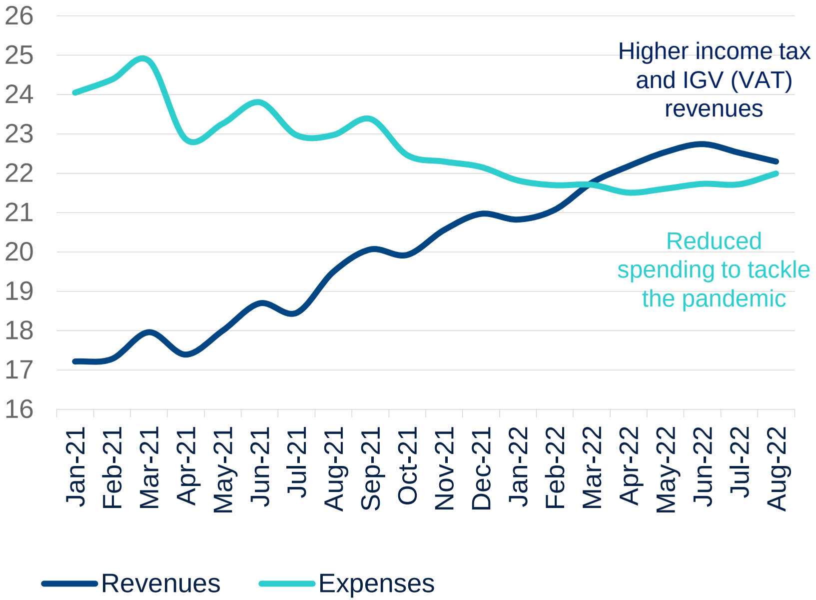
3.2. Fiscal balance and public debt

As of August, the public deficit stood at 1.6% of GDP (2021: 2.5%), against a backdrop of higher revenues and a moderation of non-financial expenditure

FISCAL BALANCE
(NON-FINANCIAL PUBLIC SECTOR, CUMULATIVE FOR THE LAST TWELVE MONTHS, % OF GDP)



GENERAL GOVERNMENT NON-FINANCIAL INCOME AND EXPENDITURE
(LAST TWELVE MONTHS, % OF GDP)

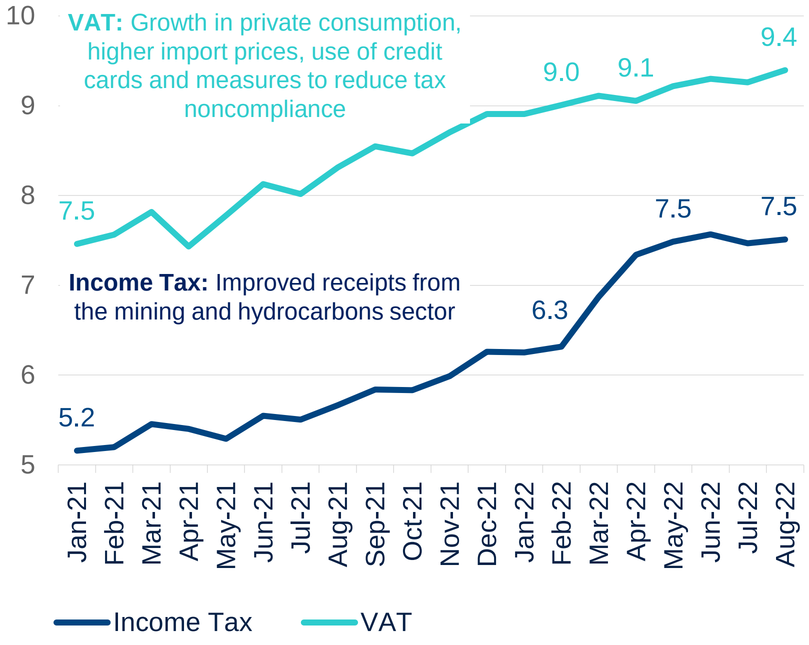


Source: BCRP and BBVA Research.

On the fiscal revenue side, higher income tax receipts (better export prices) and IGV (Value Added Tax) were the most important factors

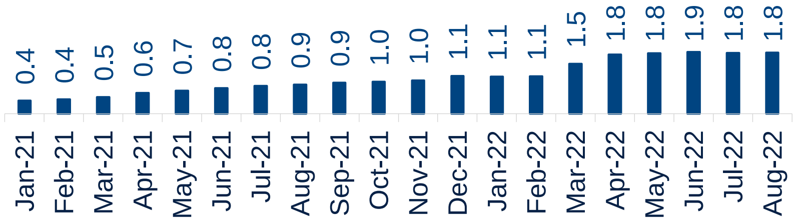
INCOME TAX AND VAT

(ACUMULADO ÚLTIMOS DOCE MESES, % DEL PIB)



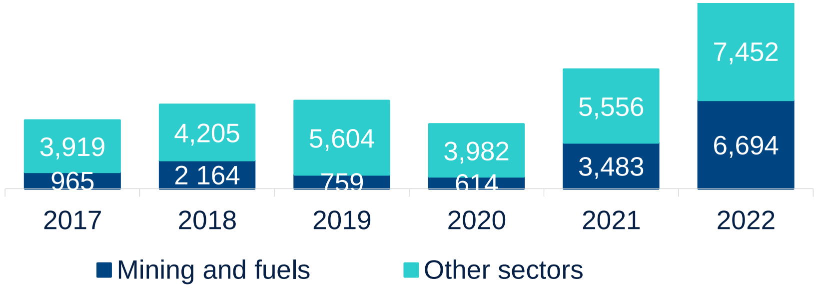
INCOME TAX FOR THE MINING AND HYDROCARBONS SECTOR

(CUMULATIVE LAST TWELVE MONTHS, % OF GDP)



REGULARIZATION OF INCOME TAX IN THE MINING AND HYDROCARBONS SECTOR

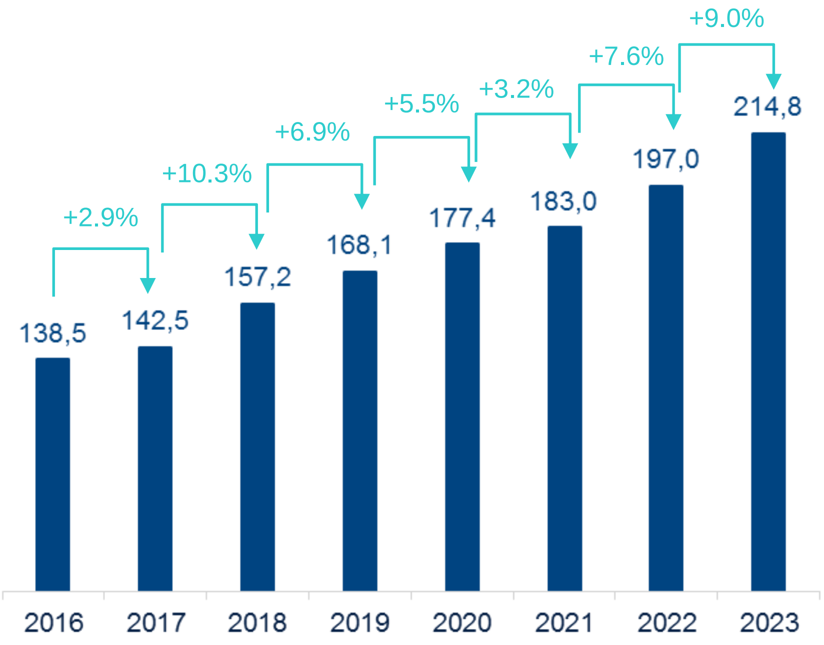
(MILLIONS OF SOLES)



Fuente: BCRP y BBVA Research.

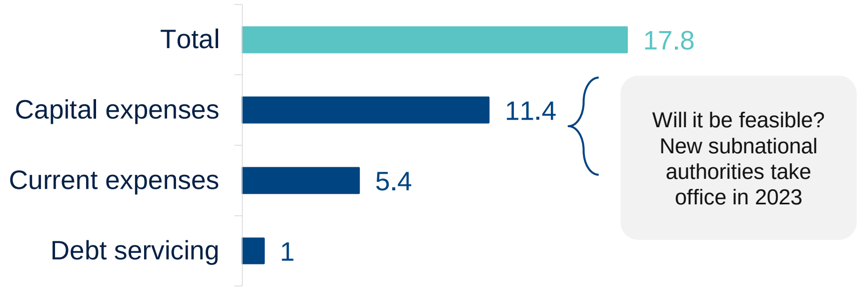
Budget 2023: 9.0% increase over the previous year (more than PEN 17 billion, mainly in capital expenditure of subnational governments)

PUBLIC SECTOR BUDGET
(MILLION OF SOLES)



Source: MEF and BBVA Research.

PUBLIC SECTOR BUDGET 2023 BY EXPENDITURE TYPE (INCREASES IN BILLIONS OF SOLES)

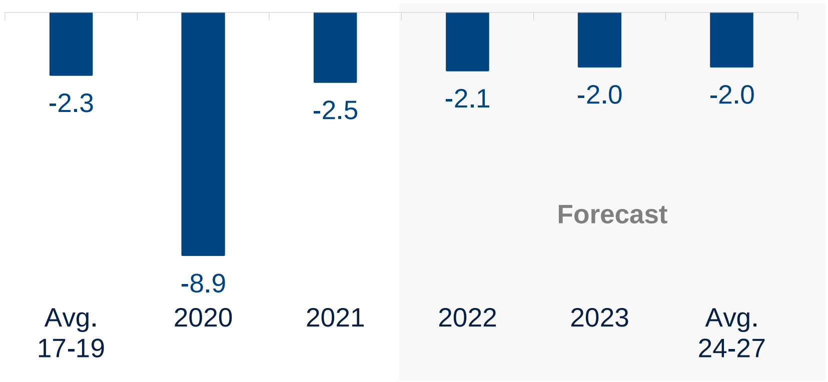


PUBLIC SECTOR BUDGET
(PARTICIPATION)

	2019	2020	2021	2022	2023
Current	65	65	65	64	61
Capital	26	27	26	24	28
Debt servicing	9	8	9	12	11

Deficits of around 2.0% of GDP for the next few years, with tax income tending to moderate (lower metal prices) and...

FISCAL BALANCE
(NON-FINANCIAL PUBLIC SECTOR, % OF GDP)

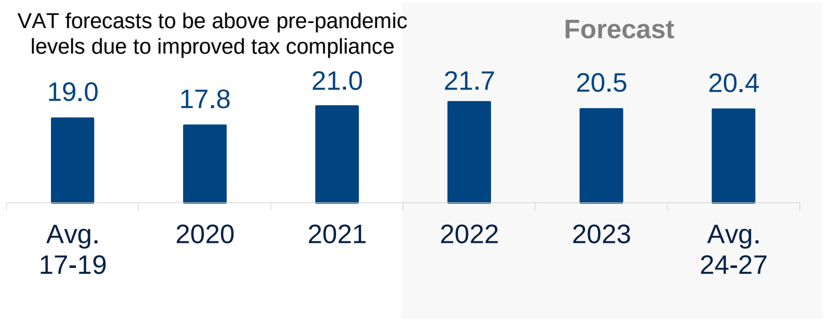


STRUCTURAL TAX RESULT
(% OF POTENTIAL GDP)

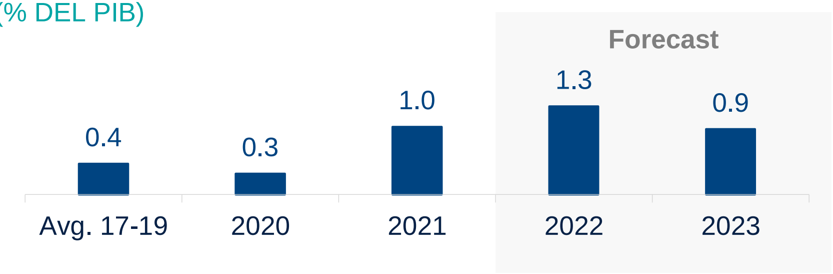
2019	2020	2021	2022	2023	Avg. 24-27
-1.4	-4.5	-3.0	-2.4	-2.2	-2.4

Fuente: BCRP y BBVA Research.

GENERAL GOVERNMENT REVENUE
(% OF GDP)



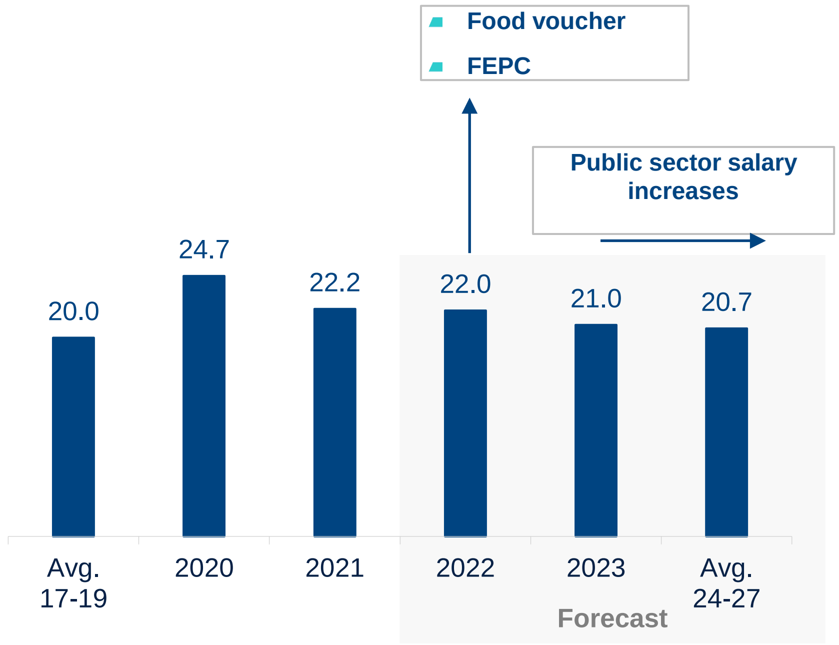
INCOME TAX FOR THE MINING SECTOR
(% DEL PIB)



Fuente: BCRP y BBVA Research.

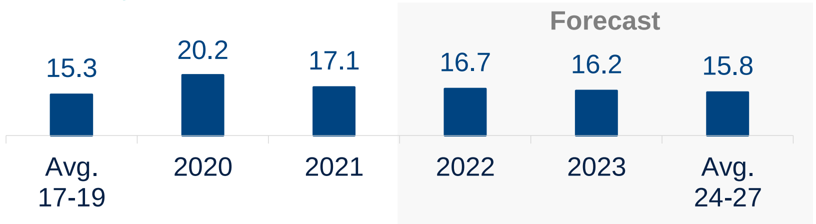
... expenditures considering a normalization of disbursements to address the health crisis and to support the private sector in the face of higher inflation

GENERAL GOVERNMENT NON-FINANCIAL EXPENDITURE (% OF GDP)

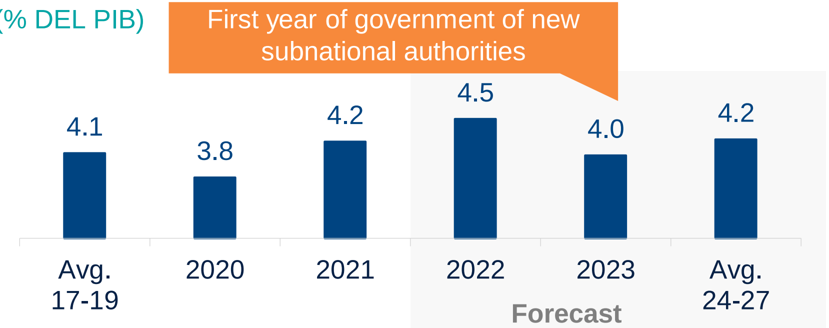


Fuente: BCRP y BBVA Research.

GENERAL GOVERNMENT CURRENT EXPENDITURE (% DEL PIB)



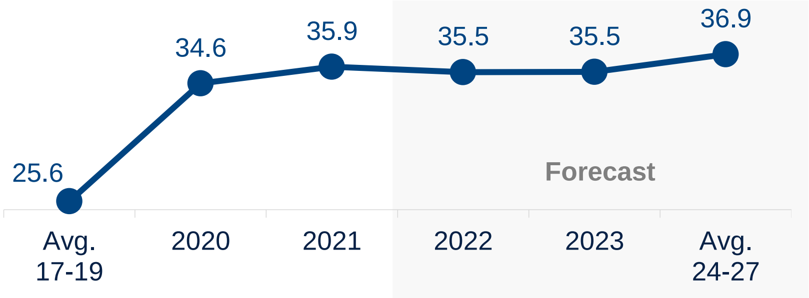
GENERAL GOVERNMENT INVESTMENT EXPENDITURE (% DEL PIB)



Fuente: BCRP y BBVA Research.

Public debt to show a slight upward trend in the medium term

GROSS PUBLIC DEBT
(NON-FINANCIAL PUBLIC SECTOR, % OF GDP)



Weaknesses

- Dollarization of public debt has increased from 32% in 2019 to 54% in 2021.
- Interest expense (as % of General Government revenues) will increase in the coming years. It restricts the resources available to meet education, health and infrastructure expenditure.

Fuente: BCRP y BBVA Research.

NON-FINANCIAL PUBLIC SECTOR INDICATORS

	2019	2020	2021	2022*
Assets (% of the GDP)	13.7	12.4	14.2	15.0
Net Debt (% of GDP)	12.9	22.2	21.8	18.8
Dollarization of Public Debt (%)	32	43	54	53
Interest as % of tax revenues	7.0	9.0	7.2	8.7

* As of the first half of the year. In the case of interest participation as a percentage of tax revenues, it is as of August.

BBVA Research

03

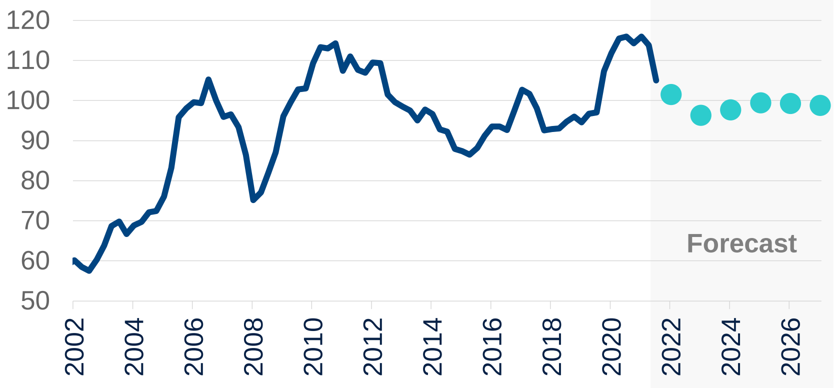
Macroeconomic outlook

3.3. External sector and exchange rate

External accounts: decline in terms of trade will lead to a moderation of the trade surplus in 2022 and 2023

TERMS OF TRADE

(INDEX 2007= 100 AND % CHG Y/Y)

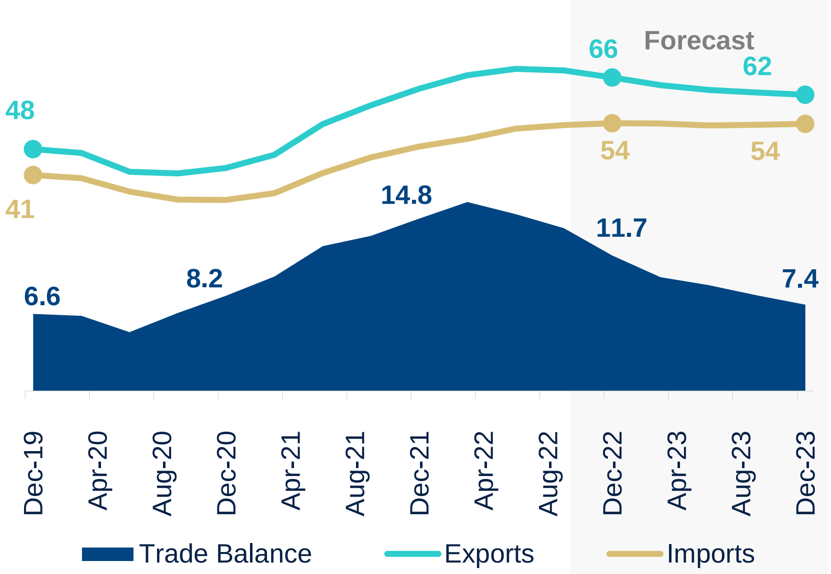


Price indexes (% chg)	Exports	Imports	Terms of Trade
2022*	0.6	9.9	-8.6
2023*	-11.3	-1.9	-9.5

*Forecast.
Source: BCRP and BBVA Research.

TRADE BALANCE

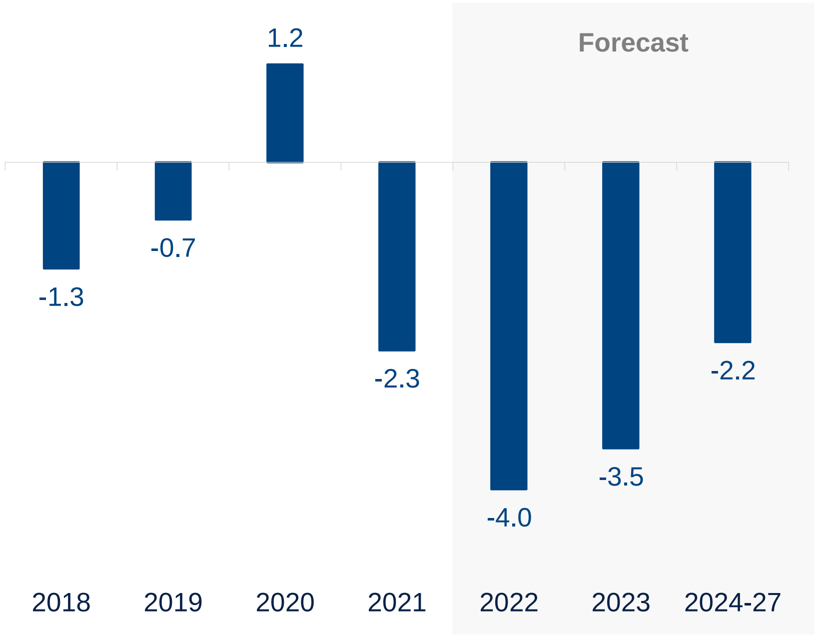
(IN BILLIONS OF USD, CUMULATIVE FOR THE LAST FOUR QUARTERS)



Fuente: BCRP y BBVA Research.

External accounts: current account deficit widening in 2022, gradually closing to sustainable levels

BALANCE OF PAYMENTS CURRENT ACCOUNT
(% OF GDP)



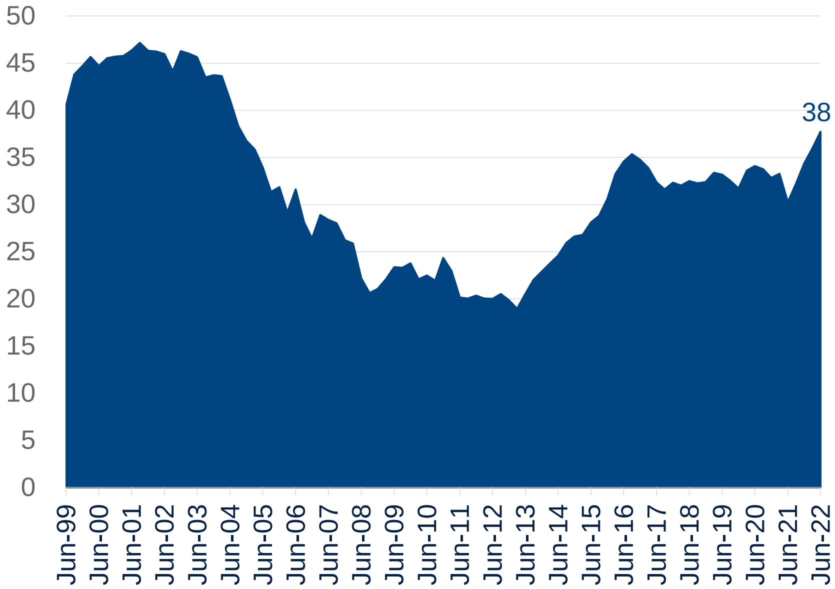
Source: BCRP and BBVA Research.

- In 2023, a lower trade surplus will be offset by lower profit remittances from foreign companies (in line with lower international metal and oil prices), and (ii) an improvement in the services account (return of inbound tourism and lower freight costs).
- Going forward, the recovery of industrial metal prices (copper, in particular) will allow for an additional closing of the current account deficit, in line with a sustainable medium-term level (one that stabilizes net foreign liabilities).

External accounts: we estimate that the external deficit that would stabilize net foreign liabilities at their current level is around 2.0% of GDP

NET FOREIGN LIABILITIES (NFL)*

(% DEL PIB)



* They consider the difference between medium and long-term liabilities, foreign direct investment, and equity, on the one hand, and foreign assets, on the other.

Source: BCRP and BBVA Research.

CURRENT ACCOUNT (CA) THAT STABILIZES THE NFL

$$cc^* = \frac{g + \pi}{1 + g + \pi} p^s$$

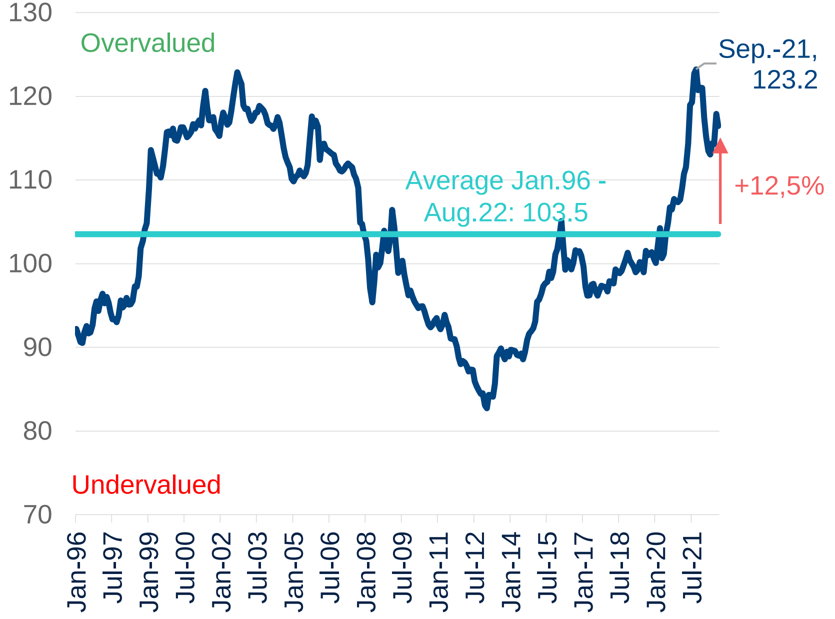
g: GDP growth
π: inflation
p^s: net foreign liabilities

Variables	
NFL to stabilize (% of GDP)	40%
Long-term inflation (%)	2.5%
Long-term GDP growth (% chg in real terms)	2.3%
CA stabilizing NFLs (deficit, % of GDP)	**≈ 2.0%**

Source: BCRP. Estimation: BBVA Research.

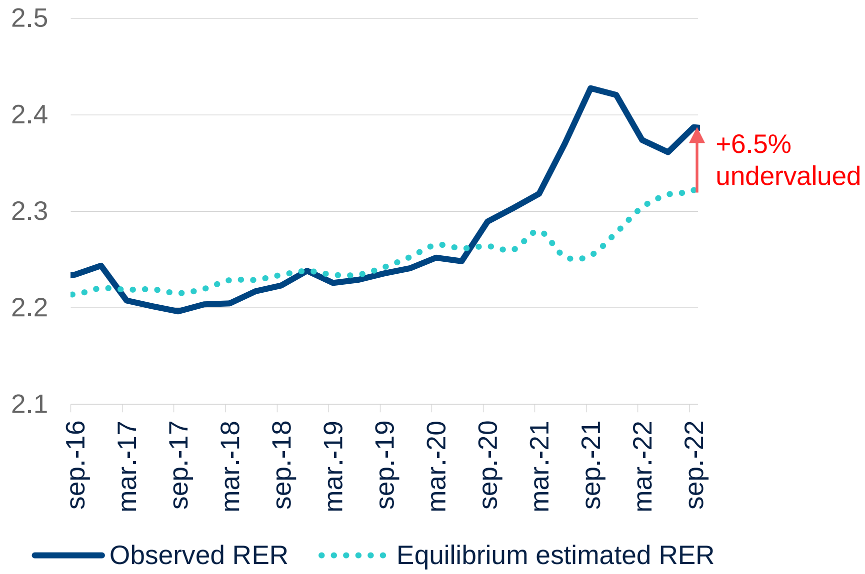
Exchange rate: some indicators suggest that the Peruvian currency is undervalued, but the misalignment correction is usually very gradual

BILATERAL REAL EXCHANGE RATE (RER) WITH THE UNITED STATES. (INDEX 2009=100)



Fuente: BCRP y BBVA Research.

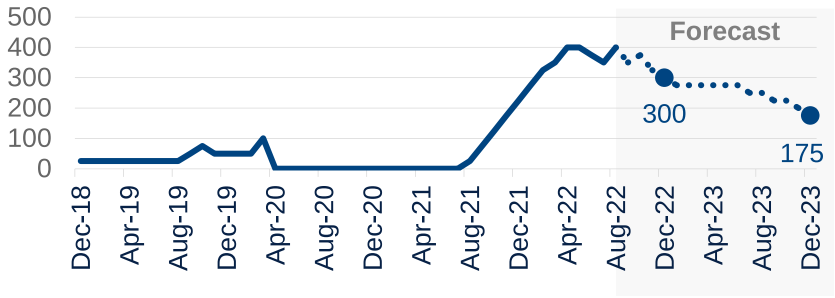
OBSERVED AND ESTIMATED EQUILIBRIUM OF BILATERAL RER WITH THE UNITED STATES* (LOGARITHMS)



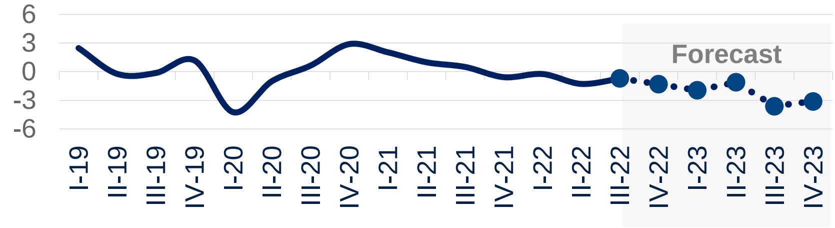
* Estimated using a cointegration model with BEER approach incorporating interest rate differentials, net foreign assets, relative productivity and terms of trade.
Source: BCRP and BBVA Research.

Exchange rate: external deficit, lower interest rate differential and EM capital outflows will put downward pressure on the PEN (depreciation) in the short term

SHORT-TERM INTEREST RATE DIFFERENTIAL
(BCRP VS. FED, BP)



CAPITAL FLOWS TO EMERGING ECONOMIES
(% OF ASSETS UNDER MANAGEMENT, CUMULATIVE FOR FOUR QUARTERS)



Source: FRED, BCRP and BBVA Research.

EXCHANGE RATES
(SOLES TO THE DOLLAR)

After short-term upward pressures dissipate, the NFL is expected to appreciate from 2024 onwards in line with an improving external balance and macroeconomic fundamentals that would remain solid.

Fuente: BCRP y BBVA Research.

BBVA Research

03

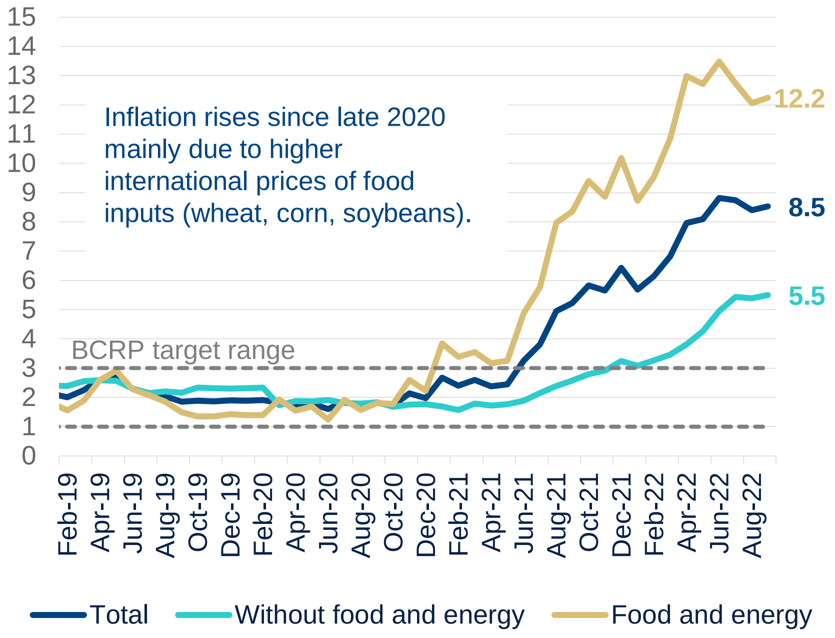
Macroeconomic outlook

3.4. Inflation and monetary policy

YoY inflation rebounded slightly in September (local supply shocks), as inflation expectations gradually decline

INFLATION

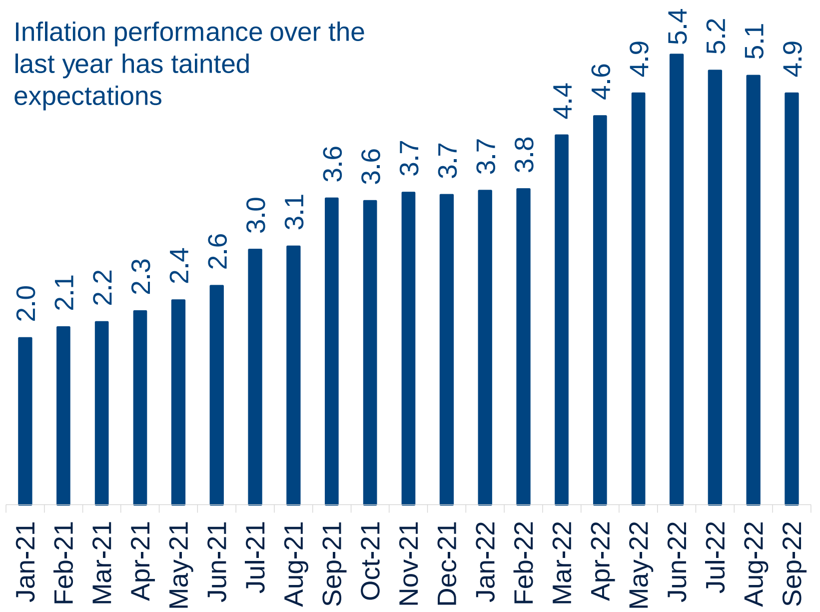
(%)



Source: INEI.

INFLATION EXPECTATIONS FOR THE NEXT YEAR

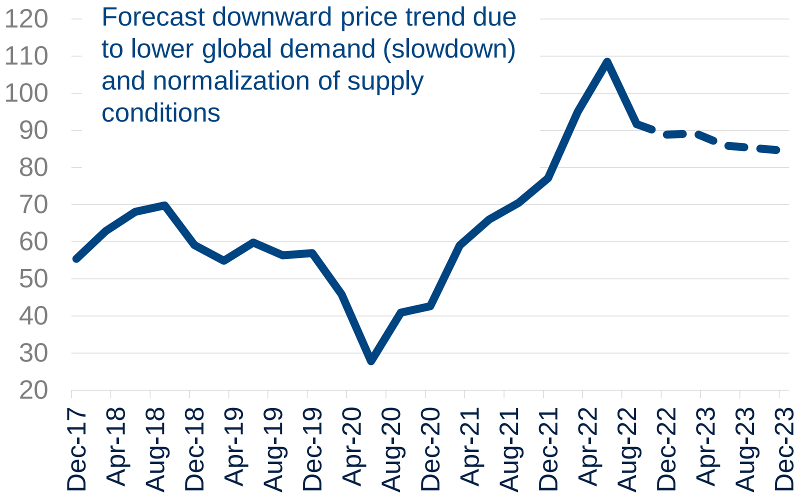
(%)



Source: BCRP.

Inflation forecast incorporates a slight moderation of oil and food prices moving forward (lower demand and normalization of supply).

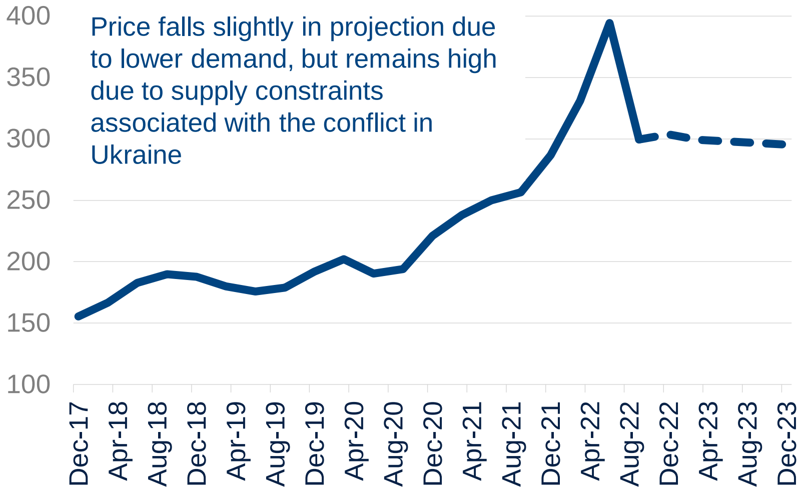
WTI OIL PRICE
(USD/BARREL)



% chg. y/y	2020	2021	2022	2023
WTI	-25.2	81.0	15.2	-4.8

Fuente: Bloomberg y BBVA Research.

WHEAT PRICE
(USD/MT)



% chg. y/y	2020	2021	2022	2023
Wheat	15.2	29.7	5.9	-2.7
Corn	9.6	35.9	18.0	-10.0
Soybean	24.3	10.3	15.3	-9.1

Source: Bloomberg and BBVA Research.

In addition, it is considered that unanchored expectations (above the target range for the end of 2024) introduce friction to the decline in inflation

INFLATION EXPECTATIONS
(%)

	Survey taken on:		
	Jul-22	Aug-22	Sep-22
Economic analysts			
2022	7,5	7,3	7,7
2023	3,5	4,0	4,0
2024	3,0	3,0	3,0
Financial system			
2022	6,8	7,3	7,3
2023	4,0	4,0	4,1
2024	3,6	3,5	3,5
Non-financial firms			
2022	6,5	7,0	7,0
2023	4,5	4,3	4,5
2024	3,9	4,0	4,0

Source: BCRP.

COMPUTATION OF EXPECTED INFLATION 1 YEAR AHEAD (%)

Expected inflation end of 2022

Months remaining in 2022

Expected inflation end of 2023

Months of 2023

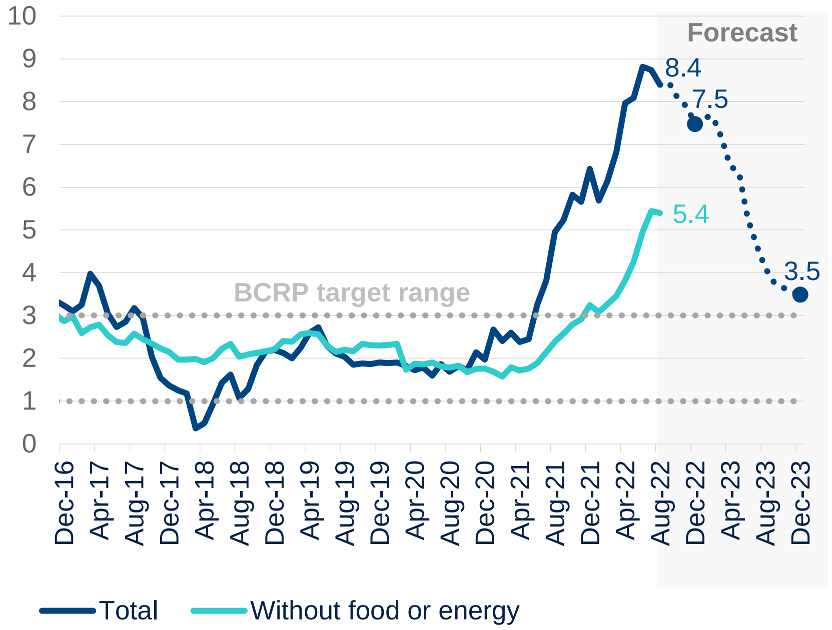
Expected inflation 1 year ahead (Aug-22) $= \dfrac{7{,}30 \times 4 + 4{,}00 \times 8}{12} = 5{,}10$

Expected inflation 1 year ahead (Sep-22) $= \dfrac{7{,}50 \times 3 + 4{,}03 \times 9}{12} = 4{,}89$

Source: BCRP.

The decline in domestic inflation will be slow until the first quarter of 2023 and will still be outside the target range at the end of that year

INFLATION
(%)



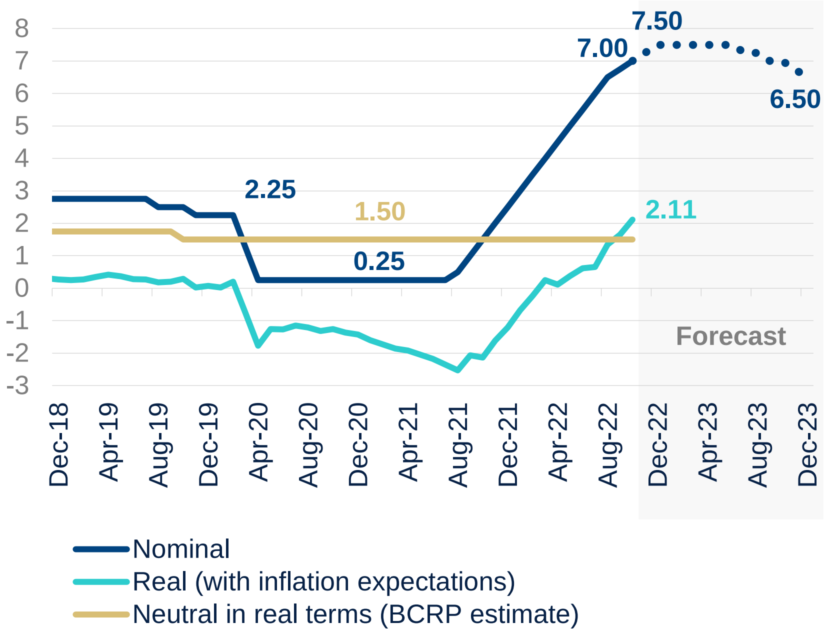
Fuente: BCRP y BBVA Research.

- The high inflation in Peru is cost-driven (not so much demand-driven). In forecasts, commodity prices correct downward.
- However, it may take some time for the transfer to the price of the final good to filter through because business margins have been compressed (in the rise, not everything was passed on to the final consumer) and inflation excluding food and energy at levels above 5% suggests contamination of the remaining prices.
- Higher fertilizer prices will continue to affect food prices in the first half of 2023.

In this context, we do not rule out that the BCRP may further tighten monetary policy (restrictive stance). Normalization from the second half of 2023

REFERENCE INTEREST RATE

(%)



Fuente: BCRP y BBVA Research.

- The Central Bank continued to tighten monetary policy in an environment of persistent inflation, bringing it into restrictive territory.
- It cannot be ruled out that the process will continue in a context of de-anchored expectations and that the reduction of the interest rate differential will introduce exchange rate pressures that will translate into higher inflation of imported goods.
- In the second half of 2023, we anticipate a gradual normalization of the reference rate, against a background of a steady reduction in inflation and a pause by the FED.

BBVA Research

04

Main risks

Main domestic risks of the baseline scenario for 2022 and 2023

MAIN SHORT-TERM RISKS

On the external side:

- Persistent global inflation.
- A sharper slowdown in global growth.

Fertilizer shortages have a major negative impact on agricultural production and inflation.

Risk of greater populism affecting competitiveness (labor market, pension system).

Deterioration of fiscal accounts (for example, due to the payment of bonuses in the education sector and the return of FONAVI contributions). Eventual deterioration of the sovereign credit rating.

More negative impact of social unrest.

Research

05

Summary of forecasts

Macroeconomic projections: summary

	2021	2022 (p)	2023 (p)	2024 (p)
GDP (% chg)	**13.6**	**2.3**	**2.5**	**2.4**
Domestic demand (excluding inventories. % chg)	**16.6**	**2.8**	**1.6**	**2.4**
Private spending (% chg)	**17.1**	**3.2**	**1.9**	**2.2**
Private consumption (% chg)	11.7	4.5	2.4	2.2
Private investment (% chg)	37.4	-1.1	0.1	2.0
Public spending (% chg)	**14.0**	**1.3**	**0.0**	**3.5**
Public consumption (% chg)	10.6	0.2	3.0	3.0
Public investment (% chg)	24.9	4.5	-8.0	5.0
Exchange rate (vs USD. EOP)	**4.04**	**3.90 – 4.00**	**4.00 – 4.10**	**4.05 – 4.15**
Inflation (% Y/Y. EOP)	**6.4**	**7.5**	**3.5**	**2.5**
Monetary policy rate (% EOP)	**2.50**	**7.50**	**6.50**	**4.00**
Fiscal balance (% GDP)	**-2.5**	**-2.1**	**-2.0**	**-2.0**
Balance of payments current account (% of GDP)	**-2.3**	**-4.0**	**-3.5**	**-2.4**
Exports (Billions of USD)	63.2	66.0	61.6	63.0
Imports (Billions of USD)	48.3	54.4	54.2	55.2

(e) Estimated. (p) Forecast. Forecast closing date: October 07, 2022.
Source: BBVA Research.

Disclaimer

This document has been prepared by BBVA Research Department. It is provided for information purposes only and expresses data, opinions or estimations regarding the date of issue of the report, prepared by BBVA or obtained from or based on sources we consider to be reliable, and have not been independently verified by BBVA. Therefore, BBVA offers no warranty, either express or implicit, regarding its accuracy, integrity or correctness.

Any estimations this document may contain have been undertaken according to generally accepted methodologies and should be considered as forecasts or projections. Results obtained in the past, either positive or negative, are no guarantee of future performance.

This document and its contents are subject to changes without prior notice depending on variables such as the economic context or market fluctuations. BBVA is not responsible for updating these contents or for giving notice of such changes.

BBVA accepts no liability for any loss, direct or indirect, that may result from the use of this document or its contents.

This document and its contents do not constitute an offer, invitation or solicitation to purchase, divest or enter into any interest in financial assets or instruments. Neither shall this document nor its contents form the basis of any contract, commitment or decision of any kind.

With regard to investment in financial assets related to economic variables this document may cover, readers should be aware that under no circumstances should they base their investment decisions on the information contained in this document. Those persons or entities offering investment products to these potential investors are legally required to provide the information needed for them to take an appropriate investment decision.

BBVA Research

Peru economic outlook

October 2022

Creando Oportunidades