

Türkiye Economic Outlook

Garanti BBVA Research

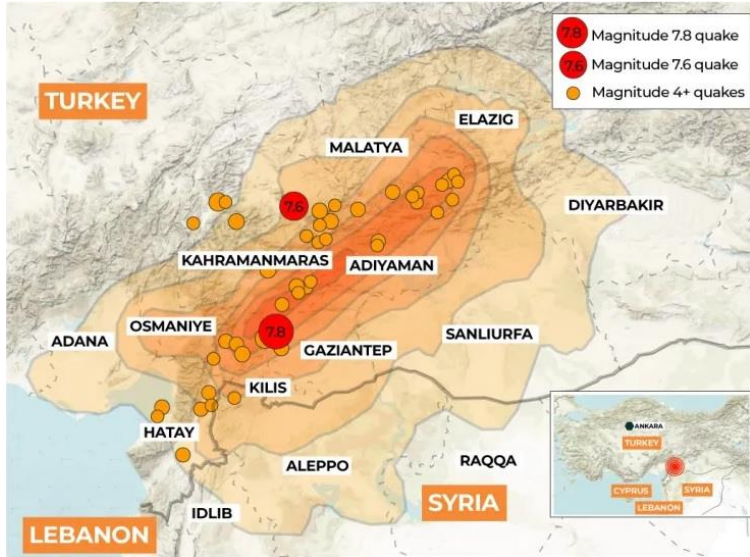
February 2023

Key messages

- Latest quakes have significant impact on our forecasts
- The total damage of the quakes might get up to 13.5% of GDP, concluding second round effects on fiscal and current account balances
- The initial negative impact of the seism (~1% of GDP) will be offset in 2023 by a better global context and gradual policy normalization from 2H23, which together with the impact of reconstruction works (~3.6% of GDP) improve 2024 prospects
- Inflation and external accounts will be more pressured; external aid will likely be needed to prevent fast FX corrections

Macroeconomic aspect of the impacted region: 10 cities

Hatay, Kahramanmaraş, Malatya and Adiyaman are the most damaged cities



Shares in total	Population	Employment	Exports	Tourism	Budget Revenues	Performing Cash Loans	NPL
Adana	2.7%	4.1%	1.3%	0.3%	1.2%	1.9%	2.7%
Hatay	2.0%		1.6%	0.3%	1.7%	1.3%	1.6%
Kahramanmaraş	1.4%	2.9%	0.6%	0.0%	0.2%	0.8%	0.8%
Osmaniye	0.7%		0.2%	0.0%	0.1%	0.3%	0.3%
Malatya	1.0%		0.2%	0.0%	0.2%	0.3%	0.3%
Gaziantep	2.5%		4.6%	0.2%	0.6%	2.8%	3.1%
Adiyaman	0.7%	2.8%	0.0%	0.0%	0.1%	0.2%	0.2%
Kilis	0.2%		0.0%	0.1%	0.0%	0.0%	0.0%
Şanlıurfa	2.5%		0.1%	0.0%	0.2%	0.6%	0.7%
Diyarbakır	2.1%		0.1%	0.1%	0.3%	0.6%	1.3%
Total	15.7%	12.2%	8.9%	1.0%	4.6%	9.0%	11.0%

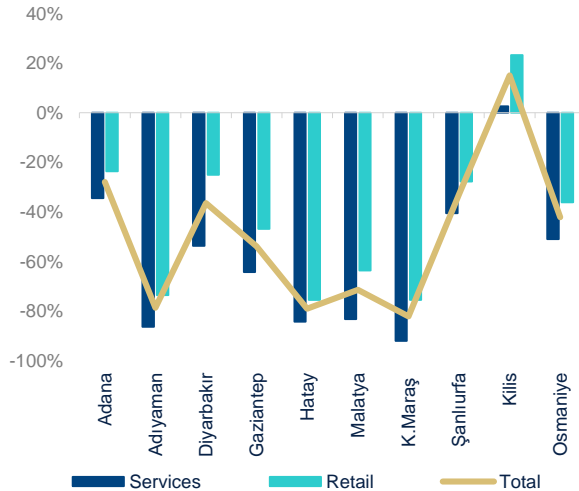
	agriculture	industry	construction	services	GDP
Adana	2.5%	2.2%	1.7%	1.9%	2.0%
Hatay	1.3%	1.8%	1.0%	1.4%	1.4%
Kahramanmaraş	1.4%	1.4%	0.8%	0.8%	0.9%
Osmaniye	0.6%	0.7%	0.3%	0.4%	0.4%
Malatya	0.9%	0.5%	0.7%	0.5%	0.5%
Gaziantep	1.3%	3.6%	1.7%	2.1%	2.0%
Adiyaman	0.8%	0.3%	0.3%	0.3%	0.3%
Kilis	0.2%	0.1%	0.1%	0.1%	0.1%
Şanlıurfa	3.0%	0.4%	0.8%	0.7%	0.8%
Diyarbakır	2.2%	0.4%	1.2%	0.8%	0.9%
Share in Total	14.3%	11.2%	8.7%	9.0%	9.3%

Textile, steel & metal sectors pioneer

Economic impact of the quakes: Big Data Information

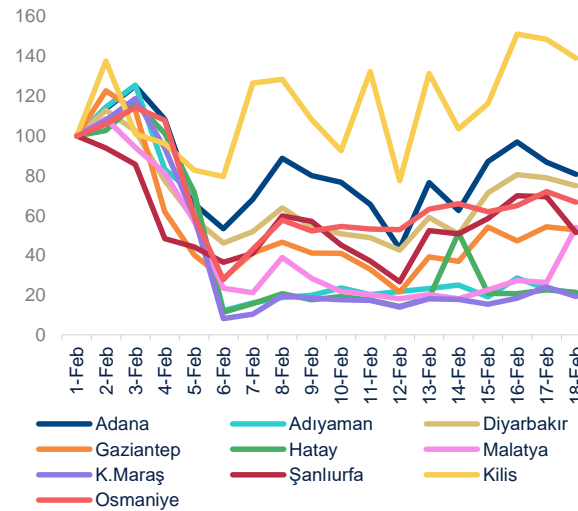
CONSUMPTION ACTIVITY

(compared to pre-shock level, Garanti BBVA cards)



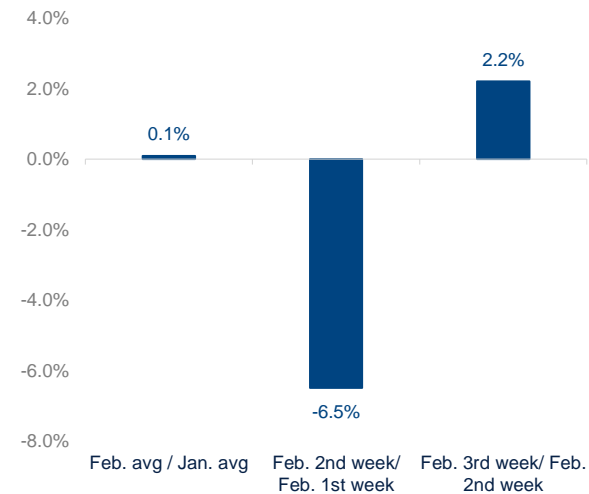
CONSUMPTION ACTIVITY

(1 Feb=100, Garanti BBVA cards)



TURKEY ELECTRICITY PRODUCTION

(% comparison)



Economic impact of the quakes: value-added effects

Capacity Assumptions	1Q23	2Q23	3Q23	4Q23	2023 avg.
Adana	80%	80%	85%	92%	84%
Hatay	50%	50%	60%	75%	59%
Kahramanmaraş	50%	50%	60%	75%	59%
Osmaniye	70%	70%	85%	92%	79%
Malatya	57%	60%	70%	92%	70%
Gaziantep	70%	70%	85%	92%	79%
Adiyaman	50%	50%	60%	75%	59%
Kilis	70%	80%	85%	92%	82%
Şanlıurfa	80%	80%	85%	92%	84%
Diyarbakır	80%	80%	85%	92%	84%
BBVA Research	68%	68%	77%	87%	75%
World Bank*	50%	70%	85%	92%	74%

Impact on GDP	1Q23	2Q23	3Q23	4Q23	2023 avg.
Direct	-3.0%	-3.0%	-2.1%	-1.2%	-2.3%
w/ compensation* from other regions	-2.0%	-2.0%	-2.1%	-1.2%	-1.8%
w/ fiscal multiplier**	-2.0%	-2.0%	-0.5%	0.5%	-1.0%

*WB assumptions in the assessment of 1999 earthquakes: a) value added lost due to disruptions in industry and services in the most severely affected regions is 50%, 30%, 15% and 8% in the first 4 quarters, b) one third of the disruptions in the first 2 quarters are offset by increased activity in other areas, c) multiplying net disruption by the weight of the region
 ** Cyclical fiscal multipliers are assumed, 2.2 in one-year, 0.9 in two-year cumulative impact starting from 3Q23

Economic impact of the quakes: physical capital effects

	# of housing units	# of building floors	# of buildings (estimated)	% damage assumed	# of damaged housing units	m2 price in \$	housing loss bn\$ (100m2)
Adana	632,875	5.4	58,269	10%	63,288	904	5.7
Hatay	449,151	3.6	62,542	70%	314,406	656	20.6
Kahramanmaraş	311,458	4.4	35,663	70%	218,021	648	14.1
Osmaniye	156,199	3.3	23,701	10%	15,620	611	1.0
Malatya	230,499	5.0	23,256	70%	161,349	622	10.0
Gaziantep	522,947	5.0	52,706	20%	104,589	788	8.2
Adıyaman	155,300	3.5	21,897	70%	108,710	675	7.3
Kilis	40,020	3.7	5,474	10%	4,002	509	0.2
Şanlıurfa	411,421	3.7	55,394	10%	41,142	607	2.5
Diyarbakır	394,867	5.9	33,531	20%	78,973	687	5.4
Total / Average	3,304,737	4.6	372,433	34%	1,110,100	716	75
1999 Quakes (w/ 2021 adjustment)	1,234,511			37%	457,088		

	Estimated Damage (bn\$)	Damage / GDP
Housing	75	8.6%
Business*	16	1.8%
Infrastructure**	11	1.2%
Total	102	11.7%

* Estimated by % GDP value of the 1999 quakes impact

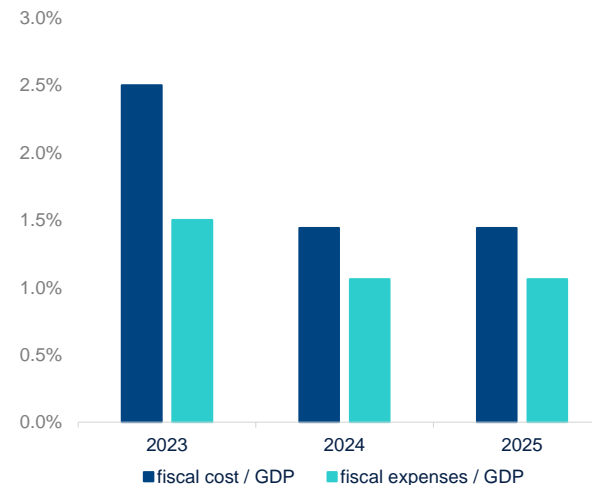
** Calculated as the twice of the % GDP value of the 1999 quakes impact, considering the larger area of the impacted region

The total damage from the quakes assumed to get near 13.5% of GDP

	Estimated Damage (% GDP)	Estimated Damage (bn\$)
Direct Costs	11.7%	102
Housing	8.6%	75
Enterprises	1.8%	16
Infrastructure	1.2%	11
Indirect Costs	1.8%	16
Value-added	1.8%	16
Total Damage	13.5%	117
Secondary Effects		
Current Account Losses	1.7%	15
Direct	0.6%	5
Indirect	1.1%	9
Fiscal Costs*	5.4%	47

* Estimated by the fiscal cost / physical damage ratio from the 1999 earthquakes

ESTIMATED FISCAL COST & EXPENDITURES % GDP



Our revisions cover recent global updates & shocks from quakes

Global scenario revisions

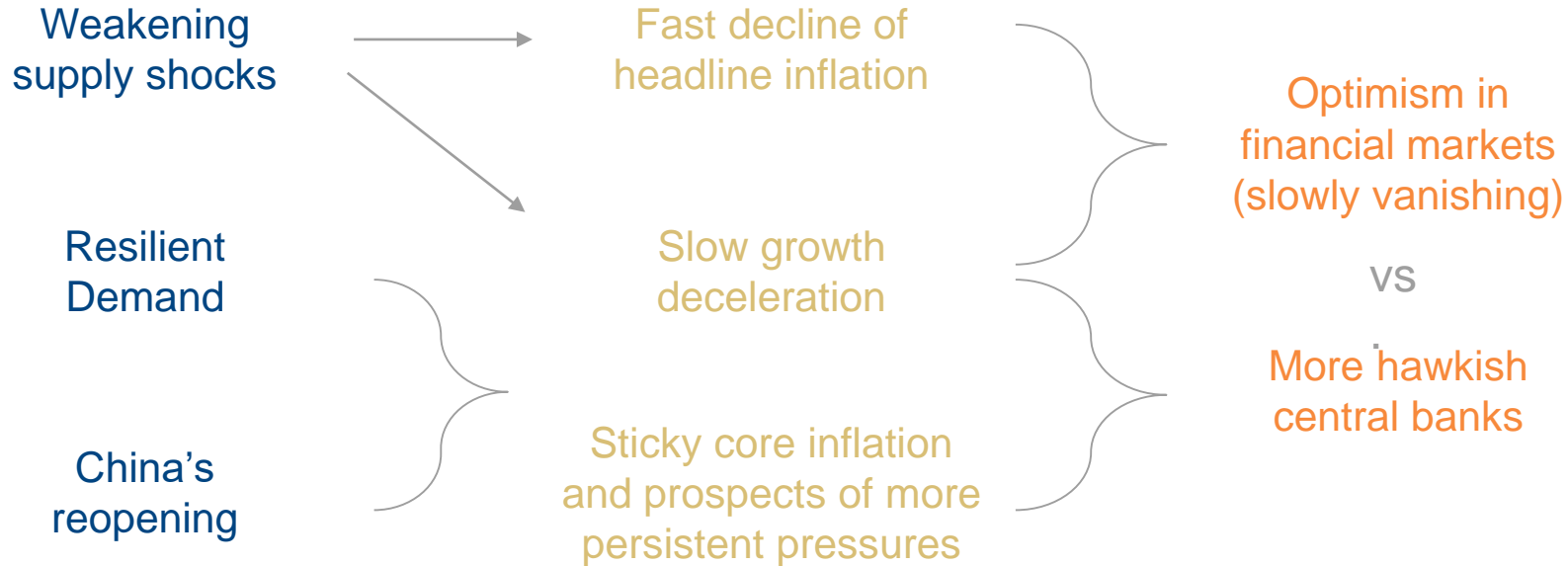
- More positive growth outlook
- Lower commodity prices (including gas)
- Declining global inflation
- Much better EM capital flows
- Lower volatility on a soft-landing scenario

Domestic Economy

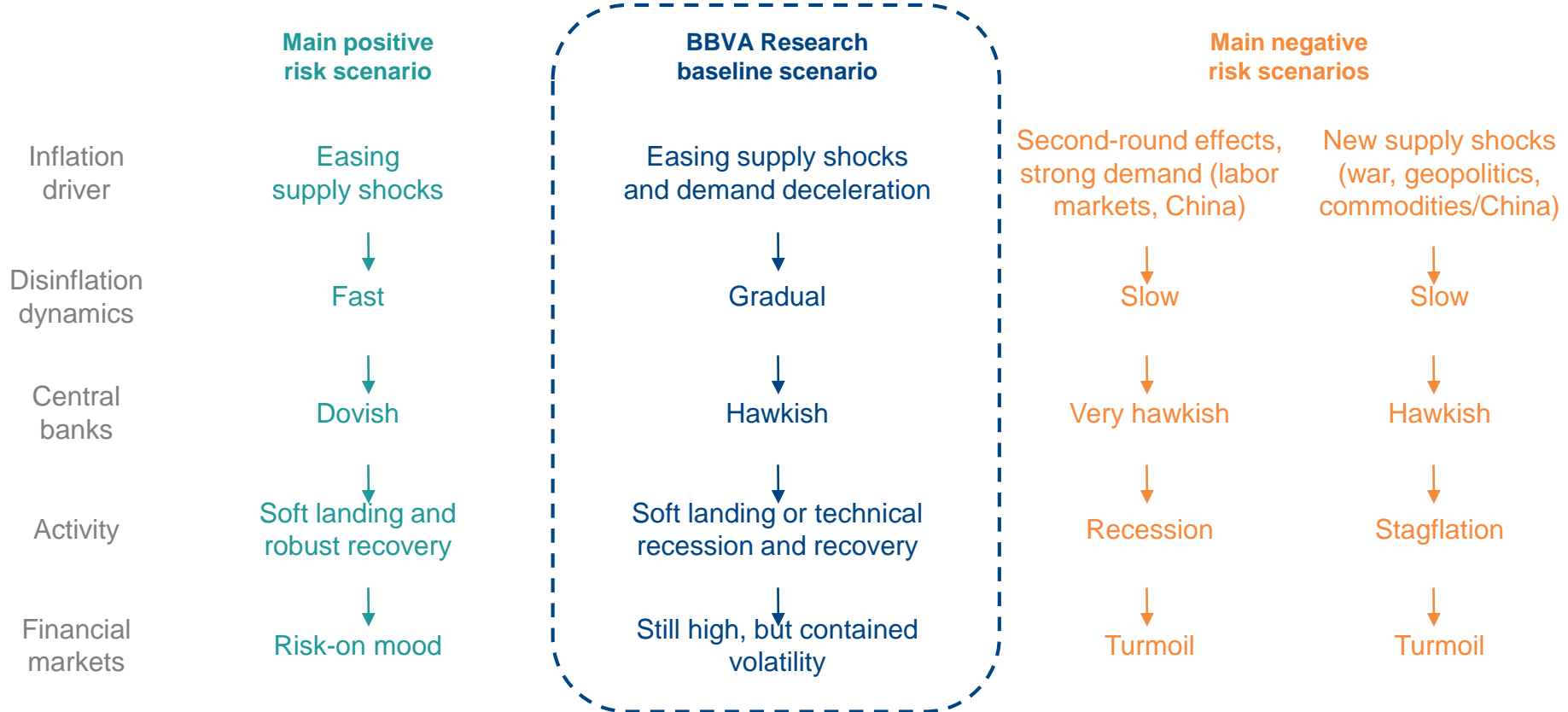
- Initial negative output shock
- Significant increase in public spending
- Inflationary pressure from output losses & fiscal expansion
- Higher external financing need
- Help from external financing aid

Global: Weakening supply shocks, resilient demand and China's reopening back growth and reinforce inflation fears

RECENT DEVELOPMENTS IN THE WORLD ECONOMY

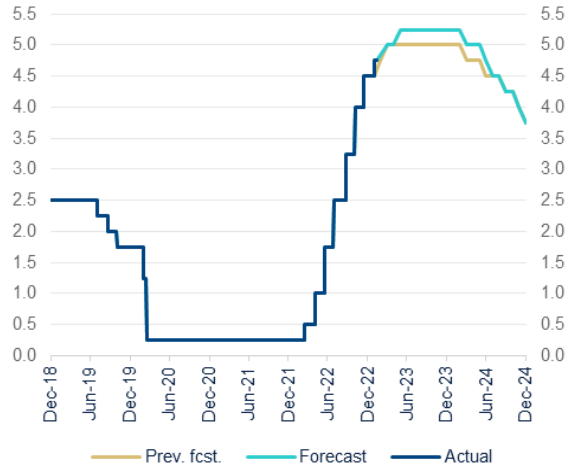


Global: Growth will ease in 2023, but less than forecast, as policy rates will remain higher for longer to curve inflation down

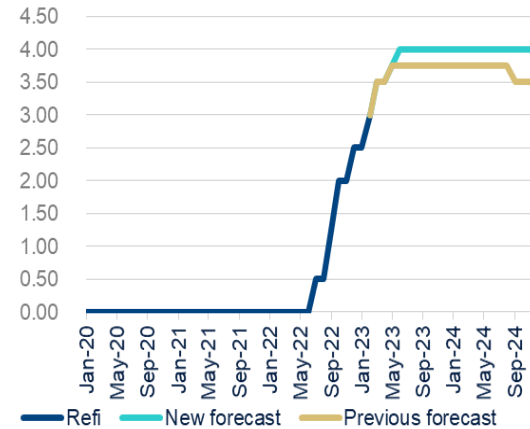


Global: Tighter financial conditions but with reduced risk outlook

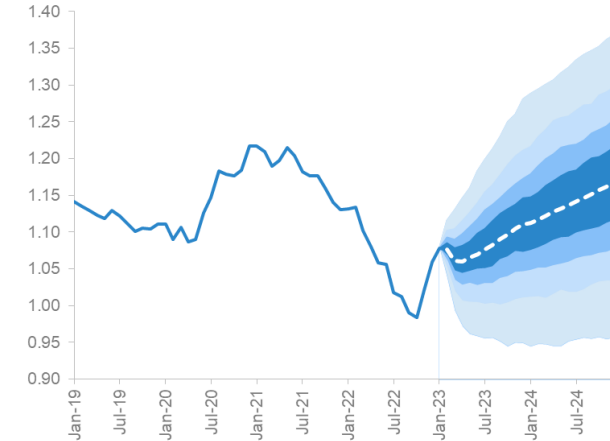
FED FUNDS RATE OUTLOOK (UPPER LIMIT OF THE TARGET RANGE, %)



ECB: REFI RATE FORECASTS (%)



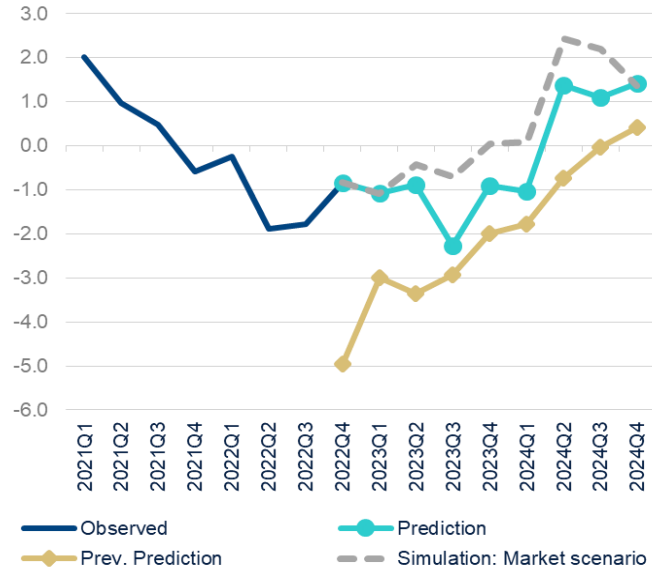
EURUSD FORECASTS (vs US dollar)



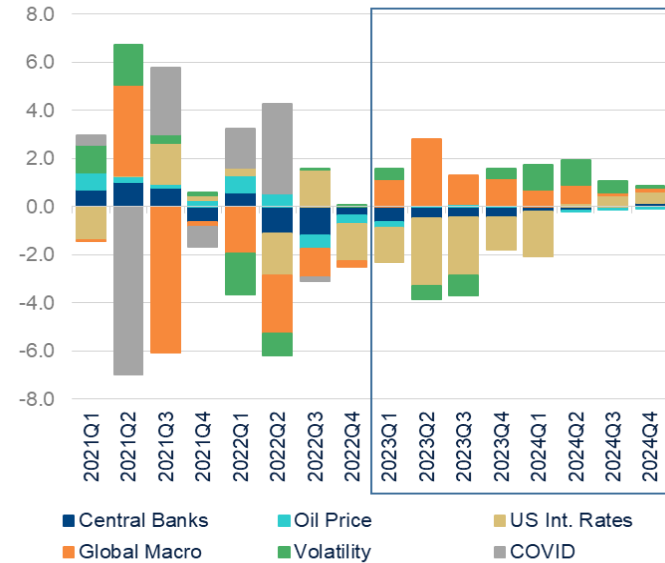
	Probability						
	-70%	-50%	-25%	Base	25%	50%	70%
Dec-23	1.01	1.05	1.07	1.11	1.15	1.17	1.21
Dec-24	1.03	1.08	1.12	1.17	1.22	1.25	1.30

Global: Better EM flows forecasts with lower volatility and growth resilience

EM CAPITAL INFLOWS PROJECTIONS (% of AUM; QUARTERLY CUMULATIVE BASIS)



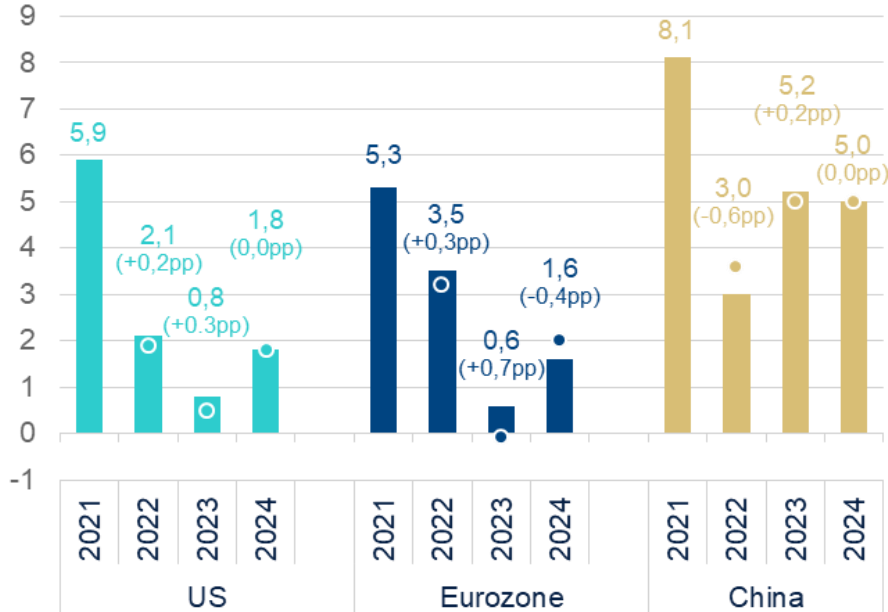
EM CAPITAL INFLOWS PROJECTIONS (% of AUM; QUARTERLY CUMULATIVE BASIS)



Global: 2023 growth forecasts have been revised upwards: a softer deceleration in both the US and the EZ, and a stronger rebound in China

GDP: ANNUAL GROWTH IN REAL TERMS

(%)

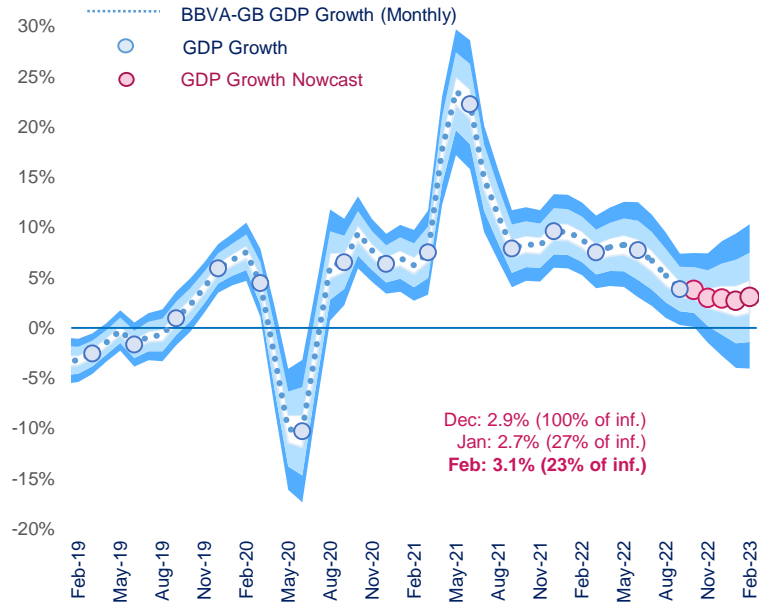


* Forecast change in parentheses.
Source: BBVA Research.

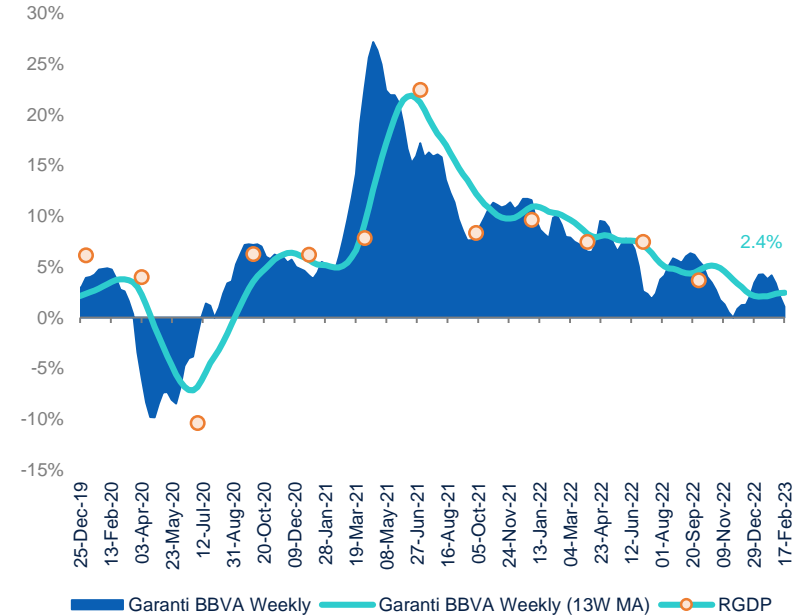
- Global GDP is expected to expand 2.8% (0.5pp higher than previous forecast) in 2023 and 3.3% (0.0pp) in 2024, after having grown 3.2% in 2022
- 2023 growth forecasts have been revised up in the US and the EZ, due to positive incoming data and lower energy prices, and also in China, where activity will be backed by domestic consumption, due to pent-up demand and supply-side normalization, while infrastructure investment is also expected to be strong
- Deceleration prospects remain in place due to monetary tightening and still relevant price pressures, but some factors (private sector's balance sheets, NGEU in Europe) will be supportive and a deep recession will be avoided

Early February data has started to curb down recent high momentum

GARANTI BBVA MONTHLY GDP INDICATOR
(YOY, 3M MOVING AVG.)

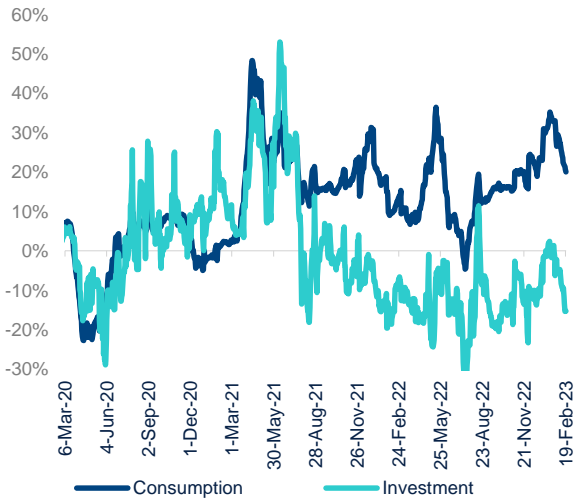


GARANTI BBVA WEEKLY GDP INDICATOR
(YOY)

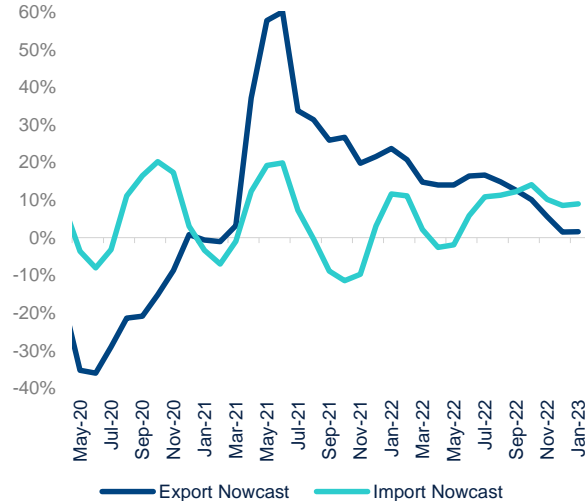


Private consumption & construction spending will help activity

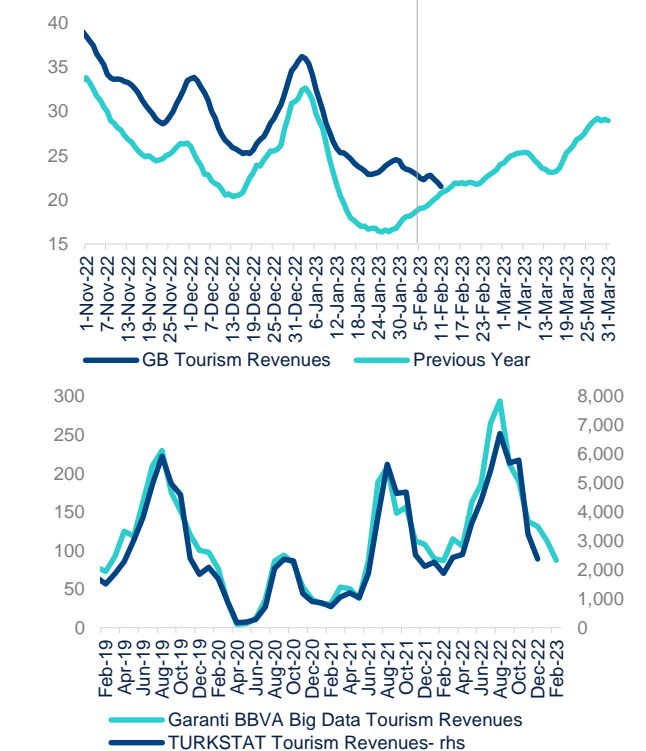
GARANTI BBVA BIG DATA DOMESTIC DEMAND (REAL, 28-DAY SUM, YOY)



GARANTI BBVA EXP & IMP NOWCAST (YOY, 3M MOVING AVG.)

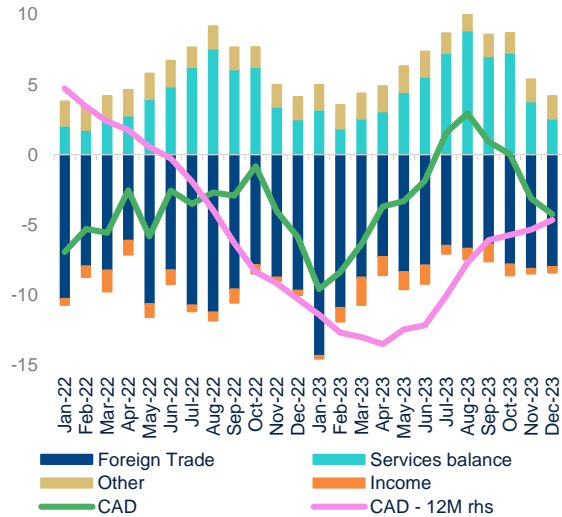


GARANTI BBVA BIG DATA TOURISM REVENUES (mn\$)

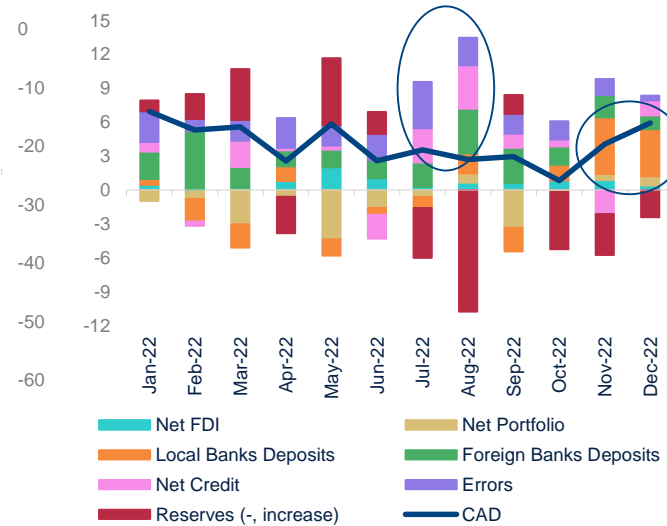


Pressure from external financing needs will rise ahead of the elections

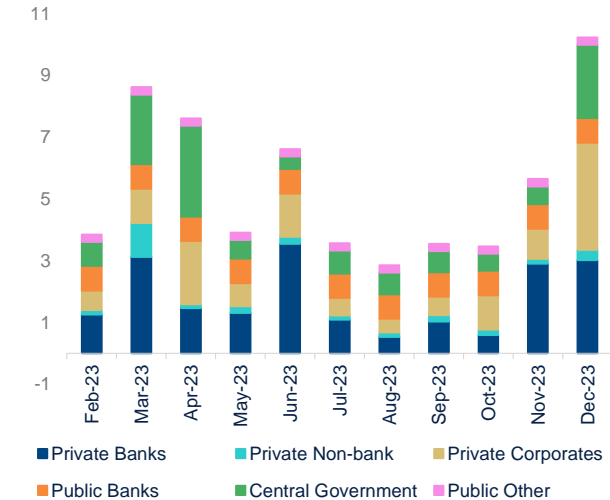
CA DEFICIT FORECASTS US\$bn



CAD FINANCING PER MONTH US\$bn



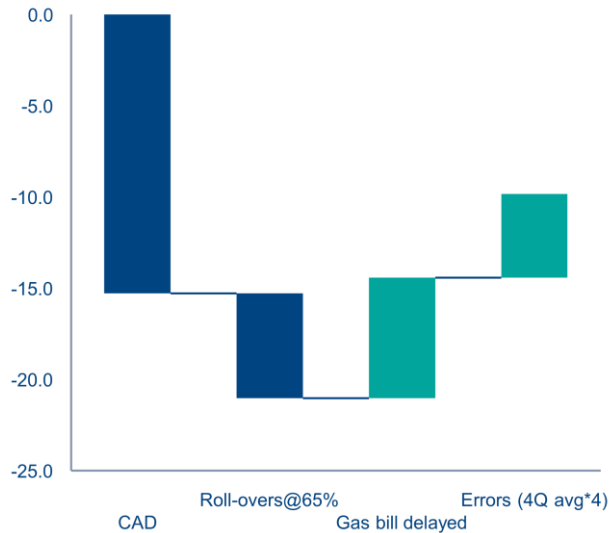
EXTERNAL LOANS REDEMPTIONS Next 12M* as of Dec22, US\$bn



* Does not include trade credits

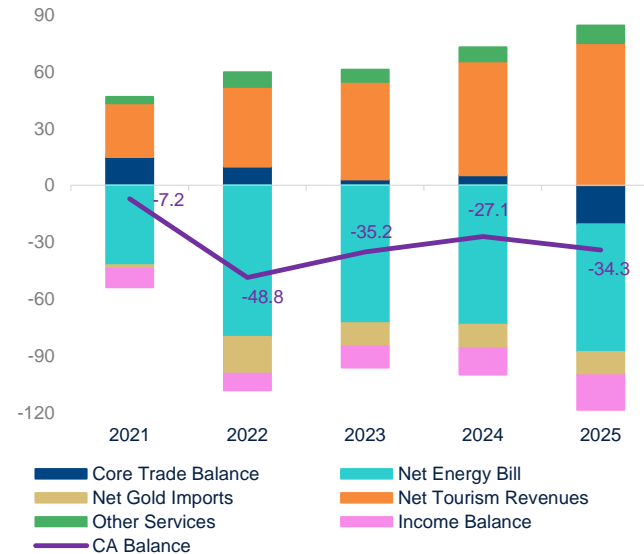
Erosion from the CBRT reserves will likely continue in the short term

EXTERNAL FINANCING NEEDS*, MAR-JUN 2023
US\$BN



* Only includes private sector roll-over gap

CAD FORECASTS DECOMPOSITION
US\$BN

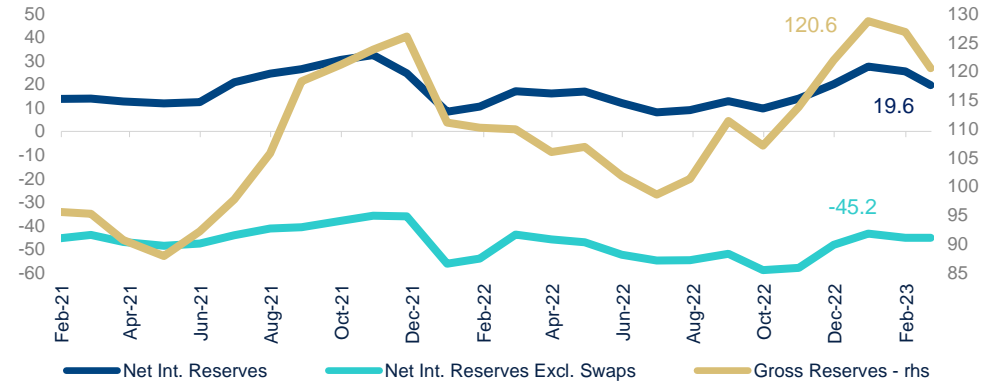


	Brent \$ per barrel	% y/y
2021	70.8	64%
2022	99.1	40%
2023	87.0	-12%
2024	87.0	0%
2025	79.3	-9%

Expected external support for CBRT reserves is still pending

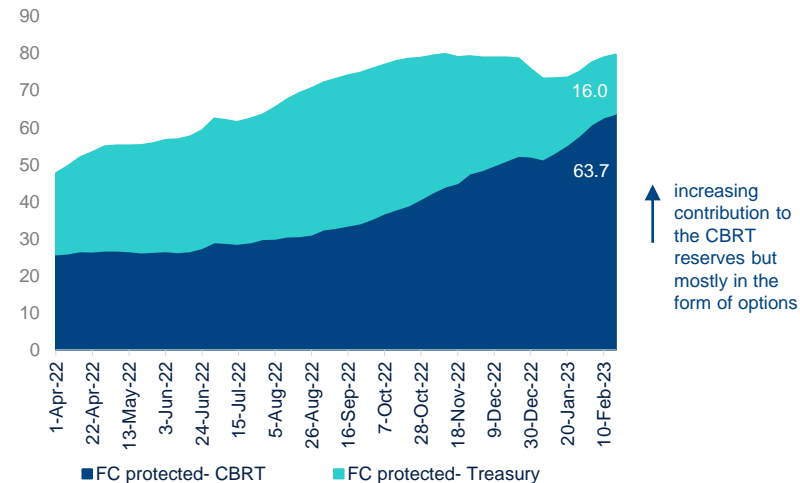
CBRT RESERVES

USBN\$, AS OF FEB 22



FC PROTECTED SCHEME

US\$bn, implied by Garanti BBVA



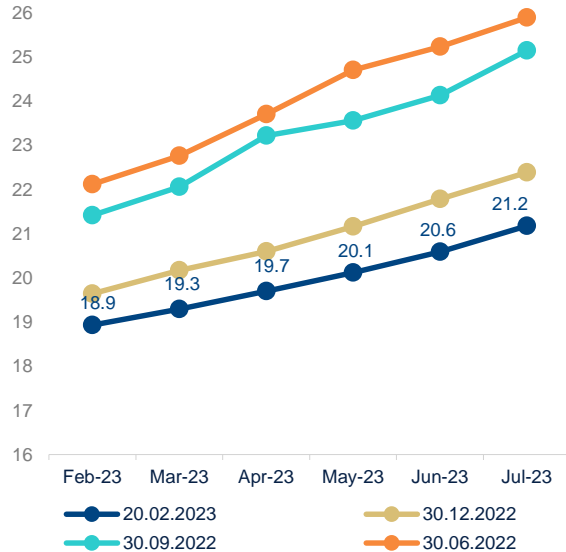
CBRT BALANCE SHEET, US\$BN	8 Jul 22	16 Dec 22	17 Feb 23
Foreign assets	102.1	132.2	124.7
Foreign liabilities	105.7	114.4	115.1
Net on balance FX position	-3.6	17.8	9.6
Net on balance FX ex swaps	-64.5	-53.6	-56.8
Net international reserves	6.1	28.1	21.4
High Quality Liquid FC Assets (HQLA)	51.6	78.2	66.0
HQLA ex CB Swaps & Treasury	17.2	42.6	28.4

Still pending
 + 5bn\$ from potential Saudi depo
 8-10bn\$ from Qatar

TRY depreciation expectations remain moderate

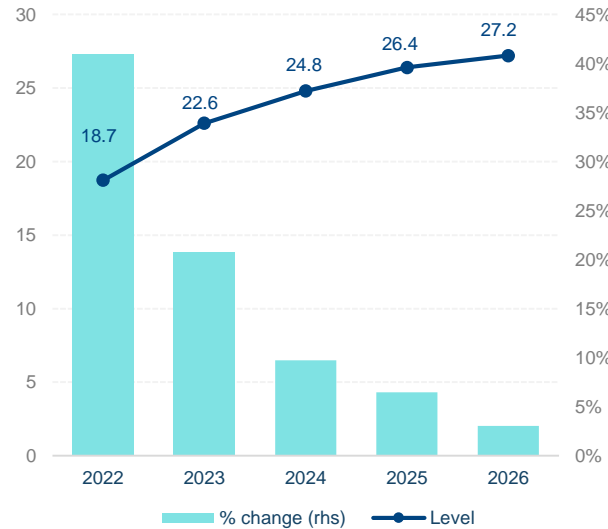
USDTRY FUTURES

TRY per USD



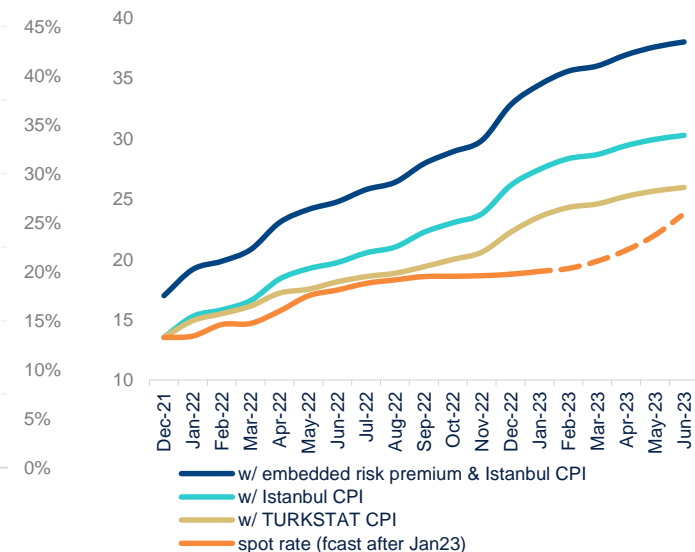
USDTRY SURVEY

TRY per USD, EOP



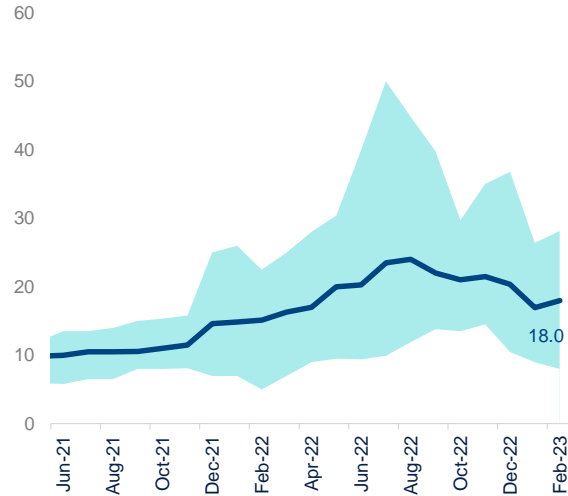
PPP BASED EXCHANGE RATE

TRY per USD, EOP

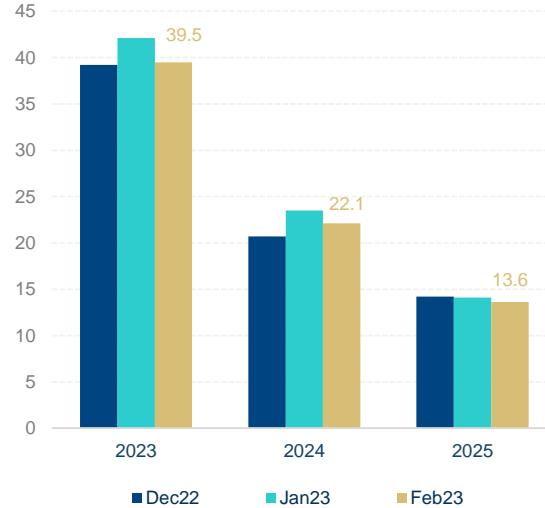


Inflation expectations imply stickiness

INFLATION EXPECTATIONS CBRT SURVEY, 24-MONTH AHEAD, %



INFLATION EXPECTATIONS CONSENSUS, EOP, %

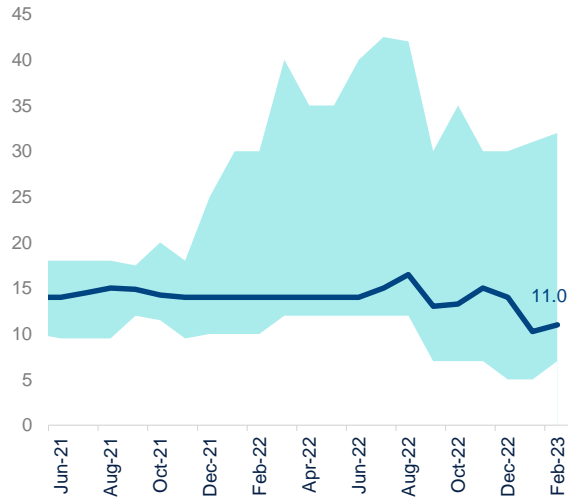


MARKET IMPLIED INFLATION EXPECTATIONS, %

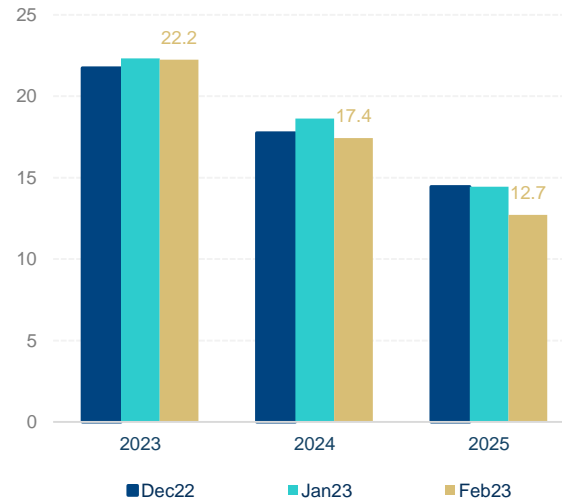


Policy rate can be cut further ahead of the elections, requiring to be more gradual in the readjustment

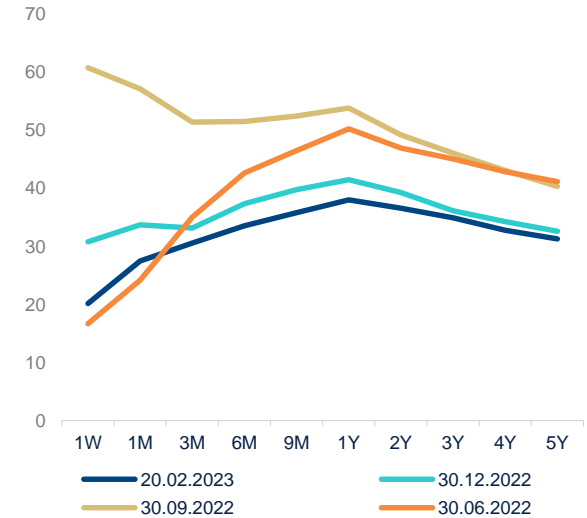
POLICY RATE CBRT SURVEY, EOP, 12M AHEAD %



POLICY RATE CONSENSUS, EOP, %

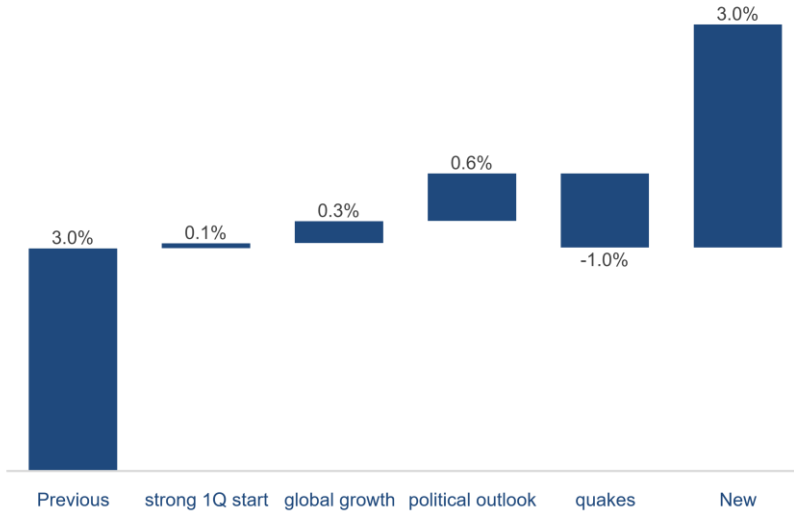


USDTRY FORWARD IMPLIED YIELD, %

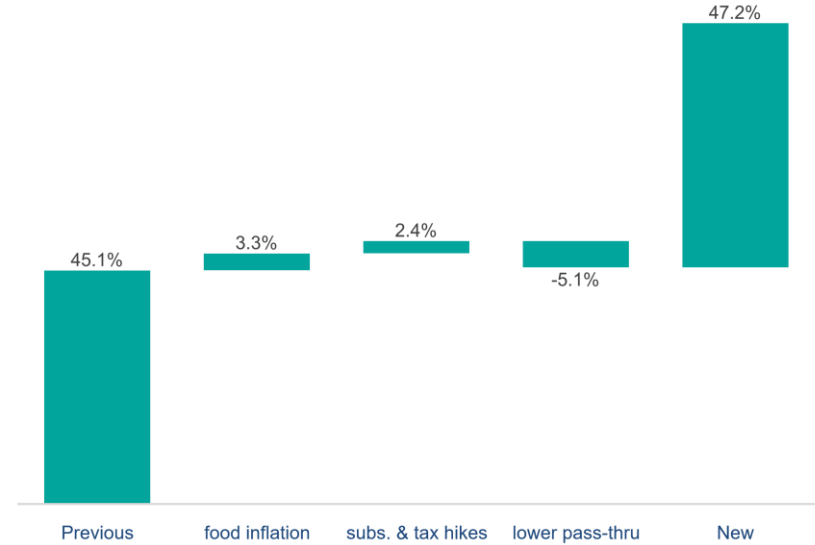


We maintain our 2023 GDP growth forecast with a slight uptick on CPI

2023 GDP GROWTH FORECAST, YOY



2023 CPI INFLATION, AVERAGE



Baseline Scenario

Scenario		2022	2023	2024	2025	2026	2027	2028
GDP growth (avg)	Previous	5.3%	3.0%	-1.5%	3.8%	3.8%	3.7%	
	New		3.0%	1.5%	3.8%	4.2%	3.9%	3.7%
Unemployment Rate (avg)	Previous	10.5%	10.3%	11.7%	12.2%	12.0%	12.0%	
	New		10.8%	11.5%	11.8%	11.6%	11.5%	11.5%
Inflation (avg)	Previous	72.3%	45.1%	30.9%	18.9%	16.6%	15.2%	
	New		47.2%	33.0%	18.8%	16.7%	15.5%	14.8%
Inflation (eop)	Previous	64.3%	42.0%	23.0%	17.4%	16.0%	14.5%	
	New		45.0%	24.0%	17.5%	16.1%	14.8%	14.8%
Current Account Balance (bn\$)	Previous	-48.8	-35.0	-15.1	-20.7	-16.7	-18.0	
	New		-35.2	-27.1	-34.3	-29.4	-28.9	-28.8
Current Account Balance (% GDP)	Previous	-5.8%	-4.0%	-1.5%	-1.5%	-1.0%	-0.9%	
	New		-3.6%	-2.2%	-2.1%	-1.5%	-1.3%	-1.2%
Primary Balance (% GDP)	Previous	1.2%	0.0%	-1.3%	-1.0%	-0.7%	-0.4%	
	New		-1.6%	-2.6%	-1.9%	-1.2%	-0.7%	-0.2%
Fiscal Balance (% GDP)	Previous	-1.0%	-3.0%	-4.2%	-4.0%	-3.7%	-3.4%	
	New		-4.6%	-5.6%	-4.9%	-4.2%	-3.7%	-3.2%

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