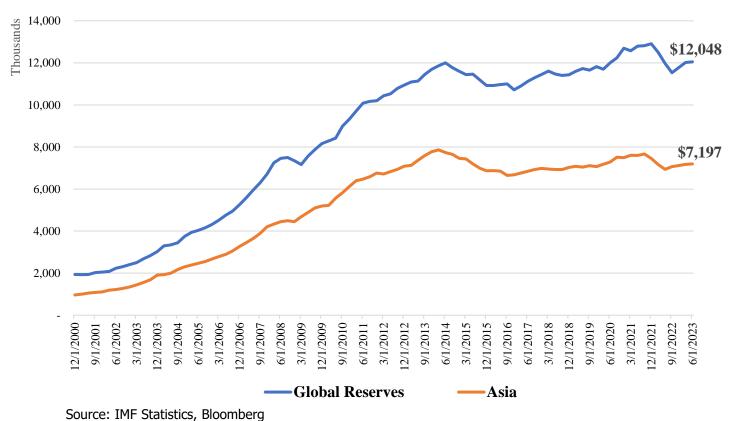


Increasing FX reserves

Global Foreign Currency Reserves



Top 10 countries

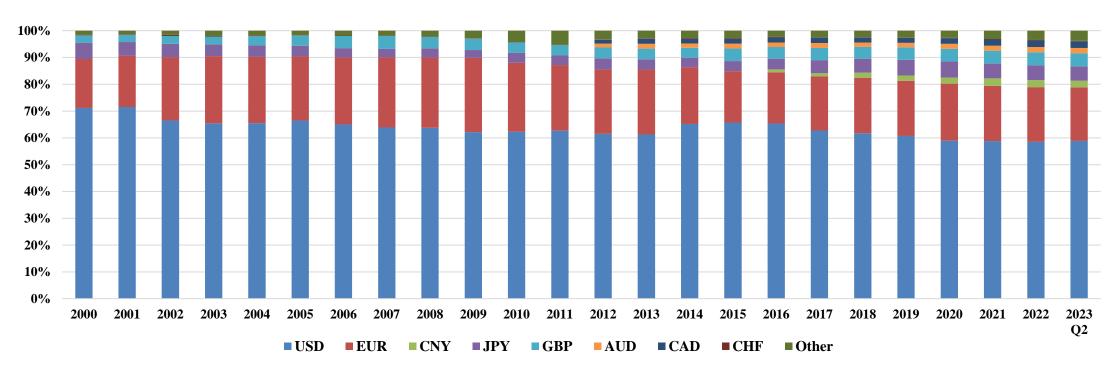
No	Country	FX Reserves mln.\$	Δ 2023 YTD mln. \$
1	China	\$3,192,998	\$65,307
2	Japan	\$1,126,104	\$17,915
3	Switzerland	\$808,190	-\$40,320
4	Taiwan	\$564,830	\$9,900
5	India	\$527,979	\$29,957
6	Saudi Arabia	\$417,924	-\$16,956
7	Hong Kong	\$417,153	-\$6,751
8	Russia	\$411,329	-\$6,477
9	South Korea	\$397,202	-\$1,841
10	Brazil	\$312,590	\$18,737
		\$8,176,300	\$69,471

Source. I'm Statistics, bloomberg

- Global Foreign Exchange Reserves continues to accumulate after a drop from 2021 peak level.
- Reserves of Asia countries are in line with global trend.

De-dollarization kicks in?

Currency composition of Official Foreign Exchange Reserves

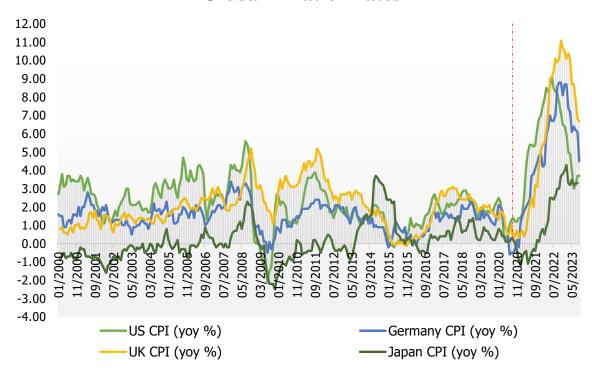


Source: IMF, Currency Composition of Official Foreign Exchange Reserves (COFER)

- For the last 3 years portion of US dollar fell below 60%.
- More currency diversification as a result of weaponization of finance?

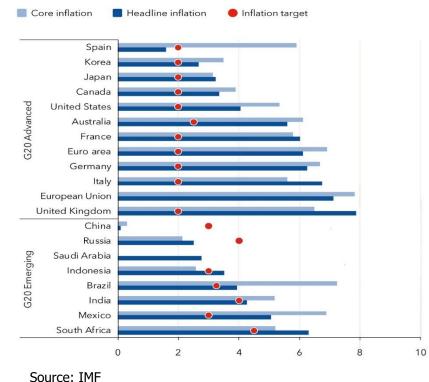
Inflationary market environment — Regime change?

Global inflation rates



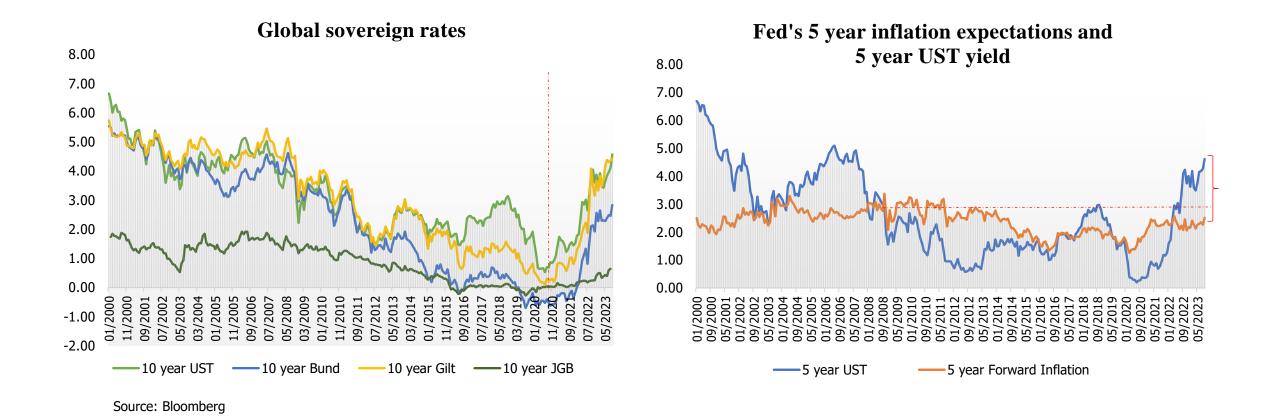
Source: Bloomberg

Headline and Core inflation (percent; yoy; as of May/June 2023)



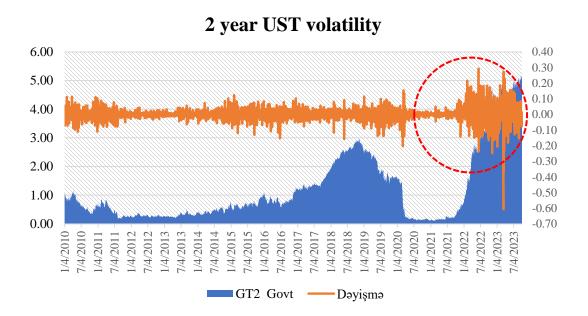
- In most G20 countries inflation remains well above central banks' targets.
- Inflation continues to fall, but it is not expected it to return to levels targeted by central banks until 2025.

Inflation expectations and real return opportunities

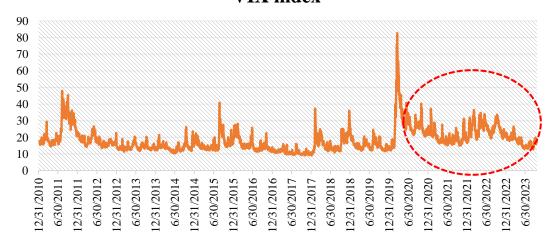


- Based on inflation expectations, global sovereign rates continues to rise.
- The situation where the nominal market interest rate on a 5-year U.S. government bond exceeds the Federal Reserve's 5-year forward inflation expectation opens up opportunities for real return that is rare after 2008.

Higher volatility — main characteristic of post pandemic era?

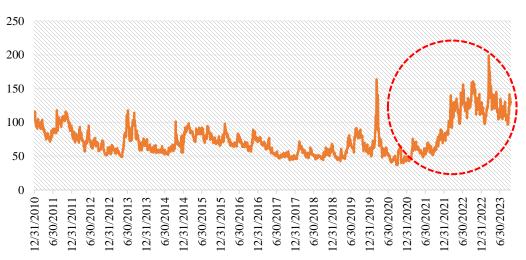


VIX index

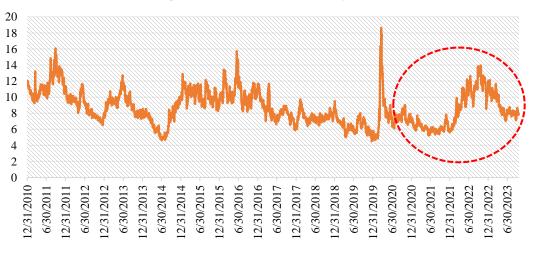


Source: Bloomberg

Move index

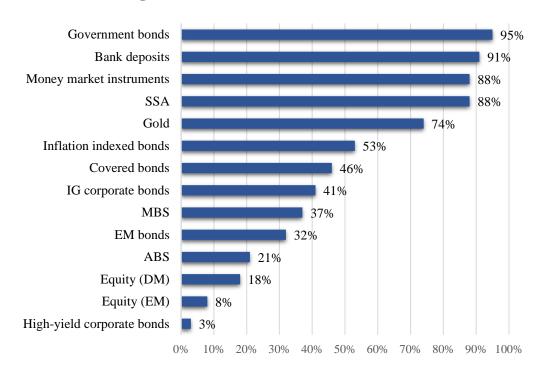


JP Morgan G10 FX volatility 1M index

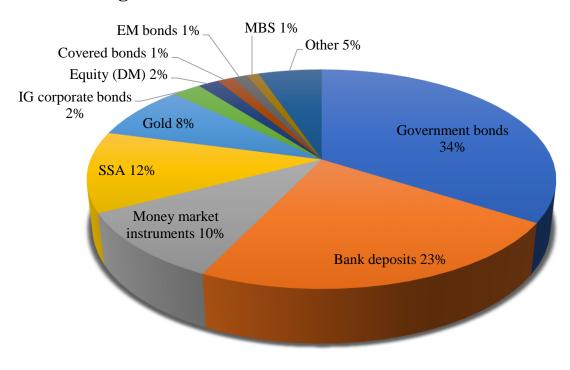


More diversified asset classes

Eligible asset classes - central banks



Average actual asset allocation - central banks

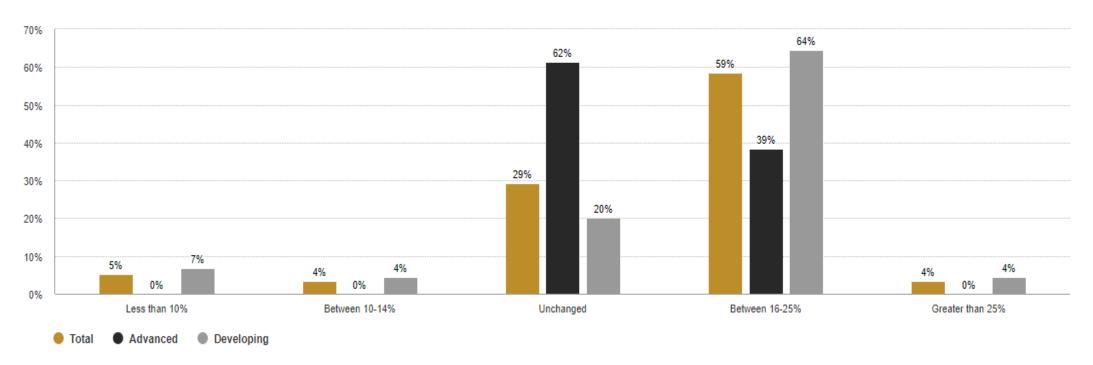


Source: Central Bank Reserve Management Practices, Third RAMP Survey, The World Bank Treasury 2021

- Almost 75% of central banks were allowed to invest in nontraditional asset classes such as corporate bonds, emerging market bonds, covered bonds, mortgage-backed securities, and equities.
- On average, nontraditional asset classes still only make up a small portion of reserve portfolios, with an average allocation of 8.2 percent across all respondent banks.

Gold remains an important asset class

What proportion of total reserves do you think will be denominated in gold 5 years from now?



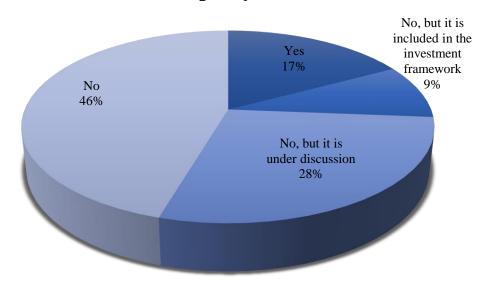
Source: World Gold Counsel, 2023 Central Bank Gold Reserves Survey

- Gold is viewed favorably by central banks amid a high level of uncertainty even though actual allocation of central bank reserves to gold is 8% on average.
- A majority of central banks expect a slight increase in the proportion of total reserves being denominated in gold over the next five years, with developing economies primarily driving this view

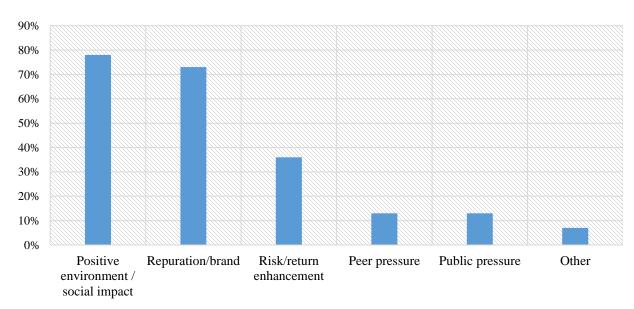
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Incorporation of ESG

Inclusion of ESG factors in the investment policy



Motivating factors to incorporate ESG



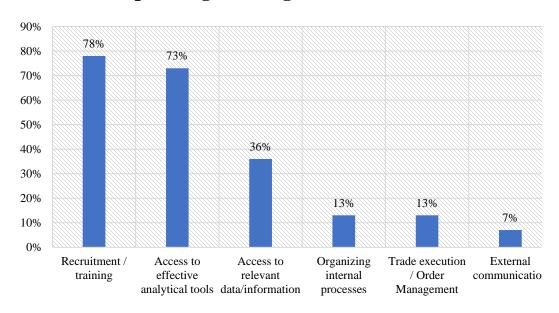
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Source: Central Bank Reserve Management Practices, Third RAMP Survey, The World Bank Treasury 2021

- The low adoption rate of ESG is attributable to the fact that central banks concentrate on high-quality fixed-income assets, where the availability of ESG instruments and strategies is limited.
- Having a positive impact and maintaining their reputation are the main drivers of ESG implementation in central banks.

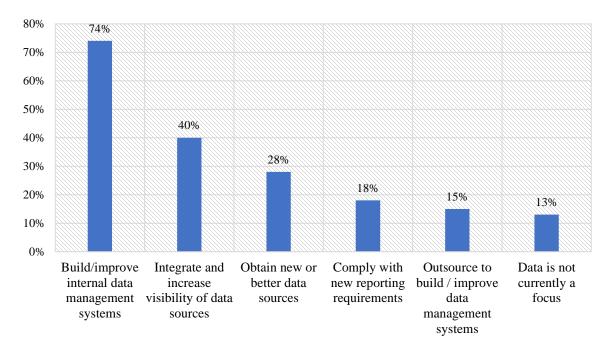
Operating & technological challenges

Operating challenges for central banks



Source: OMFIF Global Public Survey 2023

Data priorities of central banks for the next 12-24 months



10

- Accessing to effective analytical tools and relevant information are the two main operating challenges after filling in talent gaps.
- Data rapidly becoming more important for reserve management as 87% of respondents expressed that data is a focus for the next 12-24 months.

Global economic challenges

- Inflation
- Global economic slowdown
- Geopolitical tensions
- Volatile exchange rates
- Rising policy rates
- High public debt level

Stagflation concerns are growing

Capital preservation and liquidity have become more important for central banks

- highly liquid and safe assets like short-term government bonds
- ✓ longer-duration global government bonds as deflation hedge
- ✓ inflation-linked bonds as inflation hedge.

Global risks

2 years

1	Cost of living crisis
2	Natural disasters and extreme weather events
3	Geo economic confrontation
4	Failure to mitigate climate change
5	Erosion of social cohesion and societal polarization
6	Large scale environmental damage incidents
7	Failure of climate-change adaption
8	Widespread cybercrime and cyber insecurity
9	Natural resource crisis
10	Large scale involuntary migration

Environmental

Social

10 years

1	Failure to mitigate climate change
2	Failure of climate-change adaption
3	Natural disasters and extreme weather events
4	Biodiversity loss and ecosystem collapse
5	Large scale involuntary migration
6	Natural resource crisis
7	Erosion of social cohesion and societal polarization
8	Widespread cybercrime and cyber insecurity
9	Geo economic confrontation
10	Large scale environmental damage incidents

Technological

Geopolitical

Source: World Economic Forum, Global Risks Perception Survey 2022-2023

People think environmental risks will have more fierce impacts in a long run.

Thank you!