



Gold as a Reserve Asset

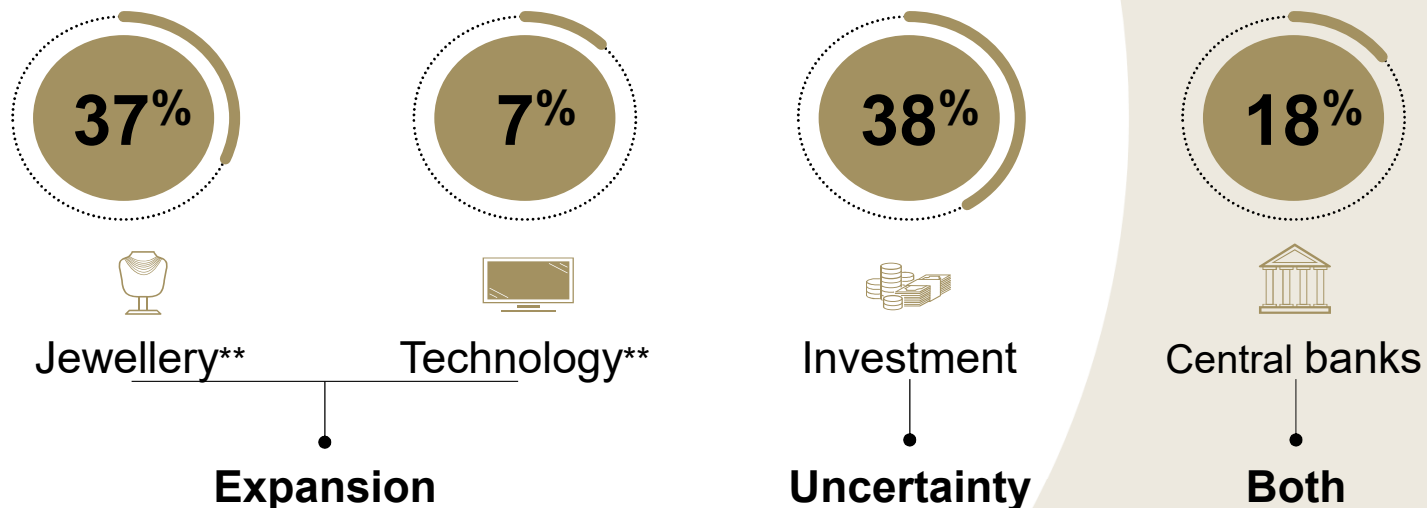
Asian Regional Forum on Investment Management of
Foreign Exchange Reserves

Chen Qinghan, Central Banks Lead, World Gold Council

October 2023

Gold has a dual nature

Average annual net demand \approx 3,140 tonnes* (approx. US\$181bn)



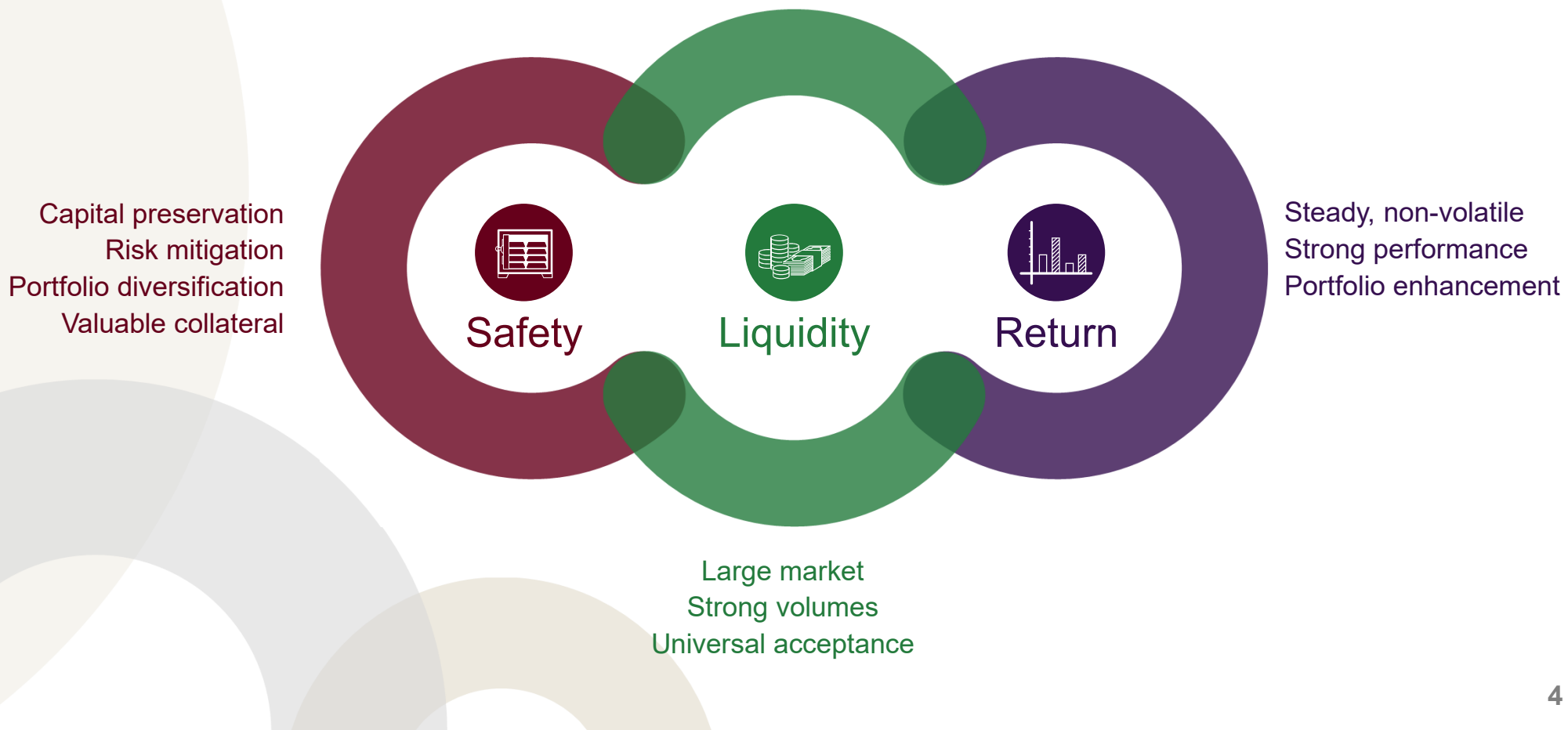
Source: Metals Focus, Refinitiv GFMS, World Gold Council

*Based on 10-year average annual net demand estimates ending in 2022. Includes: jewellery and technology net of recycling, in addition to bars & coins, ETFs and central bank demand which are historically reported on a net basis. It excludes over-the-counter demand owing to limitations in data availability. Figures may not add to 100% due to rounding. US dollar value computed using the 2022 annual average LBMA Gold Price PM of US\$1,800.1/oz.

** Net jewellery and technology demand computed assuming 90% of annual recycling comes from jewellery and 10% from technology. For more details, see: <https://www.gold.org/goldhub/research/market-primer/recycling>

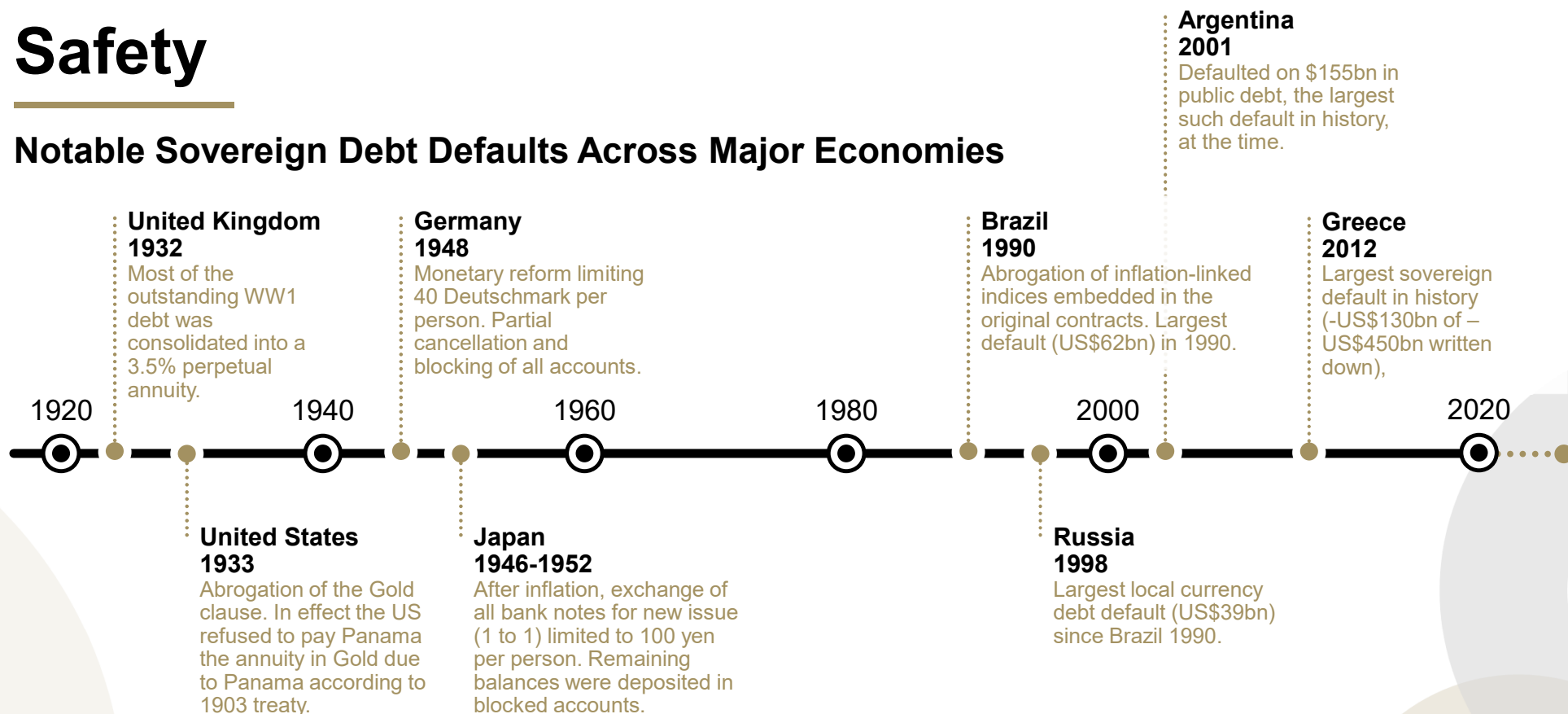
Gold as a Reserve Asset

Foreign exchange reserves management



Safety

Notable Sovereign Debt Defaults Across Major Economies

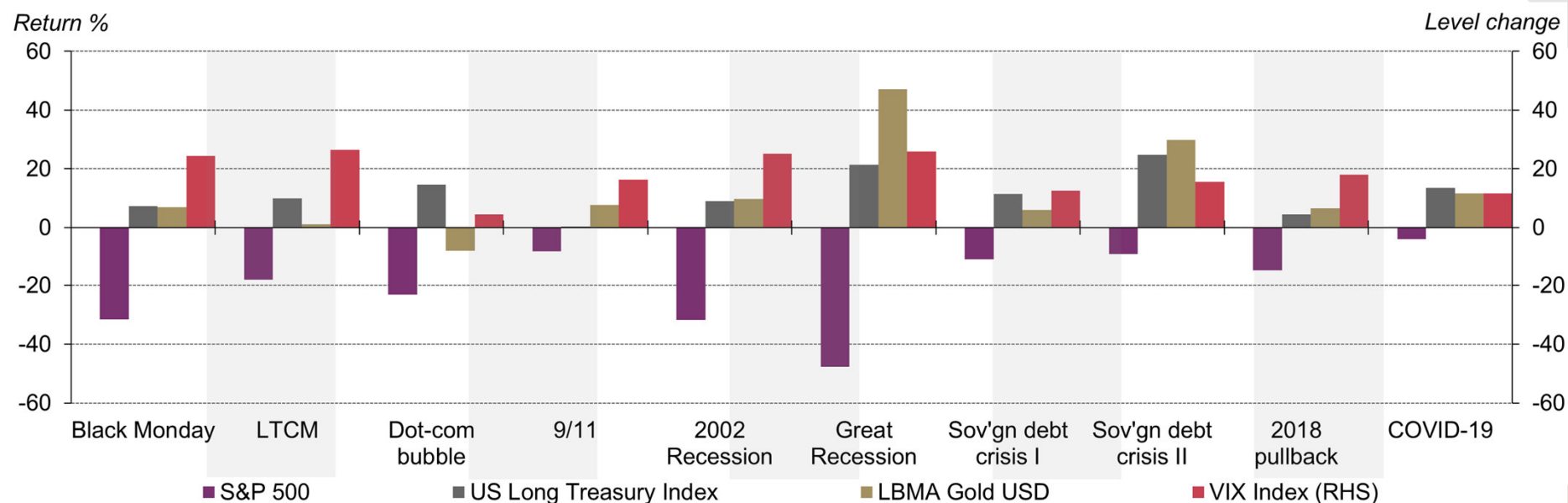


Sources

Economist, Reinhard, Carmen S. and Rogoff, Kenneth S., The forgotten history of domestic debt. April 2008

Safe-haven in periods of systemic risk

S&P 500 and Gold return vs change in VIX level*

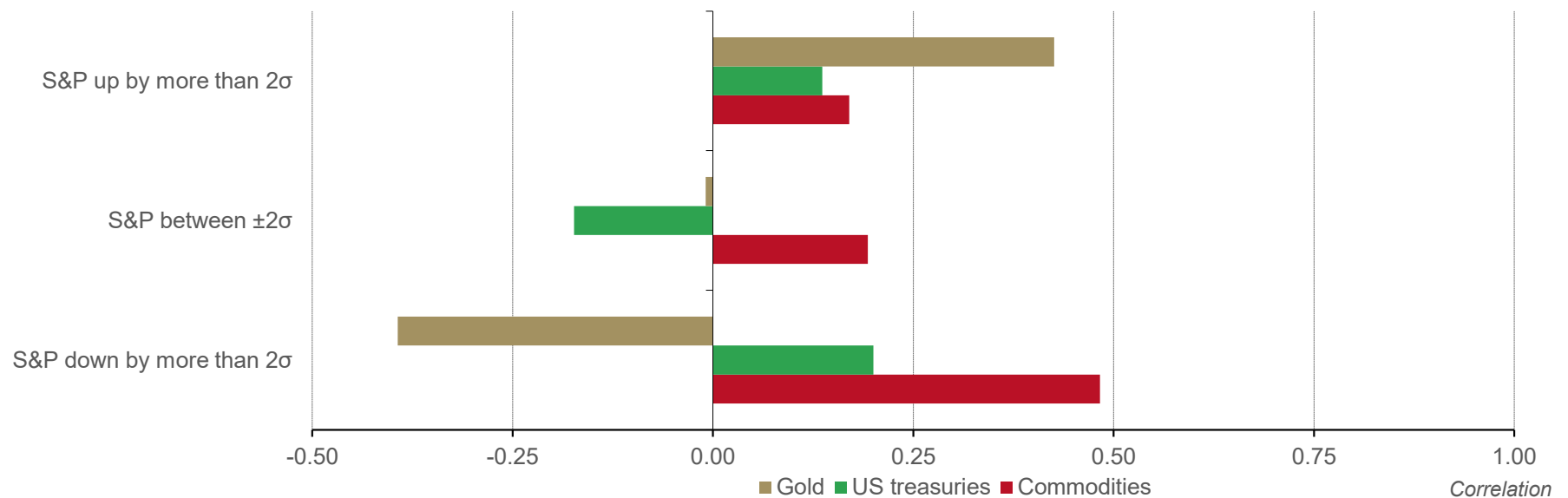


*The VIX is available only after January 1990. For events occurring prior to that date annualised 30-day S&P 500 volatility is used as a proxy. Dates used: Black Monday: 9/1987–11/1987; LTCM: 8/1998; Dot-com: 3/2000–3/2001; September 11: 9/2001; 2002 recession: 3/2002–7/2002; Great Recession: 10/2007–2/2009; Sovereign debt crisis I: 1/2010–6/2010; Sovereign debt crisis II: 2/2011–10/2011; 2018 pullback: 10/2018–12/2018; COVID-19 Feb/2020–Jun/2020.

Source Bloomberg, ICE Benchmark Administration, World Gold Council

An effective diversifier

Correlation between gold and US stock returns in various environments of stocks' performance (since 1994)*

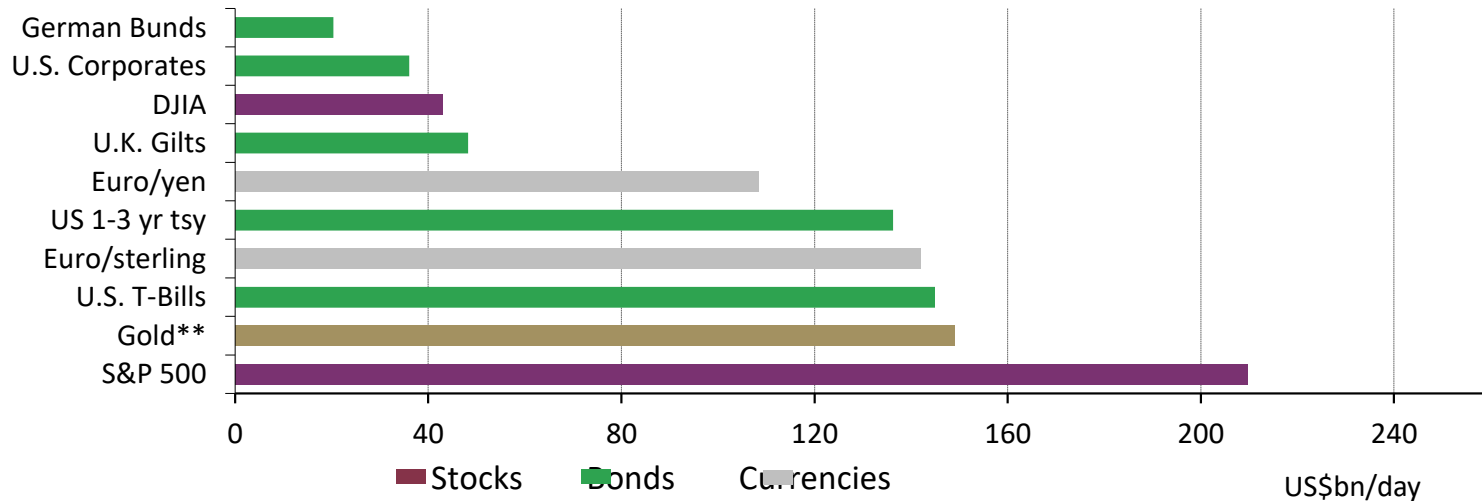


Source: Bloomberg, ICE Benchmark Administration, World Gold Council; Disclaimer

*As of 31 December 2022. Correlations computed using weekly returns based on the Bloomberg Commodity Index and the LBMA Gold Price PM. The middle bar corresponds to the unconditional correlation over the full period. The bottom bar corresponds to the correlation conditional on S&P 500 weekly return falling by more than two standard deviations (or 'σ') respectively, while the top bar corresponds to the S&P 500 weekly return increasing by more than two standard deviations. The standard deviation is based on the same weekly returns over the full period.

Liquidity

Average daily trading volumes over the last five years in US dollars*



Source: Bloomberg, Bank for International Settlements, UK Debt Management Office (DMO), Germany Finance Agency, Japan Securities Dealers Association, Nasdaq, World Gold Council; Disclaimer

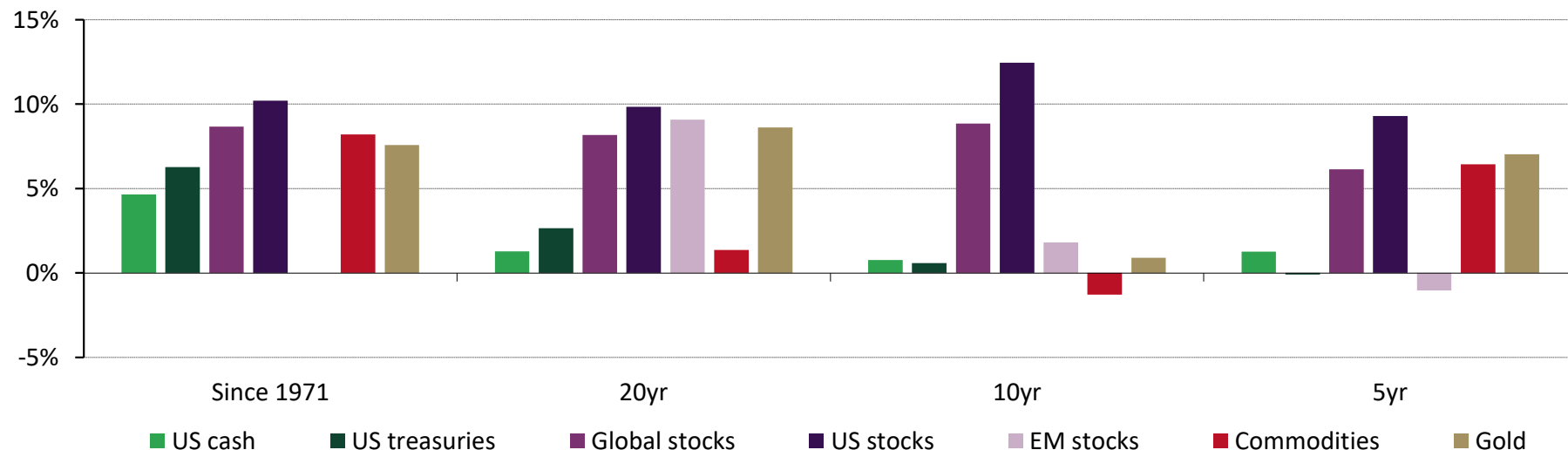
*Based on estimated one-year average trading volumes from 31 December 2017 to 31 Dec 2022, except for currencies that correspond to April 2019 to April 2022 volumes due to data availability. Fixed income trading volumes include primary dealer statistics only due to data availability.

**Gold liquidity includes estimates on over-the-counter (OTC) transactions and published statistics on futures exchanges, and gold-backed exchange-traded products. For methodology details visit the liquidity section at Goldhub.com.

Gold is a source of returns

Compound annual growth rate of key global assets in US dollars*

CAGR (%)



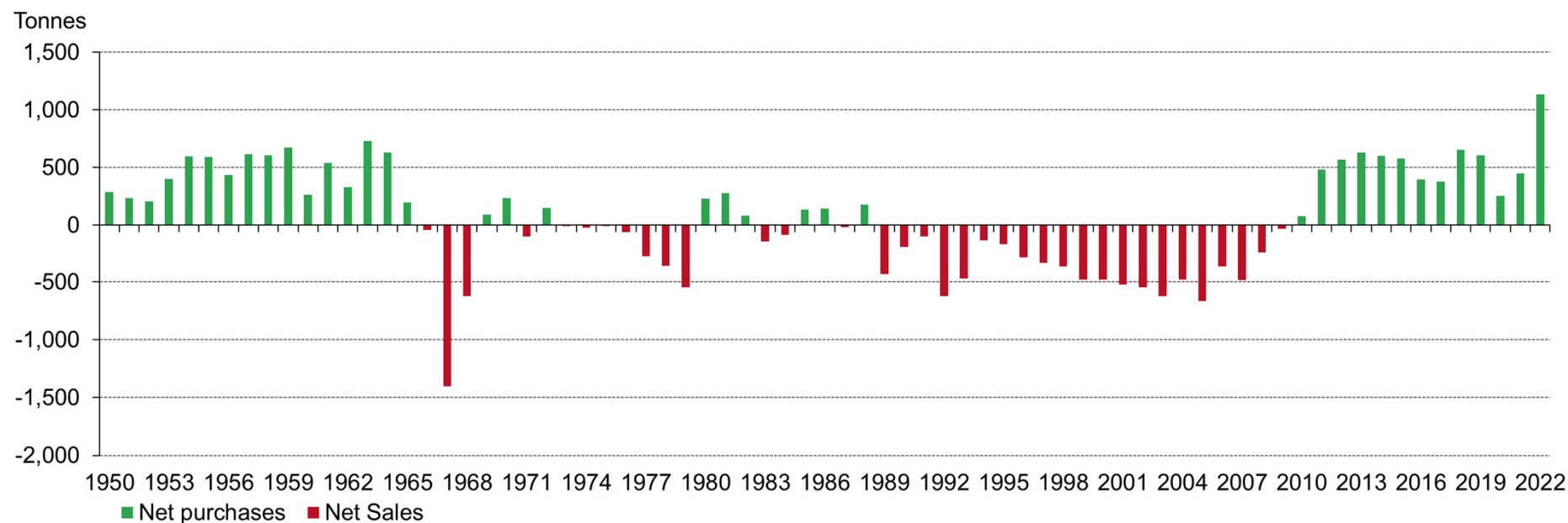
Source: Bloomberg, ICE Benchmark Administration, World Gold Council

*As of 31 December 2022. Computations in US dollars of unhedged total return indices unless otherwise specified. For US Cash: ICE 3-month Treasury; US treasuries: Bloomberg Barclays US Treasury; US, Global and EM stocks: MSCI US, World and EM total return indices respectively; Commodities: Bloomberg Commodity Total Return Index; and Gold: LBMA Gold Price PM (spot). Compounded annual growth rate (CAGR) computed as the geometric average from the start to the end of the period.

Official Sector Gold Trends

Central bank buying hits new record in 2022

Net central bank demand, tonnes



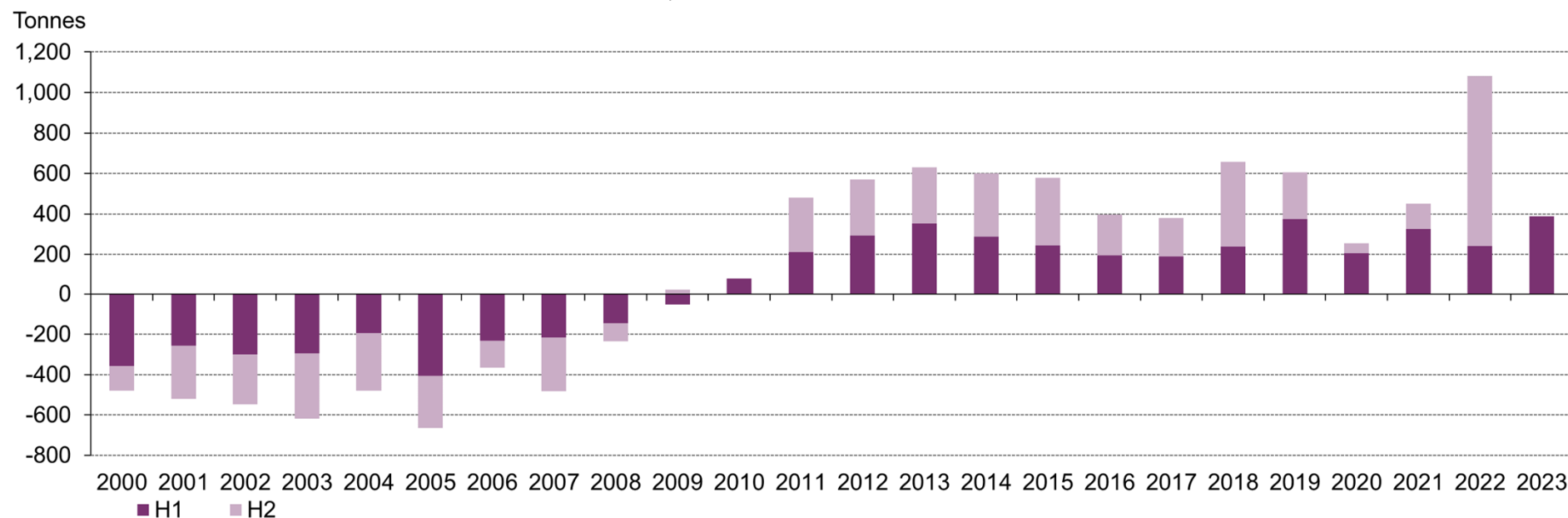
Note: Data as of 31 December 2022. For an explanation of central bank demand, please see the Notes and definitions download: <http://www.gold.org/goldhub/research/gold-demand-trends/gold-demand-trends-q4-2022/notes-and-definitions>

Source: Metals Focus, Refinitiv GFMS, World Gold Council

See [Gold Demand Trends: Full Year and Q4 2022](#) for more details.

H1 2023: Central bank demand the highest first half total on record

Semi-annual net central bank demand, tonnes



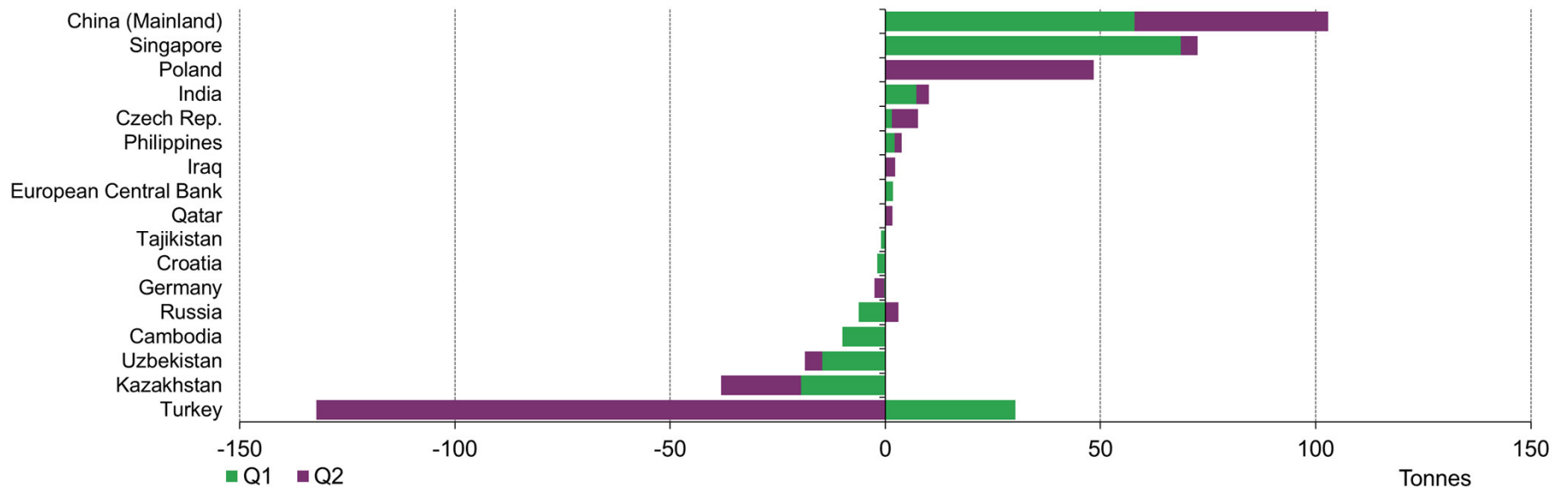
Note: Data as of 30 June 2023. For an explanation of central bank demand, please see the Notes and definitions download: <http://www.gold.org/goldhub/research/gold-demand-trends/gold-demand-trends-q2-2023/notes-and-definitions>

Source: Metals Focus, Refinitiv GFMS, World Gold Council

See [Gold Demand Trends Q2 2023](#) for more details.

Substantial sales from Turkey impacted the H1 total

Central bank activity by country, tonnes



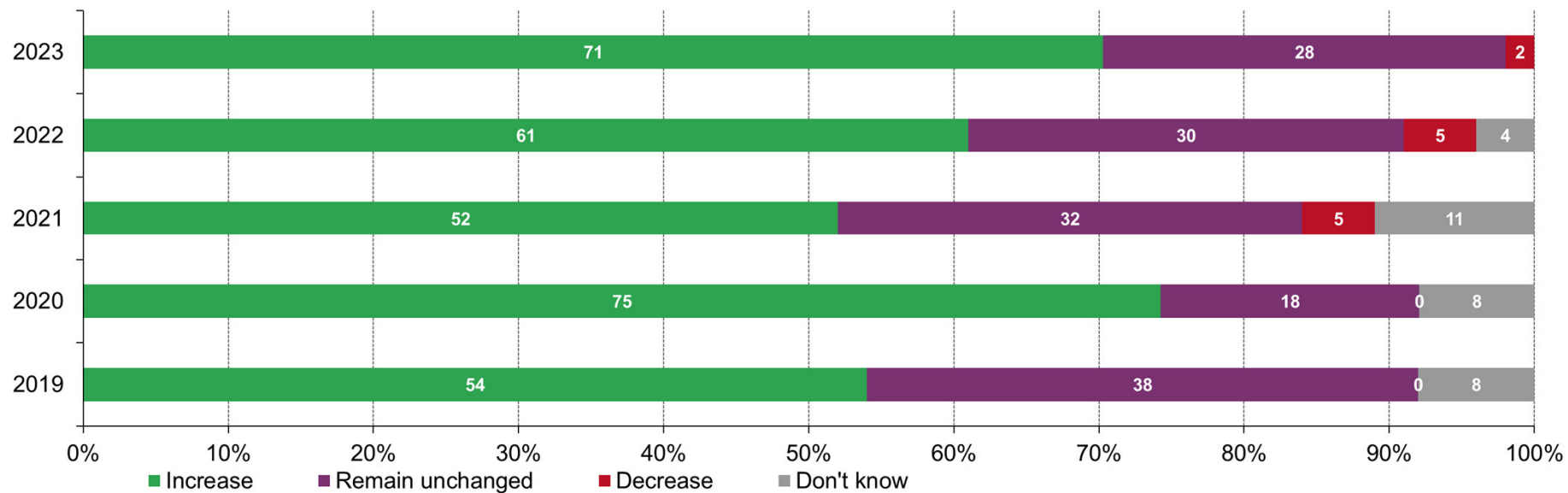
Note: Data as of 30 June 2023 where available. Chart includes only changes of a tonne or more. For an explanation of central bank demand, please see the Notes and definitions download: <http://www.gold.org/goldhub/research/gold-demand-trends/gold-demand-trends-q2-2023/notes-and-definitions>

Source: IMF IFS, Metals Focus, Respective central banks, World Gold Council

See [Gold Demand Trends Q2 2023](#) for more details.

Central Bank Gold Reserves Survey

7 in 10 central banks expect gold reserves to rise in the next 12 months



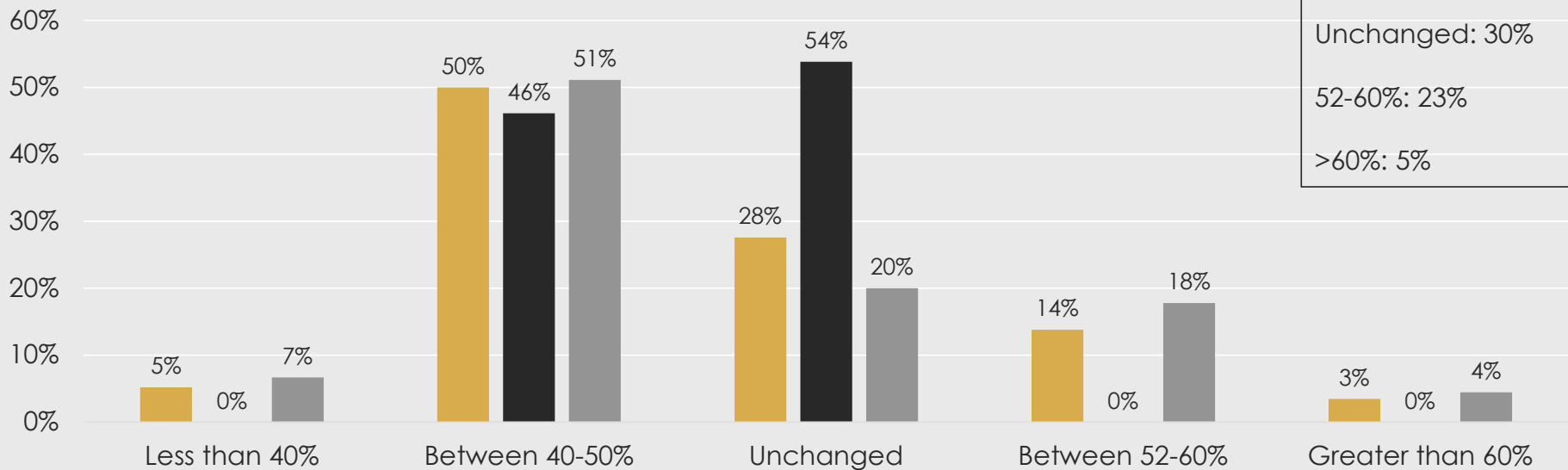
Note: Base: All central banks (57), Developed market (13), Emerging market (44). "Don't know" was removed as an option in this year's survey.

Source: World Gold Council

See [2023 Central Bank Gold Reserves Survey](#) for more details.

What % of total reserves will be denominated in USD in 5 years?

● Total ● Developed ● Emerging



2022 Results:
 <40%: 4%
 40-50%: 38%
 Unchanged: 30%
 52-60%: 23%
 >60%: 5%

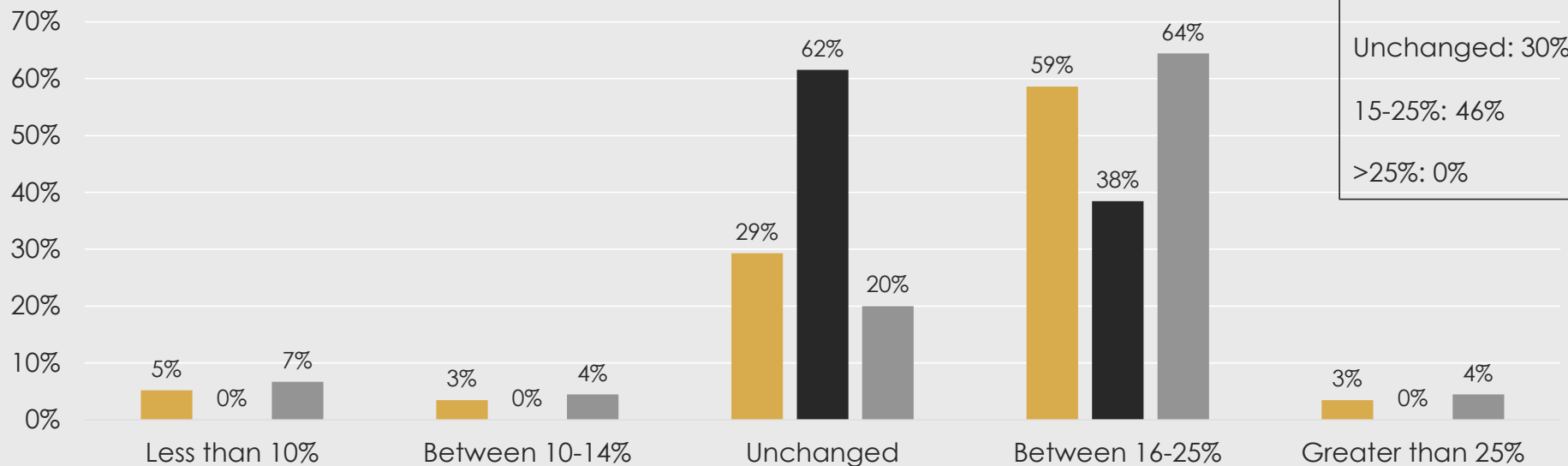
Base: All central banks (58); Developed market (13); Emerging market (45)

Source: World Gold Council

See [2023 Central Bank Gold Reserves Survey](#) for more details.

What % of total reserves will be denominated in GOLD in 5 years?

● Total ● Developed ● Emerging



2022 Results:

<10%: 4%

10-13%: 20%

Unchanged: 30%

15-25%: 46%

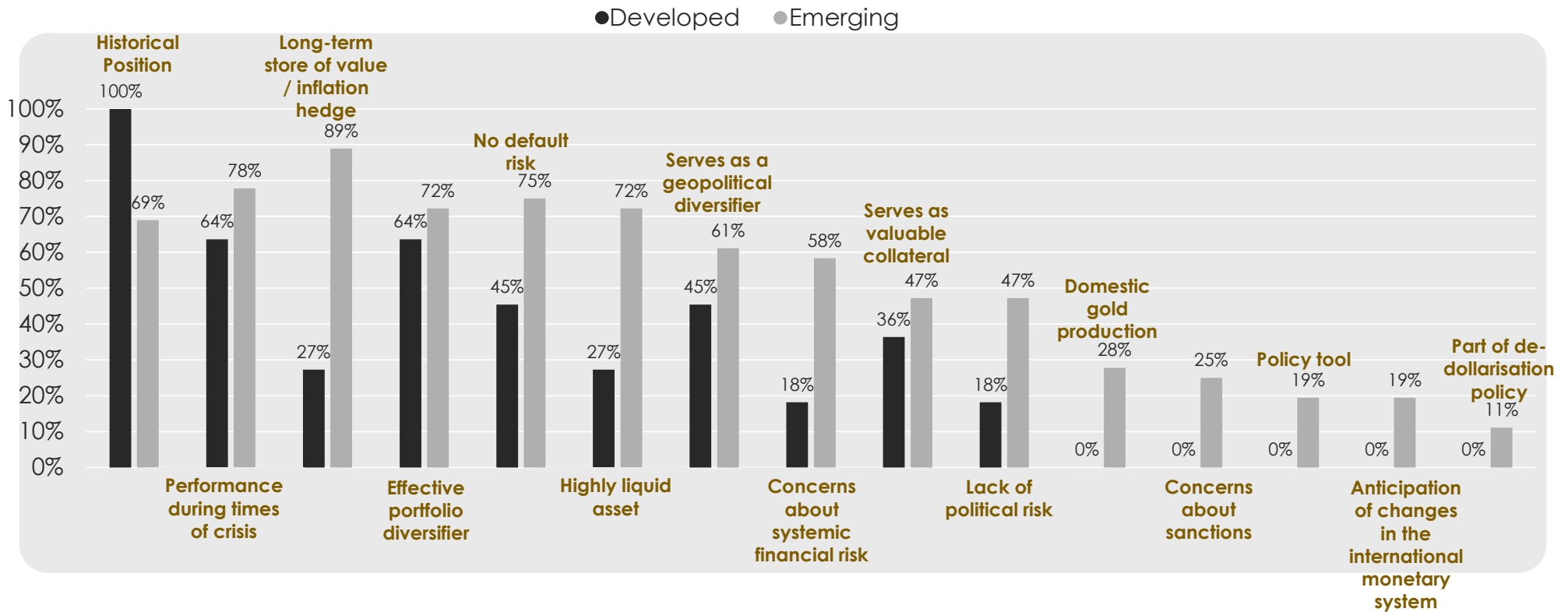
>25%: 0%

Base: All central banks (58); Developed market (13); Emerging market (45)

Source: World Gold Council

See [2023 Central Bank Gold Reserves Survey](#) for more details.

What factors are relevant for your decision to hold gold? DM vs. EM respondents



Base: All who currently hold gold as part of their total reserves (47); Developed market (11); Emerging market (36)

Source: World Gold Council

See [2023 Central Bank Gold Reserves Survey](#) for more details.

Important information and disclosures

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