Gold as a Reserve Asset in the Times of Market Stress

CEMLA and Banco de México, April 2021

Kurtulus Taskale Diamondopoulos, Director, Central Banks and Public Policy
Agenda

• Gold as a Reserve Asset: not just for crises
• Central Bank Demand Trends
• Gold Outlook
• Gold Valuation Framework
• Gold and ESG
Evolving the market

World Gold Council

• Leading industry authority on gold for over 30 years
• Proven track record for strengthening market infrastructure, delivering robust data and insights and developing solutions to expand access to gold globally
• Deep relationships with the institutional investor ecosystem, central banks, sovereign wealth funds and industry participants

Gold-backed ETFs
Launched first gold-backed ETF in the US in partnership with State Street Global Advisors

China Market Expansion
Played key role in evolution of the Shanghai Gold Exchange; currently working towards enabling insurance companies to invest in gold

India Blueprint
Led steering committee comprised of financial institutions and industry and trade associations in the development of a blueprint for a proposed Gold Spot Exchange

Responsible Gold Mining Principles
Worked with mining company members, developed a framework setting out expectations for consumers, investors and the downstream gold supply chain as to what constitutes responsible gold mining

Gold Valuation Framework
Developed an academically endorsed methodology to help investors understand how macroeconomic scenarios might impact gold demand, supply and long-term performance
Gold: not just for crises
Safe-haven in periods of systemic risk

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


Source Bloomberg, ICE Benchmark Administration, World Gold Council.
Gold outperformed typical safe-haven assets during the COVID-19

Gold and developed market sovereign bond returns in 2020


Source: Bloomberg, ICE Benchmark Administration, Standard and Poor’s, World Gold Council
Gold is a source of returns

Average annual return of key global assets in US dollars*


Source
Bloomberg; ICE Benchmark Administration; World Gold Council
Large liquid market

Market size of major govt securities*

*Gold is the sum of the above-ground stock of bars and coins, ETPs and official sector (or "Financial Gold"). FX and Gold prices updated as of 9 June 2020.
The right kind of diversification

Correlation between gold and US stock returns in various environments of stocks’ performance*

*As of 31 December 2019. Correlations computed using weekly returns based on the Bloomberg Commodity Index and the LBMA Gold Price PM since January 1971. 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 ‘s’) 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.

Source: Bloomberg, ICE Benchmark Administration, World Gold Council
The addition of gold improved the risk-adjusted returns of central bank portfolios during 2020

Portfolio returns of typical central bank investment assets with and without gold

Sharpe Ratios:
- 0% gold: 7.54, 1.84
- 5% gold: 6.63, 1.79
- 10% gold: 5.73, 1.74

Portfolios were rebalanced monthly or when a new bond was issued to ensure portfolios only have on-the-run bonds. Coupons were reinvested at prevailing yield. All portfolios are denominated in USD.

Source: Bloomberg, ICE Benchmark Administration, Standard and Poor’s, World Gold Council
Central Bank Demand Trends
Annual gold demand dips below 4,000t

COVID-19 contributed to strong investment growth but damaged consumer demand.

- Global gold ETFs saw annual record inflows of 877.1t (US$47.9bn)
- Annual retail investment demand for gold bars and coins grew 3%
- 2020 marked a record low for gold jewellery demand in our data series
- Gold buying by central banks slowed sharply in 2020, down 59%

See Gold Demand Trends: Full year and Q4 2020 for more details.

Note: Annual gold demand in 2020 (excluding OTC) was the lowest level of demand since 2009 (3,675.5t). Data as of 31 December 2020. For an explanation of gold market sectors, please see the Notes and definitions download: https://www.gold.org/goldhub/data/gold-supply-and-demand-statistics

Source: Metals Focus, World Gold Council
Central banks have been net purchasers for 11 consecutive years

Central bank net purchases in 2018 and 2019 were the highest and second highest respectively in nearly 50 years

Source
Metals Focus, Refinitiv GFMS, World Gold Council
Central bank buying continued to outstrip modest sales

Largest annual net purchases and net sales by central banks in 2020

Turkey
India
Russia
United Arab Emirates
Qatar
Cambodia
Kyrgyz Republic
Serbia
Taiwan Province of China
Cabo Verde
Germany
Philippines
Colombia
Tajikistan
Uzbekistan
Mongolia
Sri Lanka

Note: Data available as of 25 January 2021 and covers total net sales/purchases of a tonne or more during January to November 2020 (inclusive) only. For information on the methodology behind this data, as well as footnotes for specific countries, please see our table of Latest World Official Gold Reserves, at https://www.gold.org/goldhub/data/monthly-central-bank-statistics

Source: IMF IFS, Respective Central Banks, World Gold Council

See Gold Demand Trends: Full year and Q4 2020 for more details.
Outlook

Key Trends Expected to be Supportive of Gold in 2021
Outlook 2021: support for gold demand

COVID-19 continues to compound existing risks and produce new ones, creating an attractive environment for gold.

- Higher allocations to risk assets
- Ballooning budget deficits
- Inflationary pressures
- Market corrections amid already high equity valuations

See Gold Outlook 2021, January 2021, for more details.
Gold historically performs well in periods of high inflation

Gold returns in US dollars as a function of annual inflation*

**For each year on the sample, real return = (1+nominal return)/(1+inflation)-1.
Source: Bloomberg, ICE Benchmark Administration, World Gold Council
2021 Central Bank Gold Survey

Survey launch: Mid-February 2021
Survey close: April 16th 2021
Results published: June 2021

2020 Central Bank Gold Survey Participation: 51 responses

Executive Summary

The number of central banks buying gold is expected to increase substantially this year. According to the 2020 Central Bank Gold Reserves Survey, 29% of central banks intend to increase their gold reserves over the next 12 months, compared to just 8% of respondents in the 2018 survey. The increase is particularly notable as central bank buying has reached record levels in recent years, adding around 650 tonnes in 2019 alone.

Several of the survey’s key findings may explain the significant growth in central banks’ purchases of gold. First, central banks hold gold as a safe haven asset. Second, central banks consider gold to be a hedge against inflation. Third, central banks view gold as a diversifier for their portfolios. Fourth, central banks see gold’s unique characteristics as an investment in central banks’ portfolios.

International reserves

The Covid-19 pandemic has significantly affected central banks’ international reserves. Dominant currencies’ share of central bank foreign reserves fell to 52%, from 60% in 2019. Two years ago, the dollar’s share was 59%, which is now 52%. In 2019, the euro was 4%, which is now 2%. The yen is now 3%, which was 5% in 2019. This shift in central banks’ reserve holdings is a significant indication of the growing importance of gold in managing portfolios.

Survey Methodology

The survey was conducted by YouGov, a leading global research company. The survey was designed to understand the motivations and perspectives of central banks regarding their gold holdings. The survey was conducted online, using a combination of web and email surveys. The survey was completed by central bank officials from around the world.
Gold Valuation Framework
Gold Valuation Framework

A methodology that allows investors to understand the drivers of gold and their impact on price performance
Based on market equilibrium
Allows investors to determine gold’s long-term return
Gold has a dual nature

Average annual net demand ≈ 3,000 tonnes* (approx. US$122bn)

- **Jewellery**: 33%
- **Technology**: 8%
- **Investment**: 40%
- **Central banks**: 15%

Source: Metals Focus, Refinitiv GFMS, World Gold Council

*Based on 10-year average annual net demand estimates ending in 2018. 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. Figures may not add to 100% due to rounding. US dollar value computed using the LBMA Gold Price as of December 2018.

** 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
Drivers of Gold

**Economic expansion**
Periods of growth are very supportive of jewellery, technology, and long-term savings.

**Risk and uncertainty**
Market downturns often boost investment demand for gold as a safe haven.

**Opportunity cost**
The price of competing assets such as bonds (through interest rates), currencies and other assets, influences investor attitudes towards gold.

**Momentum**
Capital flows, positioning and price trends can ignite or dampen gold’s performance.
QaurumSM valuation tool
*Powered by the Gold Valuation Framework*

Utilities third party independent macroeconomic forecasts

Estimates expected demand and supply based on user’s selection

Calculates implied long-term gold returns
Responsible gold mining principles & ESG
Responsible Gold Mining Principles (RGMPs)

Overarching ESG framework
Developed with strong input from civil society, governments, and supply chain participants

Embraced by World Gold Council members
Committed to full implementation by September 2022

Conformance is externally validated
Requires public disclosure and independent assurance
Gold: ESG portfolio perspective

1. **Climate risk mitigating asset;** gold is likely to perform better than most mainstream asset classes under various long-term climate scenarios.

2. **Can lower the carbon footprint of an investment portfolio over time;** carbon emissions associated with holding physical gold are minimal.

3. **Mechanisms to validate responsible gold production;** gold miners and refiners follow demanding standards, which require external assurance.

4. **Commitment to UN’s Sustainable Development Goals;** gold mining, refining and fabrication contribute meaningfully to socio-economic development globally.

Monday, 26 April 2021
Gold: climate risk mitigating asset

Inaction on climate change will devastate global investments and markets, with global GDP per capita falling by up to 30% by 2100*

Climate change is increasingly driving investment decisions and reshaping approaches to portfolio risk

Because of its diverse sources of demand, lack of credit risk, and track record as an effective hedge, gold is likely to perform better than most mainstream asset classes under different climate scenarios

Burke et al., “Large potential reduction in economic damages under UN mitigation targets”, Stanford University, May 2018

Sensitivity of Annual Returns

Gold as a reserve asset | CEMLA and Banco de México 2021

*Monday, 26 April 2021
Appendix

Survey results 2020
Negative interest rates are the most dominant factor for central bank reserve management

What topics are relevant for your reserve management decisions? Select all that apply.

Base: All central banks (51); Advanced economies (11); EMDE (40)
NOTE: This question was not asked in 2019.
Gold and the renminbi will play bigger future roles

What proportion of total reserves (foreign exchange and gold) do you think will be denominated in Chinese renminbi / gold five years from now?

Indicates current proportion of total reserves

Base: All central banks (51); Advanced economies (11); EMDE (40)
NOTE: Comparison with 2019 not shown as different response categories were used in 2020.
Significant shifts in central banks’ views on gold reflect a changing global outlook

How relevant are the following factors in your organization’s decision to hold gold?

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Historical position</td>
<td>52%</td>
<td>31%</td>
<td>17%</td>
<td></td>
</tr>
<tr>
<td>Long-term store of value</td>
<td>45%</td>
<td>33%</td>
<td>14%</td>
<td>7%</td>
</tr>
<tr>
<td>Performance during times of crisis</td>
<td>52%</td>
<td>26%</td>
<td>10%</td>
<td>12%</td>
</tr>
<tr>
<td>No default risk</td>
<td>43%</td>
<td>31%</td>
<td>14%</td>
<td>12%</td>
</tr>
<tr>
<td>Effective portfolio diversifier</td>
<td>36%</td>
<td>29%</td>
<td>19%</td>
<td>17%</td>
</tr>
<tr>
<td>Lack of political risk</td>
<td>19%</td>
<td>43%</td>
<td>17%</td>
<td>21%</td>
</tr>
<tr>
<td>Highly liquid asset</td>
<td>19%</td>
<td>38%</td>
<td>19%</td>
<td>24%</td>
</tr>
<tr>
<td>Serves as valuable collateral</td>
<td>14%</td>
<td>29%</td>
<td>36%</td>
<td></td>
</tr>
<tr>
<td>Policy tool</td>
<td>7%</td>
<td>24%</td>
<td>45%</td>
<td></td>
</tr>
<tr>
<td>Anticipation of changes in the international monetary system</td>
<td>7%</td>
<td>17%</td>
<td>26%</td>
<td>50%</td>
</tr>
<tr>
<td>Part of de-dollarisation policy</td>
<td>7%</td>
<td>5%</td>
<td>24%</td>
<td>64%</td>
</tr>
</tbody>
</table>

Base: All central banks that currently hold gold (42); Advanced economies (10); EMDE (32)
A significant increase in expectations of more gold buying by central banks

How do you expect global central bank gold reserves to change over the next 12 months?

<table>
<thead>
<tr>
<th></th>
<th>% expecting an increase over the next 12 months</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Adv.</td>
</tr>
<tr>
<td>2019</td>
<td>45%</td>
</tr>
<tr>
<td>2020</td>
<td>64%</td>
</tr>
</tbody>
</table>

Base: All central banks (51); Advanced economies (11); EMDE (40)