Insights
GOLD

Gold for the Long Run: A Strategic Investment

SPDR® Gold Strategy Team

Contents

Executive Summary

Gold is one of the oldest financial instruments, dating back thousands of years — and its prospects as a strategic investment remain strong. Gold offers several unique investment characteristics that may help its role in portfolios gain greater prominence in the years ahead. These are centered around gold's potential portfolio utility in wealth preservation, risk management, and capital appreciation. Moreover, several themes likely to play out over the next decade should support gold demand including low real yields, rising debt, and rising global wealth. Although most coverage of gold as an investment focuses on relatively short time periods, investors stand to benefit if they consider gold in the context of its storied history, the secular trends currently supporting its outlook, and the portfolio benefits it may offer over long time horizons.

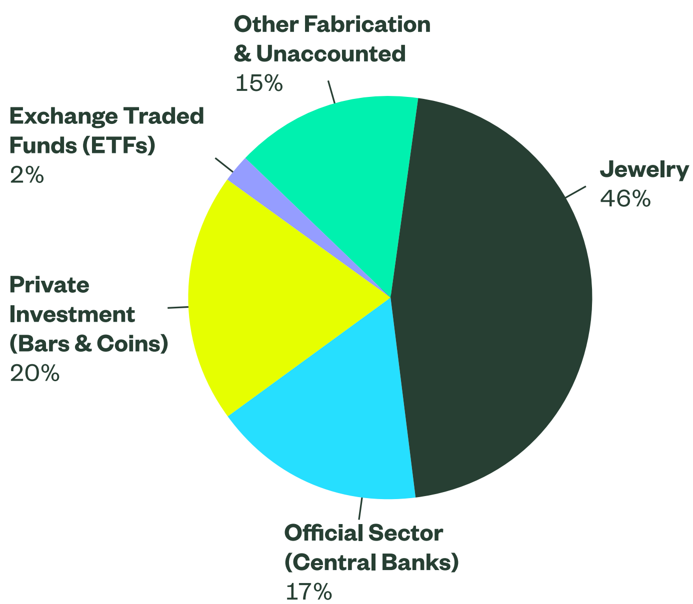
1

A Brief History of Gold as an Investment

Gold's history is as rich and ancient as the material itself. Civilizations have mined and used gold for at least 6,000 years,[1] initially spurred by the metal's beauty; its rarity helped gold evolve into a symbol of prestige, wealth and power.

Ancient Greeks adopted a gold weight standard and in 550 BCE put the first gold coin into circulation. Since then, economic empires from Rome and Persia to Britain and the United States have used gold as capital or currency. Almost every ouncce of gold that has ever been mined continues to count toward the more than 200,000 metric tons of above-ground stock in existence today.[2]

Figure 1
Current Estimated Above-Ground Stock of Gold by Sector



Source: Metals Focus, Refinitiv GFMS, World Gold Council, State Street Global Advisors. Data as of December 31, 2020.
Past performance is not a guarantee of future results.

Gold has been intertwined with the world economic order for the last two centuries. During the 19th century, most of the global economy adhered to a fixed price for gold and physical gold-backed currency values. In response to the Great Depression, US President Franklin D. Roosevelt signed Executive Order 6102 in 1933; combined with the Gold Reserve Act of 1934, it effectively outlawed private ownership of gold coins, bullion and certificates within the United States.

At the close of World War II, the US and 44 other nations met in Bretton Woods, New Hampshire, to create an efficient foreign exchange system that would promote international economic growth. Under the Bretton Woods Agreement, the US dollar was pegged to gold at a fixed price of $35.00 per ounce, while other countries pegged their currencies to the US dollar. The system became contentious among member nations during the 1960s and early 1970s, however. On August 13, 1971, President Richard Nixon announced that the US would no longer benchmark its currency to gold and maintain gold's fixed price, effectively ending the Bretton Woods Agreement.

Thereafter, gold's price fluctuated based on the supply and demand dynamics in the open market, and its price increased 159% between President Nixon's announcement and the end of 1973. Yet US investors still could not legally own gold bullion — a prohibition that vanished when President Gerald Ford repealed Executive Order 6102 in December 1974.

Futures exchanges in New York and Chicago subsequently launched gold contracts, creating a mechanism for investors to trade gold within financial markets. Several governments, including the United States, then began minting investment-grade gold coins for retail investors. The next major evolution in gold investing emerged in the 21st century with the advent of the physically backed gold exchange traded fund (ETF).

Figure 2
Timeline of Modern Gold Investment

Date	Event
1873–1933	Classical Gold Standard System
1934	Private gold ownership is outlawed in the US
1944–1971	Bretton Woods Monetary System
1967	South Africa begins minting Krugerrand gold bullion coins for retail investment
1974	US ban on private gold ownership removed; Gold futures contracts begin trading in US
1979	Canada begins minting Maple Leaf gold bullion coins for retail investment
1986	US begins minting Eagle gold bullion coins for retail investment
2003	First gold-backed exchange traded fund (ETF) launched in Australia
2004	China lifts formal prohibition on private gold bullion ownership[3]
2004	US launches first gold ETF
2013	China launches gold ETF

Source: State Street Global Advisors. As of April 30, 2021.

2 Secular Trends Affecting Gold Over the Next Decade

Gold's fundamentals are the product of a collection of short- and long-term global macroeconomic drivers, some cyclical in nature and some counter-cyclical. Gold's fundamentals in turn affect its price.

Figure 3
Drivers of Gold's Price

Strategic Drivers	Economic Expansion	Periods of growth support consumer demand (jewelry, technology) and long-term savings
	Risk and Uncertainty	Market downturns often boost investment demand for gold as a perceived safe haven[4]
Tactical Drivers	Opportunity Costs	The prices of competing assets such as bonds and currencies influence investor attitudes towards gold
	Momentum	Capital flows, positioning and price trends can ignite or dampen gold's performance

Source: World Gold Council, State Street Global Advisors. As of April 30, 2021.

Economic growth is a key strategic driver affecting gold's long-term outlook and potential investment benefits. Economic expansions lead to cyclical increases in demand for gold, which is a key component not only in jewelry but also in certain technology products and industrial applications. Economic growth also tends to increase gold demand from savers. Growing risks in the economy and financial markets also boost gold demand, as investors seek a perceived safe haven and store of value during turbulent and uncertain periods.

The global outlook over the next decade points to higher growth, increasing incomes, and rising uncertainties, contributing to several themes that are constructive for gold's long-term outlook.

Monetary Policy and the Long-Run Real-Yield Cycle

As a hard asset, gold does not generate income akin to bond coupon payments or stock dividends. This lack of cash flow — aka gold's "zero yield" — makes gold investment demand highly sensitive to the global yield cycle. When interest rates are high, investors assume a high opportunity cost for holding gold. When interest rates are low or negative, gold's appeal increases relative to yield-generating assets such as cash deposits, Treasuries, and other sovereign debt.

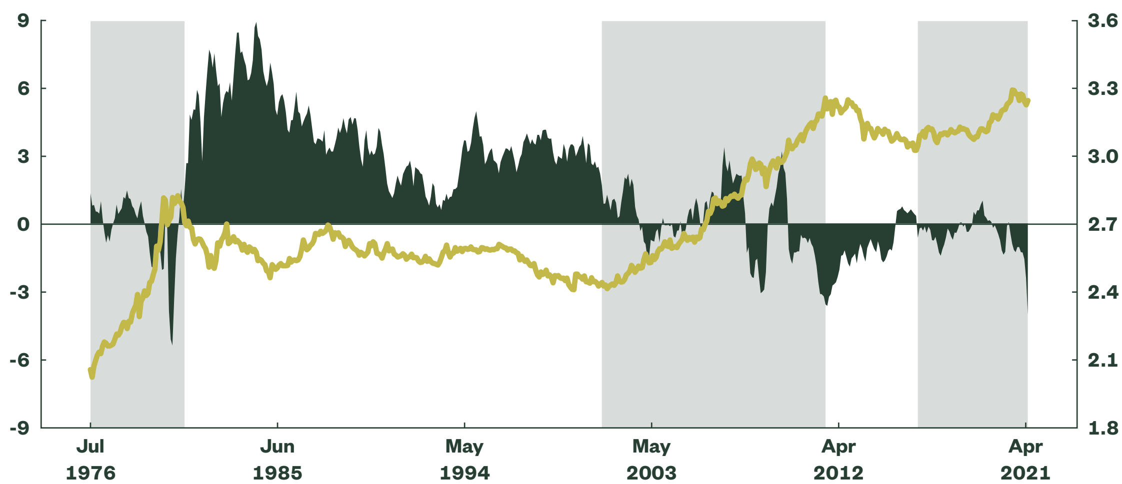
The aftermath of the global financial crisis in 2008 led monetary policymakers around the world to push interest rates to zero or in some cases negative. As a result, real yields on sovereign bonds (the bonds' yields less the rate of inflation) fell deeply negative. Throughout the 2010s, low real interest rates and yields became the norm rather than an outlier. Looking ahead, the potential of lower for longer real interest rates persisting remains high against a backdrop of accommodative monetary policies globally.

A historical comparison between gold prices and real yields (proxied by the 2-year US Treasury note) demonstrates the long-term relationship between the two. The periods with gold's strongest sustained performance (the shaded regions in Figure 4) occurred when real yields were low, particularly when they were persistently below 2%. Real yields stayed above 2% throughout almost all of the 1980s and 1990s; during this period, interest-bearing financial assets were relatively attractive and gold underperformed.

Figure 4
Gold Exhibits an Inverse Historical Relationship with Real Yields

2-Year US Real Yield, % (LHS)

Gold Price, US$/oz — Logarithmic Scale (RHS)



Source: Bloomberg Finance L.P., State Street Global Advisors. Data from July 1, 1976 to April 30, 2021. **Past performance is not a guarantee of future results.**

Real yields in the US were negative 33% of the time over the last 45 years, and gold's average monthly return was strongly positive (1.36%) during those periods. Yet positive real yields did not mean negative gold returns, as gold also performed well when US real yields were between 0% and 2%.[5] Gold's performance has struggled historically when real yields were high (above 2%) with a slightly negative average monthly return.

Figure 5

On Average, Gold Shows Positive Returns when Real Interest Rates are Below 2%

Real Yield — Level	Negative	Positive	< -2%	-2% to 0%	0% to +2%	> +2%
Average Monthly Gold Return	1.36%	0.29%	3.85%	0.84%	0.94%	-0.10%
Frequency	33%	67%	6%	27%	25%	42%

Source: Bloomberg Finance L.P., State Street Global Advisors. Data from July 1, 1976 to April 30, 2021. **Past performance is not a guarantee of future results.**

Gold prices also tended to increase most with large declines in real yields. Gold had an average monthly return of 1.29% in all months when real yields fell and 1.87% during months when real yields dropped significantly (more than 0.5%). When real yields increased, performance was mixed: Small real yield increases were associated with modest but positive gold returns, while large increases in real yields corresponded with negative returns. These types of large yield increases, however, have been infrequent — occurring only 14% of months since 1976.

Figure 6

Aside from Infrequent Major Swings, Gold Responds Favorably to Short-Term Volatility in Real Yields

Real Yield — Change	Falling	Rising/Flat	< -0.5%	-0.5% to 0%	0% to +0.5%	> +0.5%
Average Monthly Gold Return	1.29%	-0.02%	1.87%	1.03%	0.24%	-0.72%
Frequency	51%	49%	16%	35%	36%	14%

Source: Bloomberg Finance L.P., State Street Global Advisors. Data from July 1, 1976 to April 30, 2021. **Past performance is not a guarantee of future results.**

The inflation outlook has a strong influence on the real yield cycle. Expectations for rising inflation typically lead monetary policymakers to increase nominal interest rates. Those rate increases tend to dampen inflation while boosting bond yields, resulting in higher real yields.

Global trends in place today that are likely to keep inflation and real interest rates subdued over the long run include:

- Aging demographics, which reduce aggregate demand;
- The impact of technology, which reduces production costs and may boost productivity;
- Rising global debt burdens, which motivate policymakers to maintain low interest rates in order to manage higher debt service costs.

The impact of these factors is both deflationary and structural in nature and will likely limit price inflation indices from reaching sustained extreme levels last seen during the 1970s in developed economies.

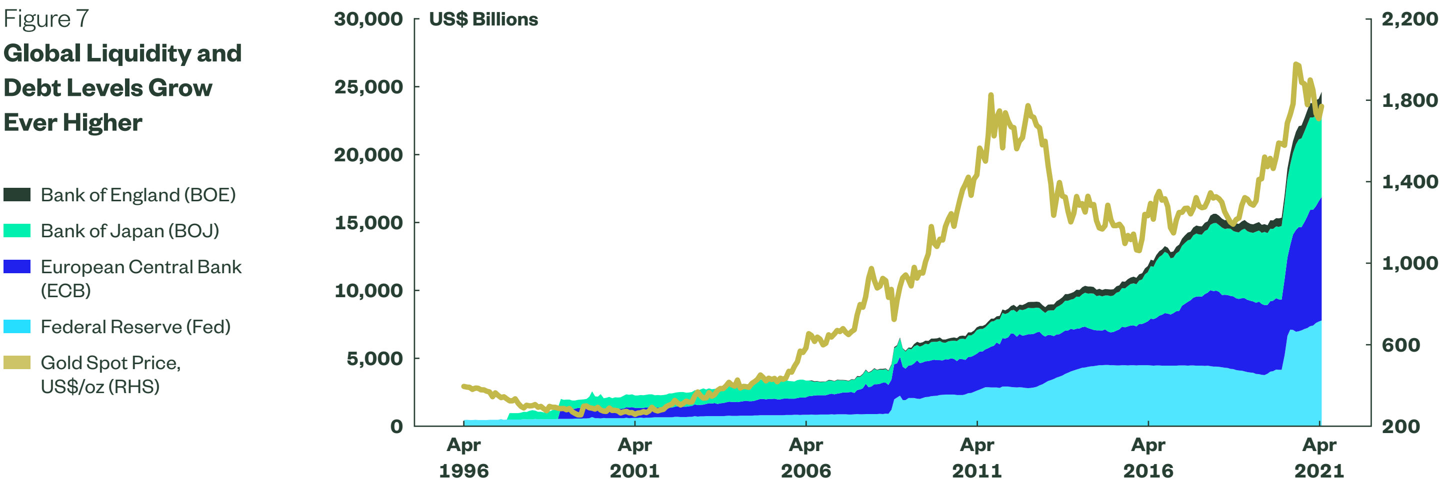
In turn, monetary policymakers will remain unincentivized to raise nominal interest rates with inflation remaining stable and relatively low compared to long-term historical trends, thereby perpetuating a low real-yield cycle. This enhances gold's appeal relative to investors' other options. Indeed, gold may play a more prominent role in portfolios as low yields and return expectations for traditional fixed income and equity solutions force investors to look to other assets to navigate volatility.

Rising Debt Levels and Reserve Diversification

Gold is often considered an alternative to fiat reserve currencies such as the US dollar, euro, and Japanese yen. Central banks around the world have dramatically expanded their balance sheets and increased global liquidity over the last 25 years. That trend is likely to persist, supporting long-term growth in gold demand and its price.

In the 21st century, the explosion of debt has been tied directly to increased liquidity and easy monetary policy. Central bank balance sheets in the US, EU, UK, and Japan rose nearly 10-fold between 2000 and April 2021, from US$2.5 trillion (T) to US$24.7T.[6]

Figure 7
Global Liquidity and Debt Levels Grow Ever Higher

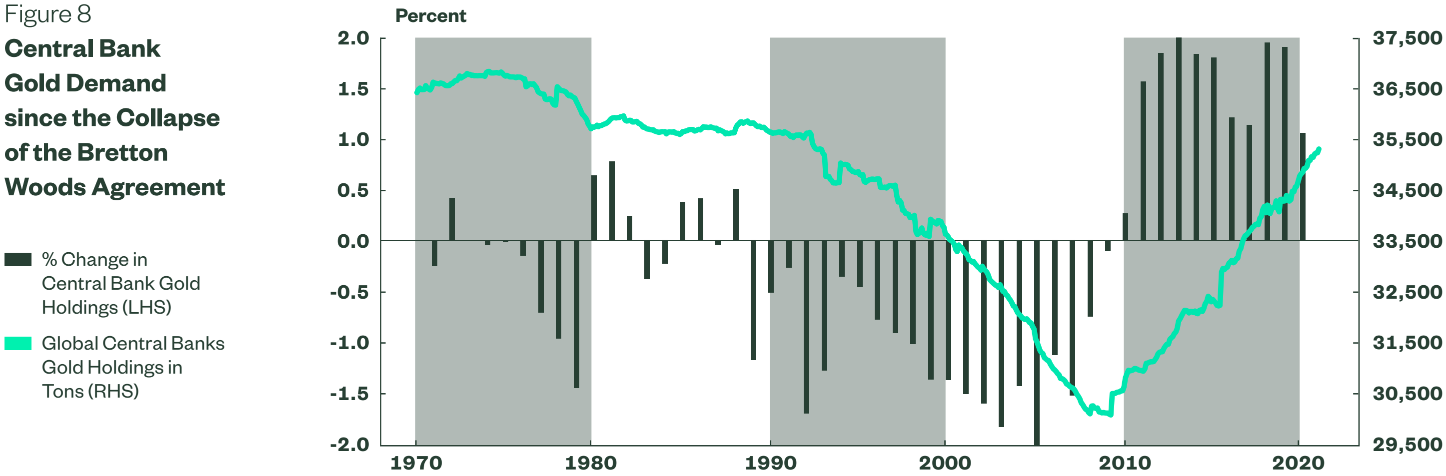


Source: Bloomberg Finance L.P., State Street Global Advisors. Data from April 30, 1996 to April 30, 2021. **Past performance is not a guarantee of future results.**

As global liquidity and debt exploded over the last 25 years, the price of gold increased 350%.[7] Individual investors shifted into gold due to concerns about pervasive, long-term risks from this eruption of debt and liquidity. Meanwhile, central banks also drastically altered their strategic stances towards gold.

Central banks were net sellers of gold during the late 20th century. They became net buyers in the aftermath of the 2008 financial crisis, and they have since maintained that position. Central banks purchased gold to diversify their reserves, to shore up their balance sheets and to gain liquidity from a ubiquitous asset without credit risk. They are expected to continue to be net purchasers, supporting the outlook for gold prices.

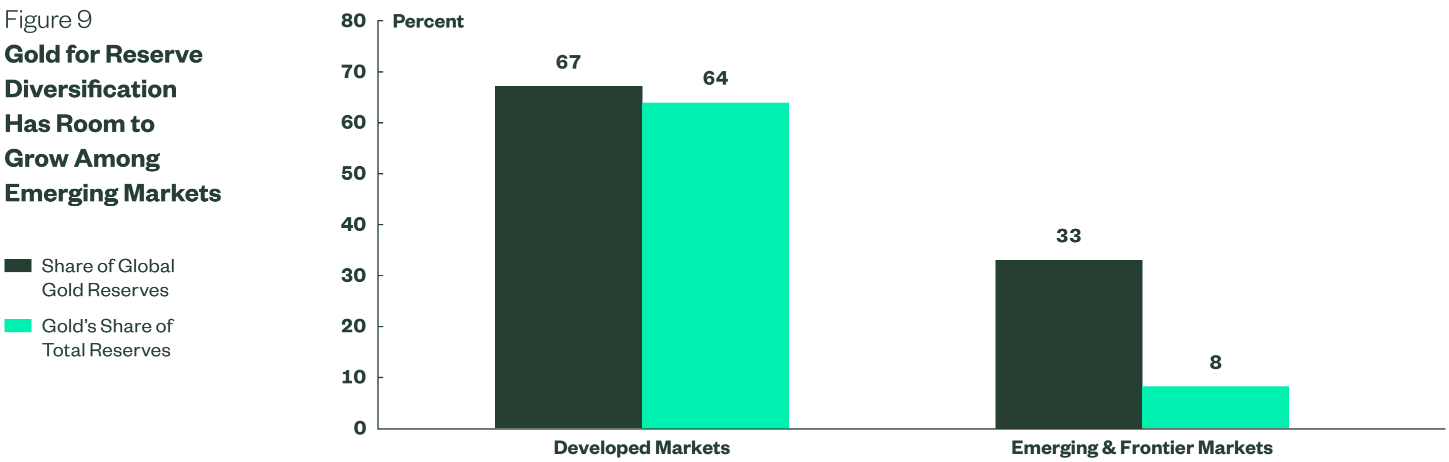
Figure 8
Central Bank Gold Demand since the Collapse of the Bretton Woods Agreement



Source: Bloomberg Finance L.P., World Gold Council, State Street Global Advisors. Data from January 1, 1970 to December 31,2020. **Past performance is not a guarantee of future results.**

Emerging markets, led by China and Russia, have accounted for the lion's share of net gold purchases. Nevertheless, emerging markets' gold reserves remain well below their developed-market peers in terms of total gold holdings and gold's percentage of total foreign exchange (FX) reserves. Developed markets currently control two-thirds of the gold held globally by the official sector, and their gold holdings account for 64% of aggregate FX reserves. By contrast, gold held by all emerging and frontier market central banks accounts for only 8% of total FX reserves, one-eighth the percentage held by developed economies. The gap showcases not only emerging markets' potential to accumulate further gold reserves, but also the critical role gold plays in diversifying positions currently dominated in fiat currencies such as the US dollar.

Figure 9
Gold for Reserve Diversification Has Room to Grow Among Emerging Markets



Source: Bloomberg Finance L.P., IMF, World Gold Council, State Street Global Advisors. Data as of April 30, 2021. **Past performance is not a guarantee of future results.**

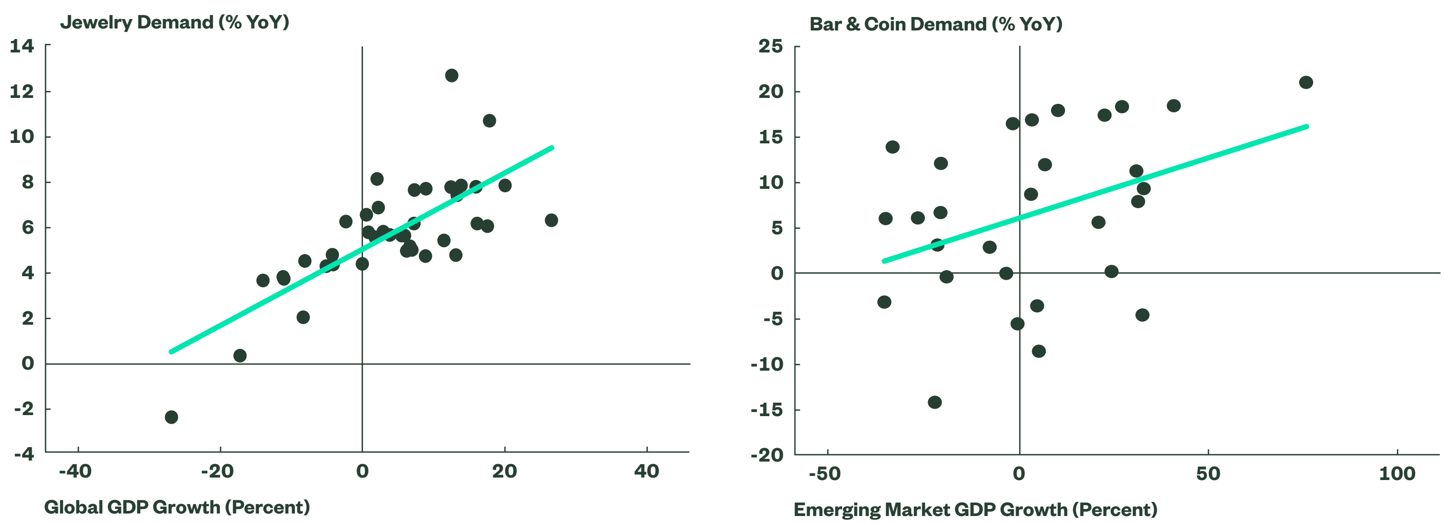
Gold and the Income Effect

As gross domestic product (GDP) per capita rises, consumers are likely to spend a higher share of their income on gold in the form of savings as well as consumer purchases of jewelry and related luxury items.

Demographics in emerging and frontier markets are constructive for economic growth in those countries, and that growth also may help increase gold demand over the long run. The populations of emerging and frontier economies are generally younger than those of developed economies and are expected to produce a higher share of future global output and future marginal wealth. Many of these countries are in Asia and the Middle East, which hold a strong cultural and social affinity for gold.

Rising incomes also promise to create a larger market for technological devices, which are another source of gold demand. As connectivity and electrification grow around the world, a higher share of incomes and wealth are spent on consumer electronics and other products that contain gold as a critical technological element.

Figure 10
Rising Wealth and Consumer Demand is a Key Driver for Gold Among its Largest Sectors

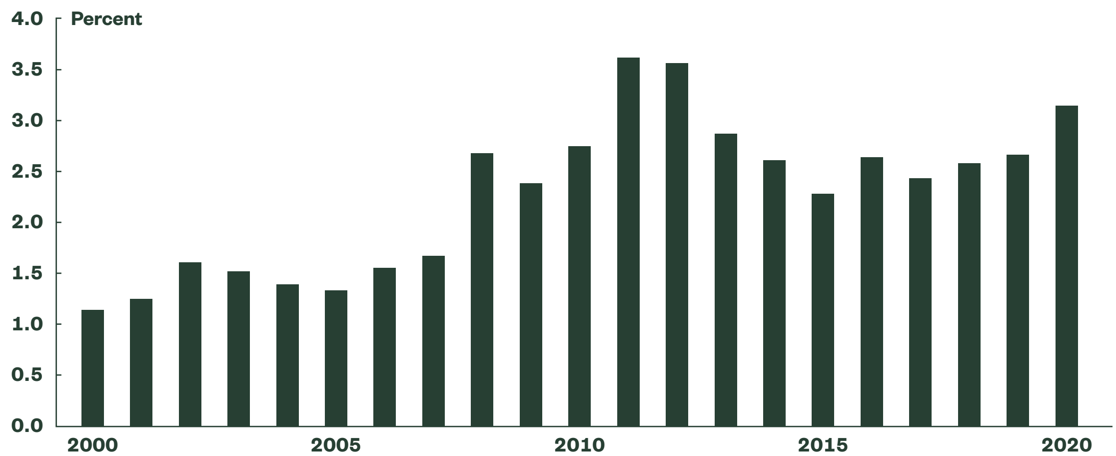


Source: (left) Refinitiv GFMS, Metals Focus, World Gold Council, State Street Global Advisors. Data from January 1, 1981–December 31, 2020. (right) Refinitiv GFMS, Metals Focus, World Gold Council, State Street Global Advisors. Data from January 1, 1992–December 31, 2020. **Past performance is not a guarantee of future results.**

At the other end of the spectrum, aging developed economies are undergoing a demographic transition as the baby boomer generation retires. Investors in these countries will continue to seek diversification and risk management, and may turn to gold to help preserve already accumulated wealth.

Gold's market capitalization within a representative global market portfolio[8] has increased since 2000. Not only has the metal's price risen alongside other asset classes, but investment holdings[9] in gold have climbed as well. Over the next decade, investors will continue to juggle the disruptive impact of monetary policy, rising debt burdens, and shifting demographics. In response, a growing need for non-traditional investment solutions to manage these risks may see new investors look to gold as a way to manage these and other risks.

Figure 11
Gold's Representative Share of Global Market Portfolio Increased Since 2000



Source: Frederic Dodard, CFA®, FRM®, EMEA Head of ISG, Amy Le, CFA®, Macro-Investment Strategist, Global Macro Policy Research and Amlan Roy, PhD, Head of Global Macro Policy Research, *What is the Portfolio of Assets Held by the World,* State Street Global Advisors Worldwide Entities. Gold represented by private investment and official sector holdings, while excluding jewelry and industrial fabrication holdings. Data from January 1, 2000 to December 31, 2020. **Past performance is not a guarantee of future results.**

3 Portfolio Strategy and Gold's Long-Term Utility

Wealth Preservation as a Store of Value

Perhaps the longest and most well-known utility for gold has been as a store of value. Gold's elemental characteristics, coupled with its natural rarity, for centuries have made it a reliable vehicle to maintain and accumulate wealth. Gold has aided in wealth preservation over time for two reasons: It has helped provide protection during periods of extreme price increases, and it has served as a hedge against currency debasement.

Gold is often touted as an inflation hedge. The full truth is more nuanced. Although the price of gold tends to keep pace with general price fluctuations, its overall inflation sensitivity during periods of low or moderate price changes has been average compared to other asset classes. In reality, gold has been most effective at protecting against periods of *extreme* price instability — both inflation and deflation.

The most intense period of global deflation in the last century occurred in the 1930s, during the depths of the Great Depression. In the US, consumer prices fell nearly 25% overall, with the rate of deflation exceeding 10% in 1932.[10] To combat deflation, the US stimulated the ailing economy, expanding the money supply by increasing the official price of gold. From 1929 to 1933, the government revalued gold upward by 70%, from $20.67 to $35 per ounce.[11]

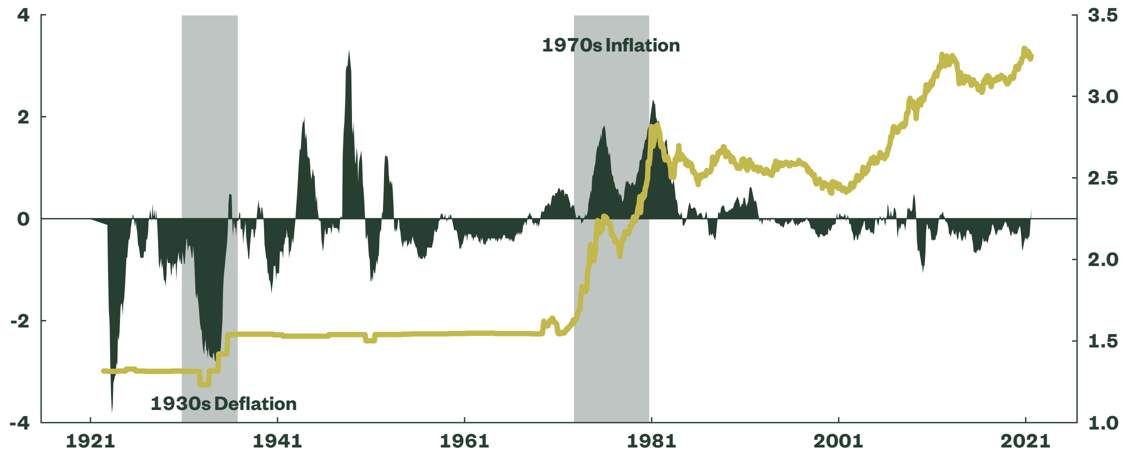
Over the last 50 years, the most dramatic price inflation in developed economies occurred in the 1970s. Rising oil prices contributed to economic stagflation — falling growth with rising prices. Annual inflation in the US averaged 7.9% during the 1970s, nearly three times the annual rate of 2.8% in the previous decade.[12] Gold benefited from this environment as well, with the US dollar price of gold soaring from $43.63 per ounce on August 15, 1971 (when gold began to trade freely) to $589.75 per ounce on December 31, 1980.[13]

Figure 12

Over Last 100 Years, Gold Has Been Effective at Hedging Extreme Changes in Price Levels

US CPI, Z-Score (LHS)

Gold Price, US$/oz — Logarithmic scale (RHS)



Source: Bloomberg Finance L.P., State Street Global Advisors. Data from April 30, 1921 to April 30,2021. US CPI rate standardized to zero. **Past performance is not a guarantee of future results.**

Gold's ability to protect against the risk of currency debasement has been another pillar of its ability to preserve wealth over time. The strength of a nation's currency is linked closely to its overall fiscal health and debt burden. Historically, extreme deficits negatively affect governments' currencies relative to those of other countries. Since gold doesn't change or erode over time, it can serve as a static measuring stick. Comparing the values of major reserve currencies to gold over the last century illustrates how dramatically they can lose their purchasing power due to fiscal deficits, increased spending, and rising debt levels to finance public programs and military operations. Gold has served as a bulwark against this risk.

Figure 13

Gold Protects Against Currency Debasement Over the Long Run

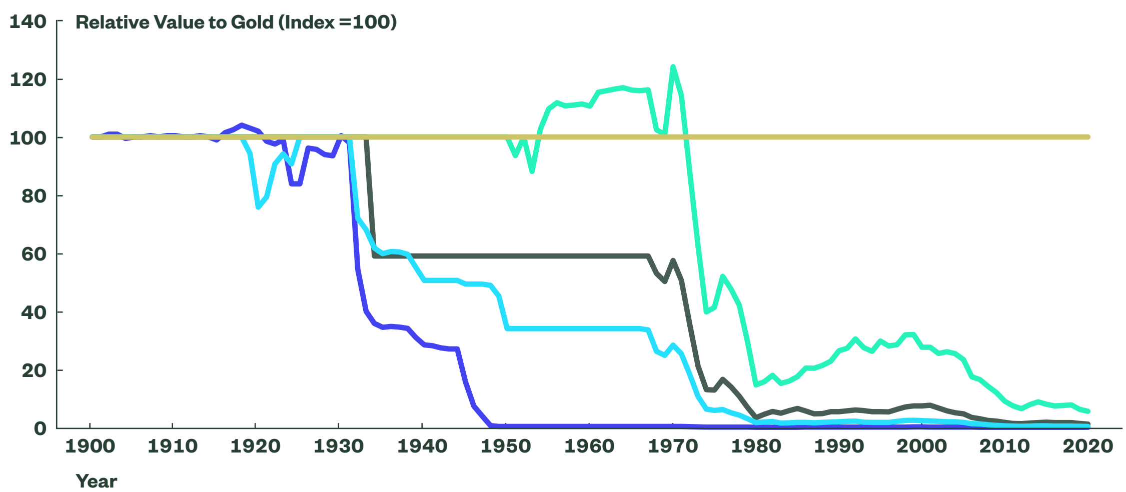
USD ($)

EUR (€)

JPY (¥)

GBP (£)

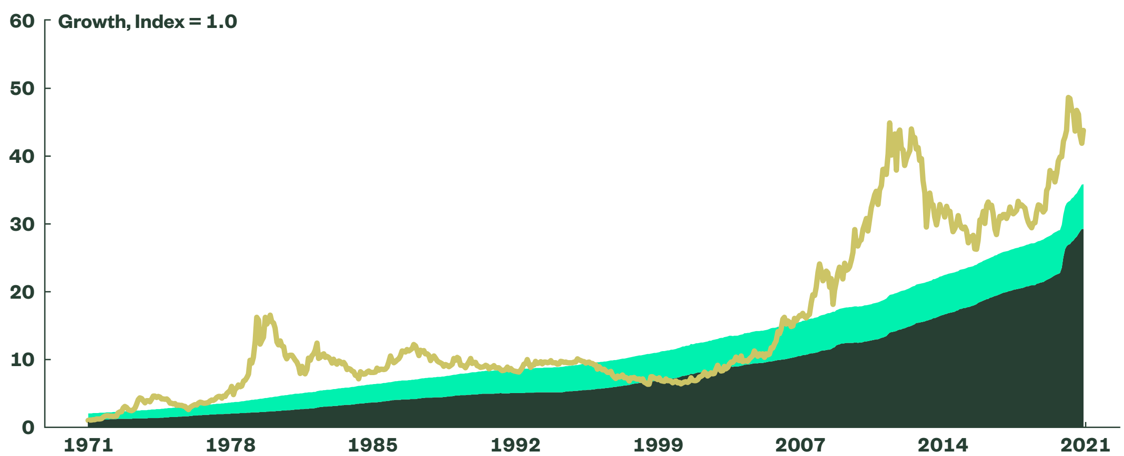
Gold



Source: Bloomberg Finance L.P., Harold Marcuse — UC Santa Barbara, World Gold Council, State Street Global Advisors. Data from January 1, 1900 to December 31, 2020. Based on the annual average price of a currency relative to the gold price. USD = US Dollar, EUR = Euro, JPY = Japanese Yen, GBP = British Pound. Euro (EUR) was established in January 1999, for period prior to this the German Deutsche Mark was used as a proxy for European currency. **Past performance is not a guarantee of future results.**

Gold has preserved purchasing power over time by protecting against both extreme price fluctuations and weakening currencies. This framework offers a more accurate and useful way to consider the metal than thinking of it purely as an inflation hedge. Over the last 50 years, monetary inflation — the loss of purchasing power through increasing money supply resulting in currency debasement — has been a greater risk to investors than price inflation alone. This should be an important consideration for investors looking to use gold to preserve wealth over the long run.

Figure 14
Gold Preserves Spending Power Over the Long Run



Source: Bloomberg Finance L.P., State Street Global Advisors. Data from July 31, 1971 to April 30, 2021. **Past performance is not a guarantee of future results.**

A Risk Management Tool with Staying Power

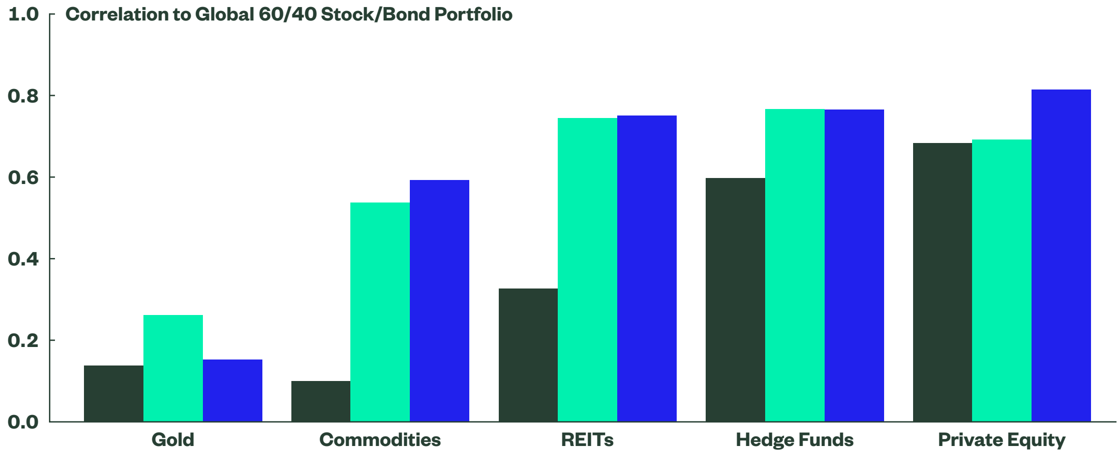
Gold is a robust, multi-faceted hedge. It has the ability to protect portfolios by reducing volatility, limiting drawdowns, and offering a low correlation to financial assets such as stocks and bonds. Over the long term, gold stands out as a persevering source of diversification for strategic investors.

A wide range of asset classes and investment strategies have been touted as portfolio diversifiers in recent decades. Many of these proposed diversifiers have failed to deliver when it counted, exhibiting high correlations to stock and bond portfolios during times of crisis.

For example, during the period leading up to the 2008 financial crisis, broad commodities, REITs and hedge funds joined gold in sporting relatively low correlations to a global stock-bond portfolio. Correlations rose during the peak of the crisis in 2008, as most assets were sold to meet liquidity needs. Among these asset classes, only gold's correlation reverted to pre-crisis levels in the years following 2008.[14]

Figure 15
Scarcity of Diversifying Assets Over Time Makes Gold Truly Unique

1999–2007
2008
2009–2021

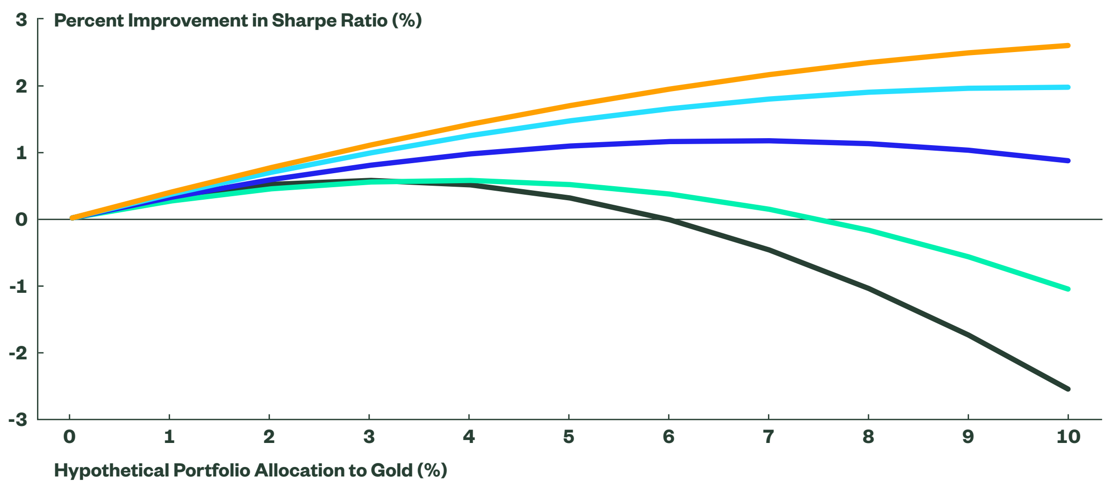


Source: Bloomberg Finance, L.P., State Street Global Advisors. Data from January 1, 1999 to April 30, 2021. Gold = gold spot price. Commodities = S&P GSCI Total Return Index, Hedge Funds = Hedge Fund Research HFRI FOF Diversified Index, REITs = FTSE NAREIT All Equity REITS Total Return Index, Private Equity = LPX50 Listed Private Equity Index Total Return. Global 60/40 portfolio = 60% MSCI All Country World Index, 40% Bloomberg Barclays Global Aggregate Index. **Past performance is not a guarantee of future results.**

Gold's unique investment characteristics mean that adding a long-term allocation can improve overall portfolio efficiency. The metal's persistently low correlation to other assets and ability to reduce portfolio drawdowns historically has improved a diversified portfolio's Sharpe ratio (a measure of risk-adjusted return) for portfolios with a variety of risk profiles.

Figure 16
Gold May Aid in Improving Efficiency of Diversified Portfolios

Conservative
Moderate Conservative
Moderate
Moderate Aggressive
Aggressive

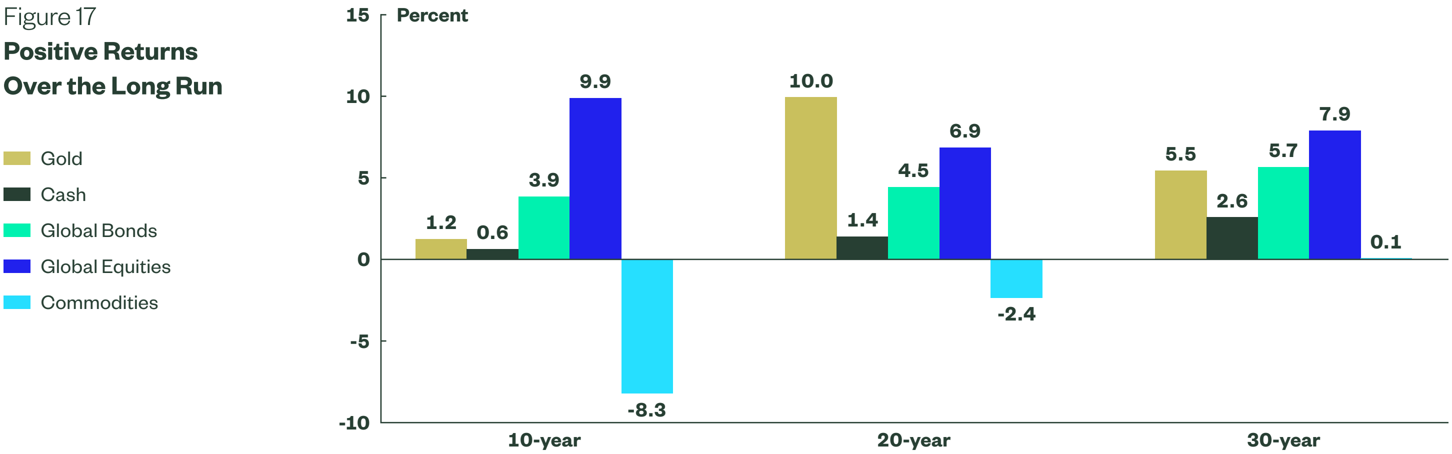


Source: State Street Global Advisors, Bloomberg Finance L.P. Data from December 31, 1977–April 30, 2021. Gold spot price used for gold return calculations. Conservative = 20% Stock/80% Bond, Moderate Conservative = 40% Stock/60% Bond, Moderate = 60% Stock/40% Bond, Moderate Aggressive = 75% Stock/25% Bond, Aggressive = 85% Stock/15% Bond. Stock index = MSCI World Total Return Index, Bond index = Bloomberg Barclays US Aggregate Index. Respective gold allocation added on a pro-rata basis to each portfolio. Index returns are unmanaged and do not reflect the deduction of any fees or expenses. Index returns reflect all items of income, gain and loss and the reinvestment of dividends and other income. Returns do not represent those of a specific product but were achieved by mathematically combining the actual performance data of the constituents according to their weightings detailed in the above disclosure. Performance of the hypothetical blended portfolio assumes no transaction and rebalancing costs, so actual results will differ. Returns are based on the actual performance of the gold spot price for the period presented and the actual performance of the MSCI World Total Return Index and the Bloomberg Barclays US Aggregate Index for the periods beginning on their inception dates. **Past performance is not a guarantee of future results.**

Capital Appreciation and Long-Term Return Expectations

Investors often focus on gold's short-term return potential. But gold has provided positive returns over most long run periods, producing an annualized return of 7.8% since 1971[15] and outperforming global equities, global bonds, and broad commodities over the last 20 years. However, a long-run perspective highlights that gold's expected returns are more comparable to bonds than equities. This makes sense, considering that gold and bonds serve similar functions in portfolios: Both are efficient sources of diversification and sensitive to long-term interest-rate cycles.

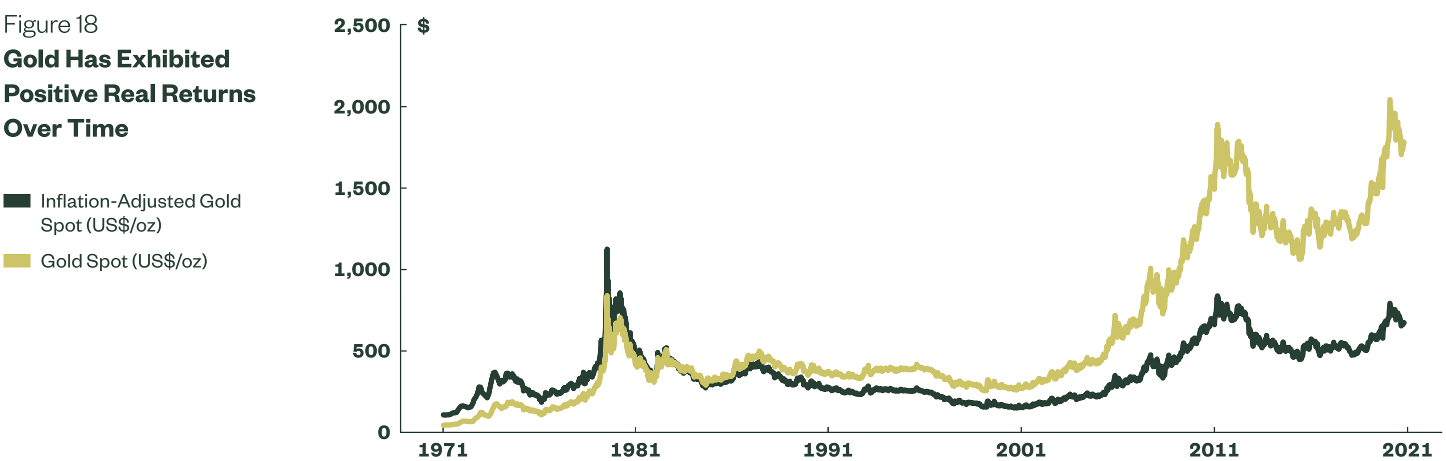
Figure 17
Positive Returns Over the Long Run



Source: Bloomberg Finance L.P., State Street Global Advisors. Data as of April 30, 2021. Gold = gold spot price, Cash = ICE BofAML US 3-Month Treasury Bill Index, Global Bonds = Bloomberg Barclays Global Aggregate Total Return USD Index, Global Equities = MSCI World Total Return Index, Commodities = S&P GSCI Total Return Index. **Past performance is not a guarantee of future results.**

Gold has consistently outperformed cash and broad commodities, indicative of its ability to serve as an effective store of value over various long-term periods. In fact gold's real return since August 15, 1971 is 3.8%.[16] Overall, strategic investors in gold should not base their allocation decisions with the expectation that gold will provide equity-like returns in the long run. Rather, they can consider investing in gold for its ability to deliver potentially positive real returns, its track record to potentially help manage risk, and for its capacity to serve as a store of value.

Figure 18
Gold Has Exhibited Positive Real Returns Over Time



Source: Bloomberg Finance L.P., State Street Global Advisors. Data from August 1, 1971 to April 30, 2021. **Past performance is not a guarantee of future results.**

There are good reasons that gold has persisted across centuries as a financial instrument. Its value is rooted in its rarity, offering investors a natural protection that financial assets can't match. Applying a long-term view of gold highlights its utility as a potential store of value, risk management tool, and appreciating asset. Trends emerging over the next decade paint a picture of low real yields, rising debt burdens, and shifting demographics. Against this backdrop gold may continue to shine in the years to come.

Contributors

Maxwell Gold, CFA
Head of Gold Strategy

George Milling-Stanley
Chief Gold Strategist

Diego Andrade
Senior Gold Strategist

Robin Tsui, CAIA
APAC Gold Strategist

Endnotes

1 *The World of Gold, 1968,* Timothy Green.

2 Above-ground stock of gold holdings is estimated to be 201,296 metric tons as of December 31, 2020. Source: Metals Focus, Refinitiv GFMS, World Gold Council.

3 *China's Gold Market: Progress and Prospects,* World Gold Council, April 2014.

4 Assets may be considered "safe havens" based on investor perception that an asset's value will hold steady or climb even as the value of other investments drops during times of economic stress. Perceived safe haven assets are not guaranteed to maintain value at any time.

5 Bloomberg Finance L.P., State Street Global Advisors. Data from July 1, 1976 to April 30, 2021. **Past performance is not a guarantee of future results.**

6 As of April 30, 2021.

7 From April 30, 1996–April 30, 2021.

8 The Global Market Portfolio represents all investable assets weighted in proportion to their relative market values.

9 Gold evaluated as investment holdings based on known physical gold holdings among global investment (retail bar and coin, ETFs, and other identifiable physical investment) and the official sector (including central bank physical gold holdings).

10 Federal Reserve Bank of San Francisco, "The Risk of Deflation," March 27, 2009. https://frbsf.org/economic-research/publications/economic-letter/2009/march/risk-deflation.

11 Bloomberg Finance, L.P., State Street Global Advisors, as of April 30, 2021.

12 Bloomberg Finance, L.P., State Street Global Advisors, as of April 30, 2021.

13 Gold LBMA PM USD price.

14 Bloomberg Finance, L.P., State Street Global Advisors. Data from January 1, 1999 to April 30, 2021.

15 From August 15, 1971 to April 30, 2021.

16 Bloomberg Finance, L.P., State Street Global Advisors. Data from August 1, 1971 to April 30, 2021.

About State Street Global Advisors

Our clients are the world's governments, institutions and financial advisors. To help them achieve their financial goals we live our guiding principles each and every day:

- Start with rigor
- Build from breadth
- Invest as stewards
- Invent the future

For four decades, these principles have helped us be the quiet power in a tumultuous investing world. Helping millions of people secure their financial futures. This takes each of our employees in 31 offices around the world, and a firm-wide conviction that we can always do it better. As a result, we are the world's third-largest asset manager with US $3.59 trillion* under our care.

* This figure is presented as of March 31, 2021 and includes approximately $60.33 billion of assets with respect to SPDR products for which State Street Global Advisors Funds Distributors, LLC (SSGA FD) acts solely as the marketing agent. SSGA FD and State Street Global Advisors are affiliated.

ssga.com/etfs

Information Classification: General Access

Marketing Communication

Glossary

Bloomberg Barclays Global Aggregate Bond Index A benchmark that provides a broad-based measure of the global investment-grade fixed income markets. The three major components of this index are the U.S. Aggregate, the Pan-European Aggregate, and the Asian-Pacific Aggregate Indices. The index also includes Eurodollar and Euro-Yen corporate bonds, Canadian government, agency and corporate securities, and USD investment-grade 144A securities.

Bloomberg Barclays US Aggregate Index A benchmark that provides a measure of the performance of the US dollar denominated investment grade bond market, which includes investment grade government bonds, investment grade corporate bonds, mortgage pass through securities, commercial mortgage backed securities.

Commodities A basic good used in commerce that is interchangeable, or "fungible," with other commodities of the same type. Commodities are most often used as inputs in the production of other goods or services. For example, crude oil is a commodity that is used to make motor fuels, heating oil and lubricants.

Consumer Price Index (CPI) A widely used measure of inflation at the consumer level that helps to evaluate changes in cost of living.

Fiat Currency Currency that a government declares to be legal tender, but that it is not backed by a physical commodity. The value of fiat money is linked to supply and demand rather than the value of the material that the money is made of, such as gold or silver historically. Fiat money's value is instead based solely on the faith and credit of the economy.

FTSE NAREIT All Equity REITS Total Return Index The index is a free-float-adjusted market capitalization-weighted index that includes all tax-qualified REITs listed in the NYSE, AMEX, and NASDAQ National Market.

Gross Domestic Product (GDP) The monetary value of all the finished goods and services produced within a country's borders in a specific time period.

Hedge Fund Research HFRI FOF Diversified Index The index invests in a variety of strategies among multiple managers; historical annual returns and/or standard deviations are generally similar to those of the HFRI Fund of Fund Composite Index. A fund in the HFRI FOF Diversified Index tends to show minimal loss in down markets while achieving superior returns in up markets.

ICE BofAML US 3-Month Treasury Bill Index This is an unmanaged index that is comprised of a single U.S. Treasury issue with approximately three months to final maturity, purchased at the beginning of each month and held for one full month.

Inflation An overall increase in the price of an economy's goods and services during a given period, translating to a loss in purchasing power per unit of currency. Inflation generally occurs when growth of the money supply outpaces growth of the economy. Central banks attempt to limit inflation — and avoid deflation — in order to keep the economy running smoothly.

LPX50 Listed Private Equity Index Total Return The index is designed to represent the global performance of the 50 most highly capitalized and liquid listed private equity companies. The index is diversified across regions, private equity investment styles, financing styles and vintages. The reference currency of the LPX50 Index is EUR, CHF and USD. The index is available as a Price Index and Total Return (Net).

Liquidity The ability to quickly buy or sell an investment in the market without impacting its price. Trading volume is a primary determinant of liquidity.

MSCI All Country World Index Captures large and mid cap representation across 23 Developed Markets (DM) and 26 Emerging Markets (EM) countries. With 3,050 constituents, the index covers approximately 85% of the global investable equity opportunity set.

MSCI World Total Return Index The index captures large- and mid-cap representation across 23 Developed Markets. With 1,644 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.

S&P GSCI Total Return Index The S&P GSCI Total Return Index in USD is widely recognized as the leading measure of general commodity price movements and inflation in the world economy. The index is calculated primarily on a world production-weighted basis comprised of the principal physical commodities futures contracts.

Spot Gold Price The price in spot markets for gold. In US dollar terms, spot gold is referred to with the symbol "XAU," which refers to the price of one troy ounce of gold in USD terms.

State Street Global Advisors Worldwide Entities

Abu Dhabi: State Street Global Advisors Limited, ADGM Branch, Al Khatem Tower, Suite 42801, Level 28, ADGM Square, Al Maryah Island, P.O Box 76404, Abu Dhabi, United Arab Emirates. Regulated by the ADGM Financial Services Regulatory Authority. T: +971 2 245 9000. **Australia:** State Street Global Advisors, Australia, Limited (ABN 42 003 914 225) is the holder of an Australian Financial Services License (AFSL Number 238276). Registered office: Level 14, 420 George Street, Sydney, NSW 2000, Australia. T: +612 9240-7600 F: +612 9240-7611. **Belgium:** State Street Global Advisors Fosbury & Sons Chaussée de La Hulpe, 185 B-1170 Watermael-Boitsfort, Belgium. T: 32 2 663 2036. F: 32 2 672 2077. SSGA Belgium is a branch office of State Street Global Advisors Ireland Limited. State Street Global Advisors Ireland Limited, registered in Ireland with company number 145221, authorized and regulated by the Central Bank of Ireland, and whose registered office is at 78 Sir John Rogerson's Quay, Dublin 2. **Canada:** State Street Global Advisors, Ltd., 1981 McGill College Avenue, Suite 500, Montreal, Qc, H3A 3A8, T: +514 282 2400 and 30 Adelaide Street East Suite 800, Toronto, Ontario M5C 3G6. T: +647 775 5900. **France:** State Street Global Advisors Ireland Limited, Paris branch is a branch of State Street Global Advisors Ireland Limited, registered in Ireland with company number 145221, authorized and regulated by the Central Bank of Ireland, and whose registered office is at 78 Sir John Rogerson's Quay, Dublin 2. State Street Global Advisors Ireland Limited, Paris Branch, is registered in France with company number RCS Nanterre 832 734 602 and whose office is at Coeur Défense - Tour A - La Défense 4 33e étage 100, Esplanade du Général de Gaulle 92 932 Paris La Défense cedex France. T: (+33) 1 44 45 40 00. F: (+33) 1 44 45 41 92. **Germany:** State Street Global Advisors GmbH, Brienner Strasse 59, D-80333 Munich. Authorized and regulated by the Bundesanstalt für Finanzdienstleistungsaufsicht ("BaFin"). Registered with the Register of Commerce Munich HRB 121381. T: +49 (0)89-55878-400. F: +49 (0)89-55878-440. **Hong Kong:** State Street Global Advisors Asia Limited, 68/F, Two International Finance Centre, 8 Finance Street, Central, Hong Kong. T: +852 2103-0288. F: +852 2103-0200. **Ireland:** State Street Global Advisors Ireland Limited is regulated by the Central Bank of Ireland. Registered office address 78 Sir John Rogerson's Quay, Dublin 2. Registered Number: 145221. T: +353 (0)1 776 3000. F: +353 (0)1 776 3300. **Italy:** State Street Global Advisors Ireland Limited, Milan Branch (Sede Secondaria di Milano) is a branch of State Street Global Advisors Ireland Limited, registered in Ireland with company number 145221, authorized and regulated by the Central Bank of Ireland, and whose registered office is at 78 Sir John Rogerson's Quay, Dublin 2. State Street Global Advisors Ireland Limited, Milan Branch (Sede Secondaria di Milano), is registered in Italy with company number 10495250960 - R.E.A. 2535585 and VAT number 10495250960 and whose office is at Via Ferrante Aporti, 10 - 20125 Milano, Italy. T: +39 02 32066 100. F: +39 02 32066 155. **Japan:** State Street Global Advisors (Japan) Co., Ltd., Toranomon Hills Mori Tower 25F 1-23-1 Toranomon, Minato-ku, Tokyo 105-6325 Japan. T: +81-3-4530-7380. Financial Instruments Business Operator, Kanto Local Financial Bureau (Kinsho #345), Membership: Japan Investment Advisers Association, The Investment Trust Association, Japan, Japan Securities Dealers' Association. **Netherlands:** State Street Global Advisors Netherlands, Apollo Building, 7th floor Herikerbergweg 29 1101 CN Amsterdam, Netherlands. Telephone: 31 20 7181701. SSGA Netherlands is a branch office of State Street Global Advisors Ireland Limited, registered in Ireland with company number 145221, authorized and regulated by the Central Bank of Ireland, and whose registered office is at 78 Sir John Rogerson's Quay, Dublin 2. **Singapore:** State Street Global Advisors Singapore Limited, 168, Robinson Road, #33-01 Capital Tower, Singapore 068912 (Company Reg. No: 200002719D, regulated by the Monetary Authority of Singapore). T: +65 6826-7555. F: +65 6826-7501. **Switzerland:** State Street Global Advisors AG, Beethovenstr. 19, CH-8027 Zurich. Registered with the Register of Commerce Zurich CHE-105.078.458. T: +41 (0)44 245 70 00. F: +41 (0)44 245 70 16. **United Kingdom:** State Street Global Advisors Limited. Authorized and regulated by the Financial Conduct Authority. Registered in England. Registered No. 2509928. VAT No. 5776591 81. Registered office: 20 Churchill Place, Canary Wharf, London, E14 5HJ. T: 020 3395 6000. F: 020 3395 6350. **United States:** State Street Global Advisors, 1 Iron Street, Boston, MA 02210-1641. T: +1 617 786 3000.

Important Risk Information

This communication is not intended to be an investment recommendation or investment advice and should not be relied upon as such.

The views expressed in this material are the views of the SPDR Gold Strategy Team through the period ended May 30, 2021 and are subject to change based on market and other conditions. This document contains certain statements that may be deemed forward-looking statements. Please note that any such statements are not guarantees of any future performance and actual results or developments may differ materially from those projected.

The information provided does not constitute investment advice and it should not be relied on as such. It should not be considered a solicitation to buy or an offer to sell a security. It does not take into account any investor's particular investment objectives, strategies, tax status or investment horizon. You should consult your tax and financial advisor.

The trademarks and service marks referenced herein are the property of their respective owners. Third party data providers make no warranties or representations of any kind relating to the accuracy, completeness or timeliness of the data and have no liability for damages of any kind relating to the use of such data.

The whole or any part of this work may not be reproduced, copied or transmitted or any of its contents disclosed to third parties without SSGA's express written consent.

Commodities and commodity-index linked securities may be affected by changes in overall market movements, changes in interest rates, and other factors such as weather, disease, embargoes, or political and regulatory developments, as well as trading activity of speculators and arbitrageurs in the underlying commodities.

Investing in commodities entails significant risk and is not appropriate for all investors.

Diversification does not ensure a profit or guarantee against loss.

For EMEA Investors: The information contained in this communication is not a research recommendation or 'investment research' and is classified as a 'Marketing Communication' in accordance with the Markets in Financial Instruments Directive (2014/65/EU). This means that this marketing communication (a) has not been prepared in accordance with legal requirements designed to promote the independence of investment research (b) is not subject to any prohibition on dealing ahead of the dissemination of investment research.

Standard & Poor's®, S&P® and SPDR® are registered trademarks of Standard & Poor's Financial Services LLC (S&P); Dow Jones is a registered trademark of Dow Jones Trademark Holdings LLC (Dow Jones); and these trademarks have been licensed for use by S&P Dow Jones Indices LLC (SPDJI) and sublicensed for certain purposes by State Street Corporation. State Street Corporation's financial products are not sponsored, endorsed, sold or promoted by SPDJI, Dow Jones, S&P, their respective affiliates and third-party licensors and none of such parties make any representation regarding the advisability of investing in such product(s) nor do they have any liability in relation thereto, including for any errors, omissions or interruptions of any index.

Distributor: State Street Global Advisors Funds Distributors, LLC, member FINRA, SIPC.

ID566300-3658928.1.1.GBL.RTL 0621
Exp. Date: 06/30/2022