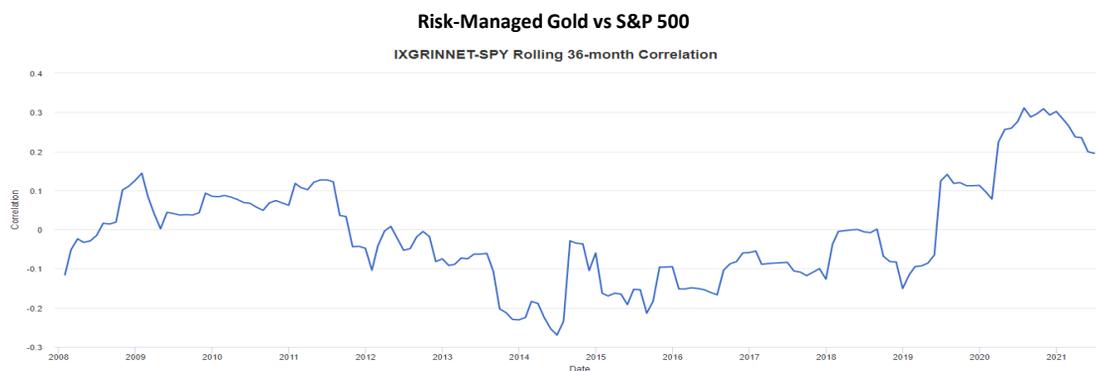
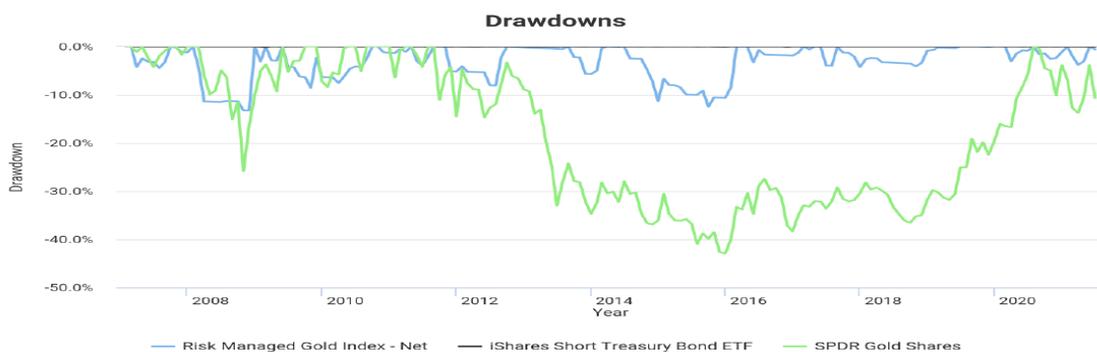


Overview

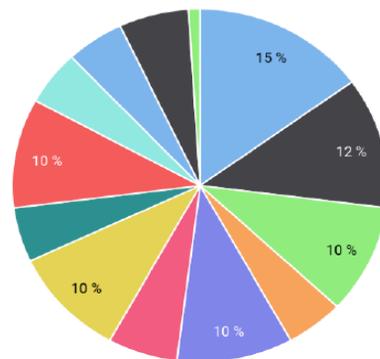
- The Palladium Risk Managed Gold Index (IDXGOLDX) seeks to provide tactical upside participation to the SPDR Gold MiniShares Trust (GLDM) while limiting drawdowns and downside volatility.
- The objective of the Risk Managed Gold Index strategy is to opportunistically deploy risk capital to GLDM when the risk – return profile of gold is favorable. The strategy also seeks to preserve capital when the risk/reward profile is unfavorable through an allocation to a risk-free asset represented by the iShares Short Treasury Bond (SHV) ETF.
- We positioned Risk Managed Gold as a short duration bond surrogate in client portfolios several months ago. The risk and return stream is meant to track that of short duration U.S. Treasury bonds. This approach is working with the strategy up 6.43%, vs -7.14% for long-only gold exposure (GLDM), and -0.04% for short duration U.S. Treasury bonds (SHV) on a year-to-date basis.
- The volatility profile of this risk-managed approach is much lower than that of a long-only approach to investing in gold. This is due to the relatively low drawdown risk (see chart below). *
- This approach is also highly liquid and is an excellent diversifier to equities and bonds (see charts below). *
- We are currently advocating a 10%-25% exposure to this risk managed approach in most client multi-asset class, diversified portfolios.



Current Gold Allocation in Palladium Growth Endowment Model

Palladium Growth Endowment - Current

Ticker	Name	Allocation
EUSA	iShares MSCI USA Equal Weighted ETF	15.00%
ANGL	VanEck Vectors Fallen Angel HiYld Bd ETF	12.00%
IXGRINNET	Risk Managed Gold Index - Net	10.00%
CASHX	Cash	1.00%
CIBR	First Trust NASDAQ Cybersecurity ETF	5.00%
ARKK	ARK Innovation ETF	10.00%
IXCOINNET	Crypto Opportunity Index - Net	6.00%
SCZ	iShares MSCI EAFE Small-Cap ETF	10.00%
IBUY	Amplify Online Retail ETF	5.00%
SCHF	Schwab International Equity ETF	10.00%
IEMG	iShares Core MSCI Emerging Markets ETF	5.00%
SKYY	First Trust Cloud Computing ETF	5.00%
MBB	iShares MBS ETF	6.00%

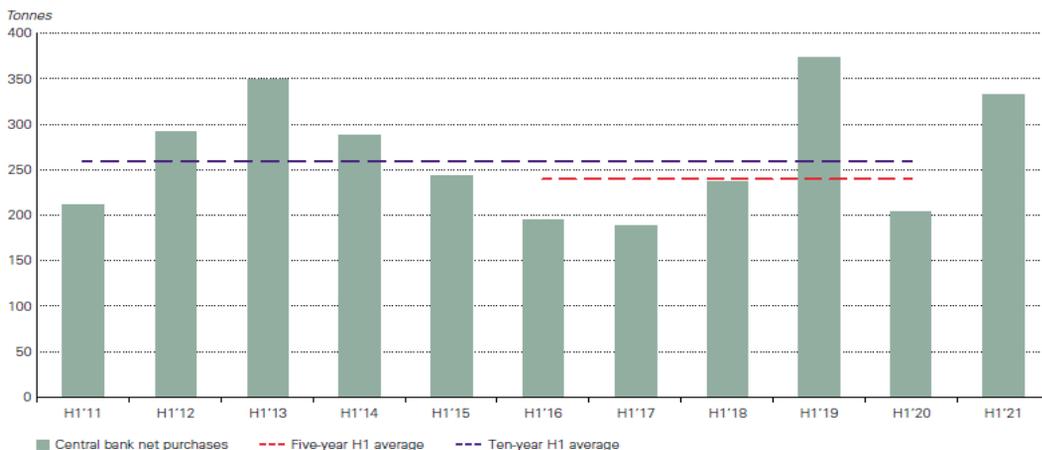


- EUSA
- IXGRINNET
- ARKK
- SCZ
- SCHF
- SKYY
- CASHX
- ANGL
- CIBR
- IXCOINNET
- IBUY
- IEMG
- MBB

Market Effects – Central Bank Demand for Gold

Central bank demand picked up during the first half of 2021

H1 net central bank purchases, tonnes*



*Data as at 30 June 2021. Note: Five-year average of H1 demand between 2016 and 2020, and ten-year average of H1 demand between 2011 and 2020. Source: Metals Focus, Refinitiv GFMS, World Gold Council

* Source: Portfolio Visualizer

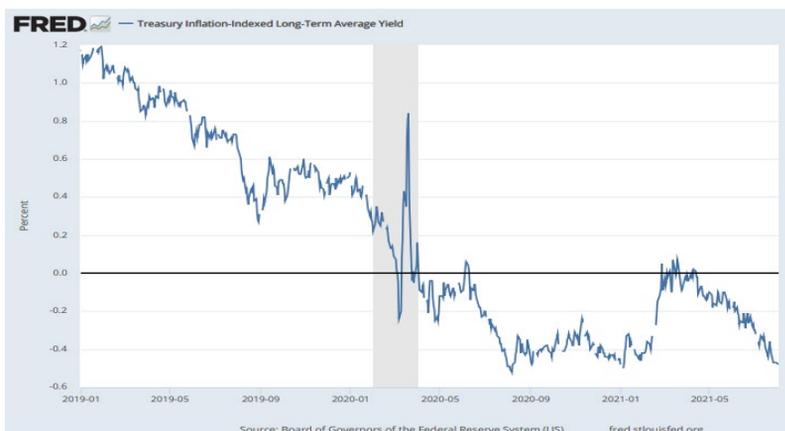
Market Effects – Demand for Gold in the Tech Sector

Tonnes	Q2'20	Q2'21	Y-o-y change	
Technology	68.1	80.0	↑	18%
Electronics	57.2	66.3	↑	16%
Other industrial	8.3	10.8	↑	31%
Dentistry	2.6	2.9	↑	12%

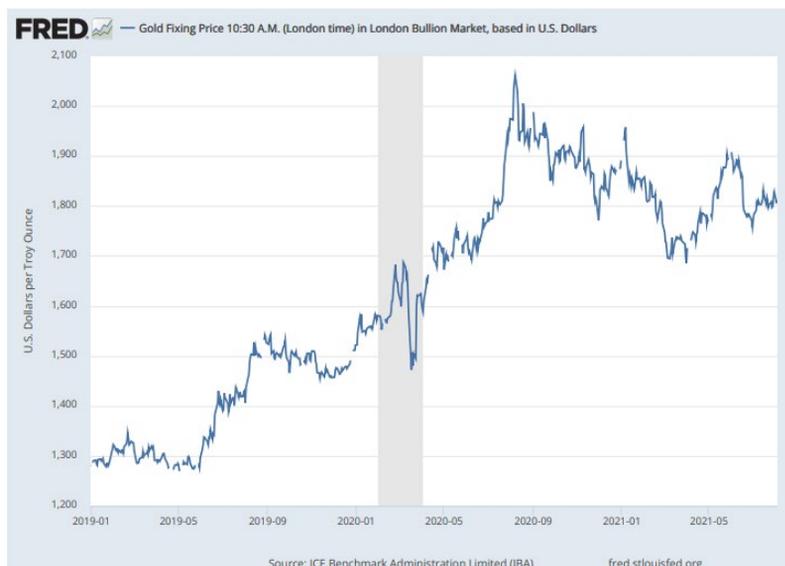
Source: Metals Focus, World Gold Council

Gold Prices vs Real Yields

Real Yields



Gold Prices



* Source: Portfolio Visualizer

Important Disclosures

Unless otherwise noted, performance information is hypothetical and NET of all associated fees and sales and trading expenses that an investor might incur (0.60%). Its not possible to invest directly in an index. Hypothetical or model performance results have certain limitations including, but not limited to: hypothetical results do not account for actual trading and market factors (such as liquidity disruptions, etc.). Simulated performance assumes frictionless transaction costs and no lag between signal generation and implementation. Simulated performance is designed with the benefit of hindsight and there can be no assurance that the strategy presented would have been able to achieve the results shown. There are frequently large differences between hypothetical performance results and actual results from any investment strategy."

The statements contained herein are based upon the opinions of Palladium LLC (Palladium) and the data available at the time of publication and are subject to change at any time without notice. This communication does not constitute investment advice and is for informational purposes only, is not intended to meet the objectives or suitability requirements of any specific individual or account, and does not provide a guarantee that the investment objective of any model will be met. An investor should assess his/her own investment needs based on his/her own financial circumstances and investment objectives. Neither the information nor any opinions expressed herein should be construed as a solicitation or a recommendation by Palladium or its affiliates to buy or sell any securities or investments or hire any specific manager.

Palladium prepared this Update utilizing information from a variety of sources that it believes to be reliable that may include, but not be limited to, custodians, mutual fund companies, investment managers, Morningstar, Bloomberg, other third-party service providers and in some cases as directed by the client or their representative. Palladium takes reasonable care to ensure the accuracy of such information but does not warrant that it is complete, accurate or adequate and it should not be relied upon as such.

It is important to remember that there are risks inherent in any investment and that there is no assurance that any investment, asset class, style or index will provide positive performance over time. Diversification and strategic asset allocation do not guarantee a profit or protect against a loss in a declining markets. Past performance is not a guarantee of future results. All investments are subject to risk, including the loss of principal. Portfolio positions referenced are subject to change at any time, your portfolio may not reflect the information referenced.

Palladium has sole discretion to change allocations to styles and vehicles at any time.

Index definitions:

"U.S. Large Cap" represented by the S&P 500 Index.

"U.S. Small Cap" represented by the Russell 2000 Index.

"International" represented by the MSCI Europe, Australasia, Far East (EAFE) Net Return Index.

"Emerging" represented by the MSCI Emerging Markets Net Return Index.

"U.S. Aggregate" represented by the Bloomberg Barclays U.S. Aggregate Bond Index.

"U.S. Government" represented by the Bloomberg Barclays U.S. Government Bond Index.

"U.S. Corporate" represented by the Bloomberg Barclays U.S. Credit Bond Index.

"U.S. High Yield" represented by the Bloomberg Barclays U.S. Corporate High Yield Index.

"Non-U.S. Developed" represented by the S&P International Treasury ex U.S. Index.

"Emerging Market Debt" represented by the JP Morgan GBI-EM Global Core Index

"REITs" represented by the FTSE North American Real Estate Investment Trust (REIT) Equity REITs Index.

"Commodities" represented by the Dow Jones Commodity Index .

"Managed Futures" represented by the Credit Suisse Managed Futures Index.

"Global Macro" represented by the Credit Suisse Global Macro Index

Palladium, LLC is a Registered Investment Adviser.

For more information about Palladium, as well as its products, fees and services, please refer to Palladium's website, www.palladium.com or call us at 888-886-4122; 610-304-6529