

Indexing Gold: Performance Dynamics and Strategies across S&P DJI

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Given gold's strong bull run since 2022, its increase in popularity is no surprise. As of year-end 2024, gold is the best-performing asset class in the 21st century,¹ and, since 2022, the [S&P GSCI Gold](#) has increased over 119%.²

Despite a correction in the latter half of October 2025, gold's role as a safe-haven asset remains intact. Trade tensions between China and the U.S., eurozone instability and a weak dollar have continued to spur both central bank buying and record flows into physical gold-backed ETFs.

In this paper, we will review the differences between physical and synthetic gold ETPs and some on-the-shelf solutions offered by S&P Dow Jones Indices (S&P DJI).

S&P DJI offers three investable measurements of the gold market: (1) the [S&P Commodity Producers Gold Index](#), (2) the [S&P GSCI Physical Gold Index](#) and (3) the S&P GSCI Gold.

Exhibit 1 shows the rebased performance of each index as of October 2025.³ The outperformance of the equities-based index is

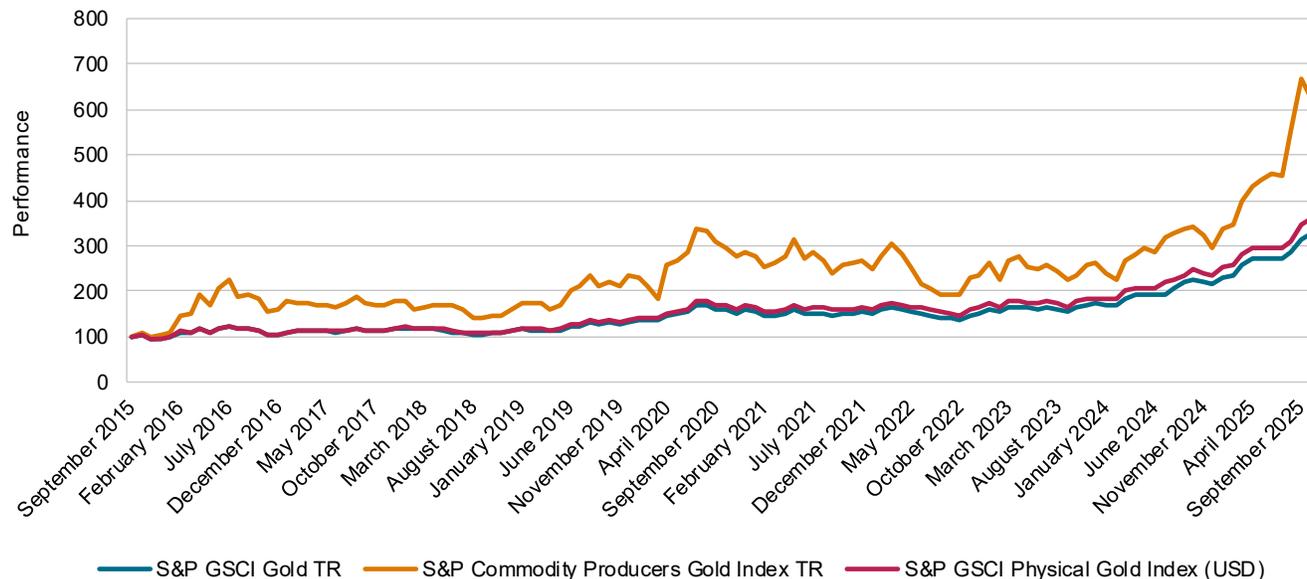
¹ The [S&P GSCI Gold](#) recorded 8.5% annualized return from the turn of the century to year-end 2024. See "[The King of the 21st Century Wears a Golden Crown](#)." Jan. 9, 2025. S&P Dow Jones Indices.

² This is based on the performance of S&P GSCI Gold as of Oct. 31, 2025.

³ Rebased Oct. 31, 2015.

apparent and in line with recent equities exceptionalism. However, as gold is often sought out as a hedge and diversifier against both inflation and equities, it's important to note that the S&P Commodity Producers Gold Index is 27% correlated with the [S&P 500® TR](#).⁴

Exhibit 1: Gold Indices Performance



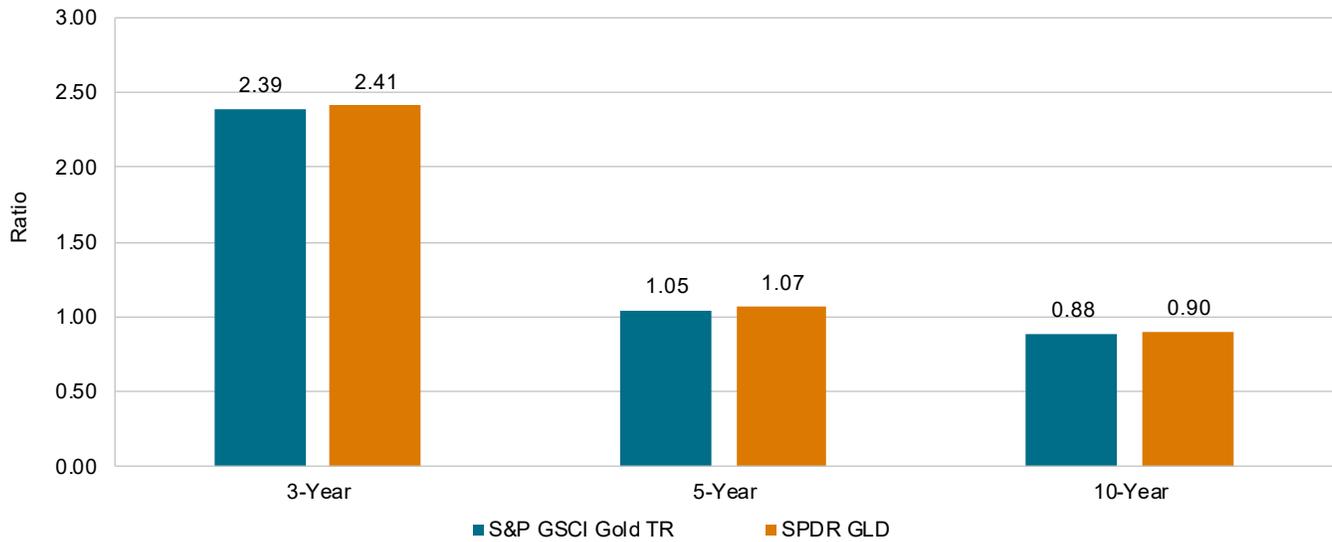
Source: S&PDow Jones Indices LLC. Data from Sept. 30, 2015, to Oct. 31, 2025. The S&P GSCI Physical Gold Index was launched Sept. 5, 2025. All data prior to such date is back-tested hypothetical data. Past performance is no guarantee of future results. Chart is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

Additionally, equity-based commodities are heavily affected by company performance outside of the precious metal; the S&P Commodity Producers Gold Index is only 84% correlated with the S&P GSCI Physical Gold Index, S&P DJI's spot index.⁵

Also apparent in Exhibit 1 is the strong correlation in performance between the S&P GSCI Physical Gold Index and the S&P GSCI Gold, which is 98% as of October 2025. Exhibit 2 shows the similarity in the performance of the S&P GSCI Gold (futures-based) and SPDR GLD, the largest physically backed gold ETP to date. Across the 3-, 5- and 10-year tenors, the difference in Sharpe ratios between the two is negligible.

⁴ On a 10-year basis, as of Oct. 31, 2025, based on monthly returns.

⁵ 10-year static correlation based on monthly index returns, as of Oct. 31, 2025.

Exhibit 2: Sharpe Ratios for SPDR GLD versus S&P GSCI Gold

Source: S&P Dow Jones Indices LLC, Refinitiv. Data as of Oct. 31, 2025. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

Like an ETF, physically backed gold ETPs own physical gold and work with authorized participants to create and redeem shares in the primary market. The authorized participants, among others, provide liquidity in the secondary market, where market participants can buy and sell shares on exchange.

Being physically backed, the trust relies on custodians to hold physical gold in London vaults. The standard for gold spot pricing is the London Bullion Market Association (LBMA), which accepts quotes from 15 financial institutions.

While a transparent mechanism for accessing gold, physically backed ETPs have concentrated counterparty risk and limited price discovery participants. Additionally, investment in ETPs must be fully funded.

Exhibit 3: Potential Advantages and Disadvantages of Alternative Gold Investment Instruments

Physical Gold ETPs	
Advantages	Disadvantages
<ul style="list-style-type: none"> – Backed by physical gold – Highly liquid – Transparent – Ease of execution and management – No specific derivatives experience or execution capability required – Physical delivery possible in some cases 	<ul style="list-style-type: none"> – Counterparty risk may not be clear – LMBA pricing mechanism – Investment must be fully funded – Custody highly concentrated – Gold not allocated to individual market participants – Produces no income – Difficult or costly to customize – Tracking error to spot gold price
Derivative-Based Gold Products	
Advantages	Disadvantages
<ul style="list-style-type: none"> – Highly liquid and large number of market participants – Transparent pricing mechanism – Ability to customize—short, leverage, tenure, multi asset – Capital efficient (not fully funded) – Counterparty risk well-understood – Physical delivery possible in some cases – Liquid options market for hedging 	<ul style="list-style-type: none"> – Requires specific derivatives experience and execution capability – Roll yield can detract from performance – Tracking error to spot gold price – Cost of capital efficiency and customization can lead to higher per-unit costs

Source: S&P Dow Jones Indices LLC. Table is provided for illustrative purposes.

In contrast, the derivatives market for gold, including over-the-counter (OTC) and on exchange, dwarfs the size of daily ETF trades. According to the World Gold Council, ETF trades accounted for only 2% of the average daily gold trading volumes in October 2025 YTD.⁶ The size and liquidity of the derivatives markets adds price transparency, and, for futures traded on exchange, counterparty risk is nearly eliminated.

Exhibit 4: Daily Average Gold Trading Volume (USD Billions)

Investment Vehicle	Full-Year 2024	YTD October 2025
OTC	127.7	175.7
Exchange	102.2	168.8
Gold ETFs	2.9	6.9

Source: World Gold Council. Data as of Oct. 31, 2025. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

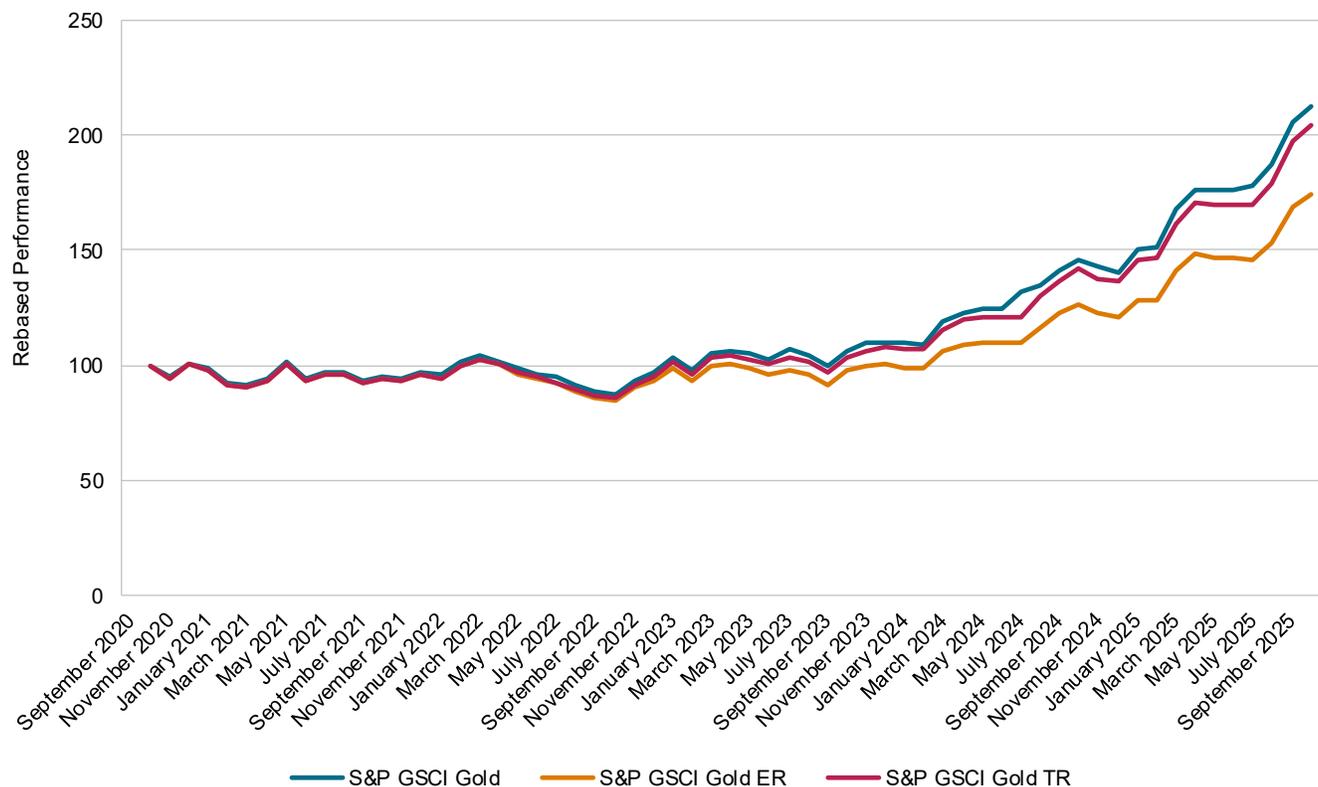
While requiring some sophistication, the derivatives market allows market participants to hold positions without being fully funded. The front-month COMEX gold contract requires a margin

⁶ [Trading volumes](#). Nov. 7, 2025. World Gold Trading Council

of only 25%—this requirement gives market participants the flexibility to earn yield on the additional 75% collateral.⁷

Exhibit 5 shows the performance difference between the S&P GSCI Gold, the S&P GSCI Gold ER and the S&P GSCI Gold TR. Gold has historically been in a contango market—meaning that the shape of the futures curve is downward sloping. Rolling futures in a contango market generates negative roll yield, which can be seen by the lower performance of the S&P GSCI Gold ER. However, most of the spot prices' returns are recovered by investing collateral in a yield-bearing account. The S&P GSCI Gold TR, like the rest of the S&P GSCI series, invests in three-month T-bills, but the yield and instrument options are open to the market participant.

Exhibit 5: Rebased Performance for S&P GSCI Gold, S&P GSCI Gold ER and S&P GSCI Gold TR



Source: S&P Dow Jones Indices LLC. Data as of Oct. 31, 2025. Past performance is no guarantee of future results. Chart provided for illustrative purposes.

The S&P GSCI Gold TR is a sub-index of the S&P GSCI and rolls the front-month contract before expiration. Unlike physically backed gold ETPs, futures-based strategies are more open to strategic enhancements. Exhibit 6 shows some on-the-shelf S&P GSCI Gold variants that have performed well during gold's recent rally.

⁷ [Gold Futures and Options](#). CME Group.

The [S&P GSCI Gold 2X Leveraged](#) provides an amplified measure of gold's performance, albeit at the expense of volatility. The [S&P GSCI Gold Multiple Contract](#) diversifies across futures contracts by investing 55%, 30% and 15% in the first-, second- and third-month contracts, respectively. The S&P GSCI Covered Call simulates a covered call strategy, which caps upside potential but allows for income generation on an otherwise unproductive asset.

Exhibit 6: Performance Metrics for S&P GSCI Gold Series

Index	Annualized Returns			Annualized Volatility			Risk-Adjusted Return		
	1-Year	3-Year	5-Year	1-Year	3-Year	5-Year	1-Year	3-Year	5-Year
S&P GSCI Gold 2X Leveraged TR	89.82	65.34	25.65	32.17	28.06	29.29	2.79	2.33	0.88
S&P GSCI Gold Multiple Contract (USD) TR	43.98	33.66	15.48	15.47	13.74	14.53	2.84	2.450	1.07
S&P GSCI Gold Covered Call TR	26.97	24.47	12.90	9.07	10.00	10.91	2.97	2.447	1.18

Source: S&PDow Jones Indices LLC. Data as of Oct. 31, 2025. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

For Further Reading

[Commodity Briefing Service, Gold October 2025 by Marlon Joaquin, Analyst, Metals and Mining Research, S&P Global Commodity Insights](#)

[Physical versus Synthetic Gold: Know Your Gold Exposure by Fiona Boal, Former Head of Commodities and Real Assets, S&P Dow Jones Indices](#)

Performance Disclosure/Back-Tested Data

The S&P GSCI Physical Gold Index was launched Sept. 5, 2025. All information presented prior to an index's Launch Date is hypothetical (back-tested), not actual performance, and is based on the index methodology in effect on the index launch date. However, when creating back-tested history for periods of market anomalies or other periods that do not reflect the general current market environment, index methodology rules may be relaxed to capture a large enough universe of securities to simulate the target market the index is designed to measure or strategy the index is designed to capture. For example, market capitalization and liquidity thresholds may be reduced. In addition, forks have not been factored into the back-test data with respect to the S&P Cryptocurrency Indices. For the S&P Cryptocurrency Top 5 & 10 Equal Weight Indices, the custody element of the methodology was not considered; the back-test history is based on the index constituents that meet the custody element as of the Launch Date. Also, the treatment of corporate actions in back-tested performance may differ from treatment for live indices due to limitations in replicating index management decisions. Complete index methodology details are available at www.spglobal.com/spdji. Back-tested performance reflects application of an index methodology and selection of index constituents with the benefit of hindsight and knowledge of factors that may have positively affected its performance, cannot account for all financial risk that may affect results and may be considered to reflect survivor/look ahead bias. Actual returns may differ significantly from, and be lower than, back-tested returns. Past performance is not an indication or guarantee of future results.

Please refer to the methodology for the Index for more details about the index, including the manner in which it is rebalanced, the timing of such rebalancing, criteria for additions and deletions, as well as all index calculations. Back-tested performance is for use with institutions only, not for use with retail investors.

S&P Dow Jones Indices defines various dates to assist our clients in providing transparency. The First Value Date is the first day for which there is a calculated value (either live or back-tested) for a given index. The Base Date is the date at which the index is set to a fixed value for calculation purposes. The Launch Date designates the date when the values of an index are first considered live: index values provided for any date or time period prior to the index's Launch Date are considered back-tested. S&P Dow Jones Indices defines the Launch Date as the date by which the values of an index are known to have been released to the public, for example via the company's public website or its data feed to external parties. For Dow Jones-branded indices introduced prior to May 31, 2013, the Launch Date (which prior to May 31, 2013, was termed "Date of introduction") is set at a date upon which no further changes were permitted to be made to the index methodology, but that may have been prior to the Index's public release date.

Typically, when S&P DJI creates back-tested index data, S&P DJI uses actual historical constituent-level data (e.g., historical price, market capitalization, and corporate action data) in its calculations. As ESG investing is still in early stages of development, certain datapoints used to calculate S&P DJI's ESG indices may not be available for the entire desired period of back-tested history. The same data availability issue could be true for other indices as well. In cases when actual data is not available for all relevant historical periods, S&P DJI may employ a process of using "Backward Data Assumption" (or pulling back) of ESG data for the calculation of back-tested historical performance. "Backward Data Assumption" is a process that applies the earliest actual live data point available for an index constituent company to all prior historical instances in the index performance. For example, Backward Data Assumption inherently assumes that companies currently not involved in a specific business activity (also known as "product involvement") were never involved historically and similarly also assumes that companies currently involved in a specific business activity were involved historically too. The Backward Data Assumption allows the hypothetical back-test to be extended over more historical years than would be feasible using only actual data. For more information on "Backward Data Assumption" please refer to the [FAQ](#). The methodology and factsheets of any index that employs backward assumption in the back-tested history will explicitly state so. The methodology will include an Appendix with a table setting forth the specific data points and relevant time period for which backward projected data was used.

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