In Gold We Trust® Report

Special

The Optimal Gold Allocation

How Much Gold Does Your Portfolio Need?

incrementum

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In Gold We Trust Report

We would like to express our gratitude to our Premium Partners for supporting the *In Gold We Trust* report 2024

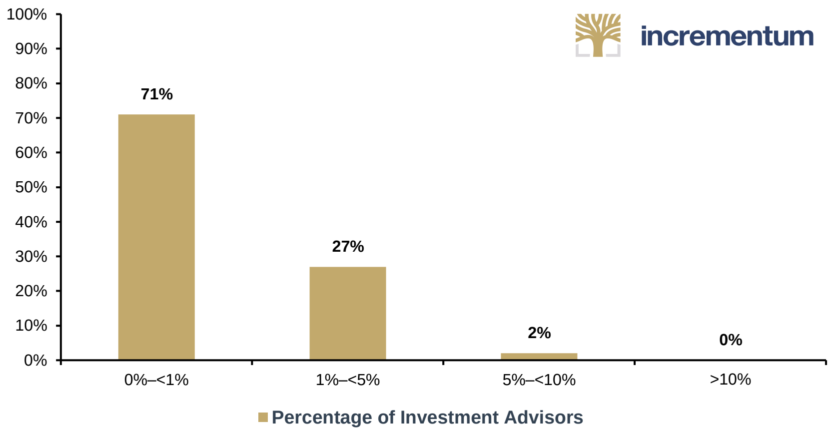
The Optimal Gold Allocation: How Much Gold Does Your Portfolio Need?

The most important thing you can have is a good strategic asset allocation mix. So, what the investor needs to do is have a balanced, structured portfolio – a portfolio that does well in different environments […] We don't know that we're going to win. We have to have diversified bets.
Ray Dalio

"Gold remains on everyone's lips but is far from being in all portfolios" as we noted in our recently published *In Gold We Trust* report 2024 "The New Gold Playbook". This underinvestment comes at a time when gold is hitting one all-time high after another. It seems that most investors—especially in the West—are missing out on the gold rally. As the momentum builds, they remain reluctant to admit they have been absent from the party. The risk now is that they may join the celebration when it is already in full swing, and by then, the "price of admission" could be much higher.

A recent ARC survey reveals that 75% of surveyed managers have minimal to no exposure to gold, with none exceeding a 10% allocation. This mirrors a Bank of America study, where 71% of US advisors allocate less than 1% of their portfolios to gold. This indifference also extends to gold mining stocks, which have fallen out of favor due to poor performance. Thus, for many investors, gold remains the missing piece of the portfolio puzzle.

Gold Allocation of Investment Advisors, 2023



Source: BofA Global Research, Crescat Capital, Incrementum AG

The optimal asset allocation depends on a variety of factors. Van Vliet and Lohre highlight in a study that incorporating gold into a portfolio can significantly reduce downside risk. For investors with a 10-year investment horizon, they estimate that an optimal gold allocation is around 13%. Those with a higher tolerance for interest rate risk may find that gold offers even greater diversification benefits than it does for investors with shorter-term portfolios.

A study by SPDR supports these findings, showing that adding gold to a portfolio enhances the Sharpe ratio, reduces risk metrics such as standard deviation and maximum drawdown, and simultaneously delivers higher returns.

Volatility creates lower returns and thus is itself a risk. If you can reduce the volatility in a portfolio, then the compounded return moves higher, closer to the simple average return of the weighted investments in the portfolio. This is how lower portfolio price volatility increases portfolio return over time.
Richard A. Ferri

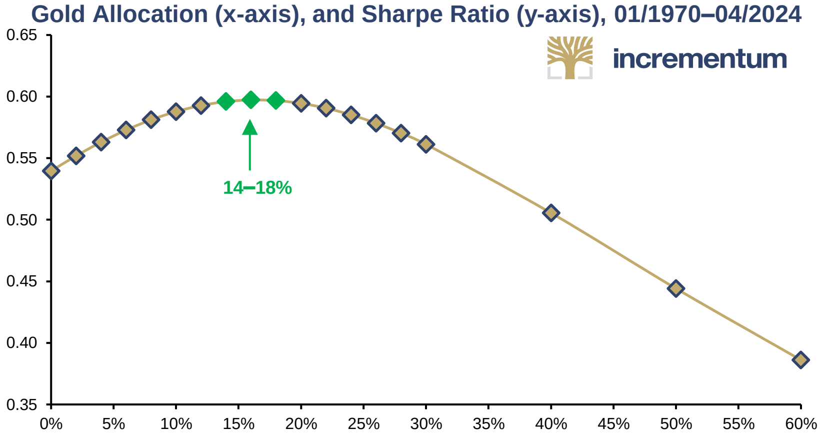
When considering gold, it's important to distinguish between two types: safe-haven gold and performance gold. Safe-haven gold, typically held in physical form, acts as a crisis-resistant component of a portfolio. Performance gold, on the other hand, includes investments that can benefit disproportionately from rising gold prices but come with higher risks, making active management advisable. This category primarily includes gold mining stocks, along with silver and silver mining stocks. Sprott's research makes a similar distinction between gold and gold-like investments, suggesting that a diversified portfolio should allocate 10–15% to gold, with 10% in physical gold and up to 5% in higher-risk gold-like investments.

In response to the poor performance of the traditional 60/40 portfolio in 2022, WisdomTree conducted a study on gold as a resilient asset class and its optimal allocation. Using a Monte Carlo simulation with 20,000 scenarios across different 10-year periods, the research found that a gold allocation of 16–19% in a portfolio maximizes risk-adjusted returns.

Various studies suggest a gold allocation between 10% and 19%, depending on the investment horizon and other assets. Even the most conservative recommendations exceed the typical gold exposure found in standard asset allocations. Building on these insights, we analyzed the impact of different gold allocations within an equity/bond portfolio, covering the period from 1970 to 2024. This analysis utilized monthly data on gold, as well as the total return indices of the S&P 500 and 10-year US Treasury bonds.

Our findings indicate that integrating gold into an equity/bond portfolio positively influences the Sharpe ratio, with the optimal allocation falling between 14–18%. However, increasing the gold allocation beyond this range results in a decline in the Sharpe ratio, underscoring the importance of a balanced approach.

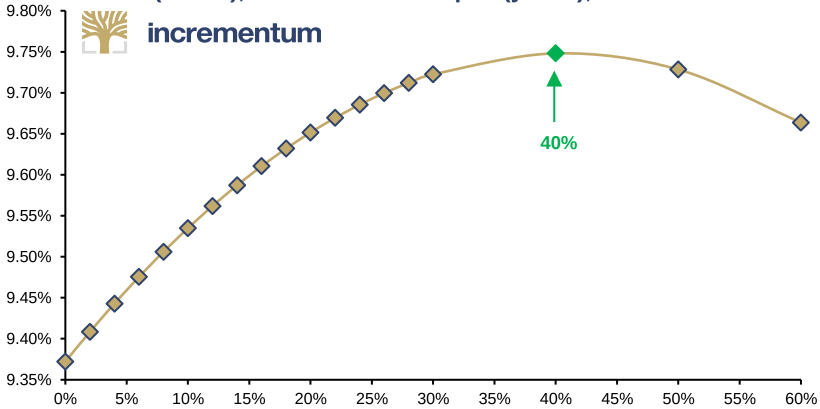
Optimal Gold Allocation for Risk-Adjusted Returns Maximization: Gold Allocation (x-axis), and Sharpe Ratio (y-axis), 01/1970–04/2024



Source: Robert J. Shiller, Reuters Eikon, Incrementum AG

A 40% gold allocation might offer the highest returns, but it also comes with significantly higher volatility and drawdowns.

Optimal Gold Allocation for Performance Maximization: Gold Allocation (x-axis), and Performance p.a. (y-axis), 01/1970–04/2024



Source: Robert J. Shiller, Reuters Eikon, Incrementum AG

I like gold because it is a stabilizer; it is an insurance policy.
Kevin O'Leary

For risk-conscious investors, our analysis indicates that a 14–20% gold allocation offers a great balance. This aligns with most research, which supports a 10–19% range.

Optimal Gold Allocation in a Stock/Bond Portfolio, 1970–2024

Gold Allocation	Performance p.a.	Annualized Volatility	Max. Drawdown	Sharpe Ratio
0%	9.37%	8.28%	-27.00%	0.54
2%	9.41%	8.16%	-26.38%	0.55
4%	9.44%	8.05%	-25.76%	0.56
6%	9.48%	7.96%	-25.13%	0.57
8%	9.51%	7.89%	-24.50%	0.58
10%	9.53%	7.84%	-23.87%	0.59
12%	9.56%	7.82%	-23.46%	0.59
14%	9.59%	7.81%	-23.07%	0.60
16%	9.61%	7.83%	-22.67%	0.60
18%	9.63%	7.87%	-22.28%	0.60
20%	9.65%	7.92%	-21.97%	0.59
22%	9.67%	8.00%	-22.10%	0.59
24%	9.69%	8.10%	-22.24%	0.59
26%	9.70%	8.22%	-22.37%	0.58
28%	9.71%	8.35%	-22.51%	0.57
30%	9.72%	8.51%	-22.65%	0.56
40%	9.75%	9.49%	-25.99%	0.51
50%	9.73%	10.77%	-31.55%	0.44
60%	9.66%	12.25%	-36.76%	0.39

Source: Robert J. Shiller, Reuters Eikon, Incrementum AG

In the world of sports, new and innovative playbooks have the power to redefine the game. This dynamic is no less true in the realm of asset allocation. Each asset class holds a distinct and crucial role, and when strategically utilized, gold can emerge as a true game-changer within the portfolio, particularly in the context of the new gold playbook presented in the *In Gold We Trust* report 2024 "The New Gold Playbook".

Amidst the looming specters of recession, geopolitical tensions, fiscal erosion, and the burgeoning burden of interest payments, the current economic environment is primed for a more substantial allocation to gold. All these factors underline that it makes sense to reconsider and possibly expand the conventional boundaries of gold's role in a well-structured portfolio.

Our quantitative analysis shows that in the past an optimal gold allocation has been in the range of 14–20%. However, given the sheer magnitude and diversity of the uncertainties that now define our global economic landscape, it may be prudent to consider an even more robust allocation. A 25% allocation to gold could serve as a strategic bulwark. This elevated allocation should be maintained as long as these destabilizing factors persist, ensuring that the portfolio is not only resilient but also well-positioned to capitalize on the protective qualities that gold uniquely offers in times of economic turbulence.

Key Takeaways

- Financial investors are currently significantly underinvested in gold when considering an optimal risk-adjusted portfolio allocation. Recent studies reveal that the majority of investors hold less than 1% of their portfolios in gold, making gold the missing puzzle piece in the portfolios.
- Recent research from economists and asset managers, including SPDR, Sprott, and WisdomTree, suggests that the optimal gold allocation lies between 10% and 19%.
- The new rules in the gold market necessitate a reevaluation of traditional asset allocation and portfolio construction. Our historical analysis indicates that an optimal gold allocation typically falls within the range of 14% to 20%. Yet, given the current market environment – characterized by geopolitical uncertainties and recession fears – a higher allocation of around 25% seems prudent.

About Us

Ronald-Peter Stöferle, CMT

Ronnie is managing partner of Incrementum AG and responsible for Research and Portfolio Management.

He studied business administration and finance in the USA and at the Vienna University of Economics and Business Administration, and also gained work experience at the trading desk of a bank during his studies. Upon graduation he joined the research department of Erste Group, where in 2007 he published his first *In Gold We Trust* report. Over the years, the *In Gold We Trust* report has become one of the benchmark publications on gold, money, and inflation.

Since 2013 he has held the position as reader at scholarium in Vienna, and he also speaks at Wiener Börse Akademie (the Vienna Stock Exchange Academy). In 2014, he co-authored the international bestseller *Austrian School for Investors*, and in 2019 *The Zero Interest Trap*. He is a member of the board of directors at Tudor Gold Corp. (TUD), and Goldstorm Metals Corp. (GSTM). Moreover, he is an advisor to VON GREYERZ AG, a global leader in wealth preservation in the form of physical gold stored outside the banking system.

Mark J. Valek, CAIA

Mark is a partner of Incrementum AG and responsible for Portfolio Management and Research.

While working full-time, Mark studied business administration at the Vienna University of Business Administration and has continuously worked in financial markets and asset management since 1999. Prior to the establishment of Incrementum AG, he was with Raiffeisen Capital Management for ten years, most recently as fund manager in the area of inflation protection and alternative investments. He gained entrepreneurial experience as co-founder of philoro Edelmetalle GmbH.

Since 2013 he has held the position as reader at scholarium in Vienna, and he also speaks at Wiener Börse Akademie (the Vienna Stock Exchange Academy). In 2014, he co-authored the book *Austrian School for Investors*.

Incrementum AG

Incrementum AG is an owner-managed and FMA-licensed investment and asset management company based in the Principality of Liechtenstein. Our core competence is the management of investment funds and asset management. We evaluate investments not only on the basis of the global economic situation, but also always see them in the context of the current global monetary system. Independence and self-reliance are the cornerstones of our philosophy, which is why the five partners own 100% of the company.

The publishing rights for the *In Gold We Trust* report were transferred to Sound Money Capital AG in November 2023. The *In Gold We Trust* report will continue to be co-branded with the Incrementum brand as usual.

www.incrementum.li

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Company Descriptions

Agnico Eagle

Agnico Eagle is a senior Canadian gold mining company, and third-largest gold producer in the world, with operating mines in Canada, Australia, Finland and Mexico, and a pipeline of high-quality exploration and development projects in these countries and the United States.

www.agnicoeagle.com

Asante Gold

Asante Gold has developed its +400,000 oz per year production profile through organic growth and focused acquisitions. We believe in responsible development and strive to be Ghana's foremost gold producer and employer of choice.

www.asantegold.com

Caledonia Mining

Caledonia Mining is a dividend-paying gold producer and explorer, with a strong growth profile; since November 2021 it has acquired Maligreen, Motapa and Bilboes. Its vision is to become a Zimbabwe focused multi-asset gold producer.

www.caledoniamining.com

DMCC

DMCC has played a key role in making Dubai a top gold market, known as 'the city of gold', with 25% of global trade, mostly through its free zone. DMCC's infrastructure includes a precious metals vault, jewelry facilities, and gold coins. It also boosts gold trade through platforms like DGCX and DMCC Tradeflow.

www.dmcc.ae

ELEMENTUM – More for sure!

For almost two decades, Elementum has been your competent partner for strategic solutions in physical gold and silver for private individuals, families, employers and employees.

www.elementum-international.ch

EMX Royalty

EMX has a 20+ year track record of smart deals. Experiencing a record year in 2023 with USD 37mn in cashflow, EMX looks forward to a bright future with diversification into gold, copper, battery metals, strong partners like Franco Nevada and multi-decade paying royalties.

www.emxroyalty.com

Endeavour Mining

As a leading global gold producer and largest in West Africa, Endeavour is committed to the principles of responsible mining and delivering sustainable value to all stakeholders. Endeavour is listed on the LSE and TSE under the symbol EDV.

www.endeavourmining.com

Endeavour Silver

Endeavour Silver operates 2 high-grade underground silver mines in Mexico. Advancing Terronera Project & exploring to become premier silver producer. Shares offer industry-leading beta to silver price, with over 60% revenue from silver.

www.edrsilver.com

First Majestic Silver

First Majestic is a silver and gold producer that owns and operates three producing mines in Mexico, one gold project in USA, and several development and exploration assets. We are also launching our own minting facility, First Mint, in USA.

www.firstmajestic.com

flexgold – a brand of SOLIT

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www.flexgold.com

Hecla Mining Company

Founded in 1891, Hecla Mining Company (NYSE: HL) is the largest silver producer in the United States. In addition to operating mines in Alaska, Idaho, and Quebec, Canada, the Company is developing a mine in the Yukon, Canada, and owns a number of exploration and pre-development projects in world-class silver and gold mining districts throughout North America.

www.hecla.com

Karora Resources

Karora is a TSX-listed gold producer (TSX: KRR) with operations in the tier 1 jurisdiction of Western Australia. Karora has a proven management team and is growing its production to 170-185 koz for 2024.

www.karoraresources.com

Kinross Gold

Kinross Gold is a senior gold mining company headquartered in Toronto, with a diverse portfolio of mines and projects located in the United States, Canada, Brazil, Chile, and Mauritania.

www.kinross.com

McEwen Mining

McEwen Mining, a gold and silver producer, owns 48% of Los Azules copper project. Led by Chairman Rob McEwen (USD 220mn investment, USD 1/yr salary),we focus on boosting productivity and shareholder value.

www.mcewenmining.com

Minera Alamos

Minera Alamos is a new gold producer going through the ramp up of its Santana mine and fast tracking permitting for its second flagship mine: Cerro de Oro. Specializing in low capex builds the Minera model remains insulated from inflationary pressures.

www.mineraalamos.com

Münze Österreich

Internationally renowned for its precious metal processing, Münze Österreich AG produces Austria's circulation coins, Vienna Philharmonic bullion coins in gold, platinum and silver, and gold bars.

www.muenzeoesterreich.at

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www.philoro.com

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www.regency-silver.com

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Sprott is a global leader in precious metals and critical materials investments, with expertise in the mining industry. We offer investments in gold, silver, platinum and palladium, and manage the world's largest physical uranium trust.

www.sprott.com

Tudor Gold

TUDOR GOLD Corp. is an exploration company in the Golden Triangle region of B.C., Canada, which is advancing the Treaty Creek Project that hosts an Indicated Mineral Resource of 27.9 Moz AuEQ @ 1.19 g/t AuEQ including 6.0 Moz AuEQ @ 1.25 g/t AuEQ of Inferred.

www.tudor-gold.com

Victoria Gold

Victoria Gold (VGCX) is Building a Mining Company Focused on the Yukon. Their Dublin Gulch property in central Yukon includes the Eagle Gold Mine – a long-life mine with high likelihood for mine life extension at depth & along strike. Exploration potential is excellent.

www.vgcx.com

VON GREYERZ

VON GREYERZ is the global and industry leader in the acquisition and storage of precious metals, providing investors in over 90 countries direct personal access to the largest and safest private gold vault in the world, located in the Swiss Alps.

www.vongreyerz.gold

West Red Lake Gold Mines

West Red Lake Gold Mines Ltd. is a mineral exploration company focused on advancing and developing its flagship Madsen Gold Mine and Rowan property in the prolific gold district of Red Lake, Ontario, Canada.

www.westredlakegold.com

Ximen Mining

Ximen Mining (TSX.V XIM) is focused on responsible development, sustainable mining and exploration of its precious metals properties in southern BC, Canada, as it advances its Kenville Gold mine.

www.ximenminingcorp.com