



HEYOKHA  
BROTHERS

## The Return of Real Money



Reserve currency and superpower: Same circus, different clowns?

*Gold has always been the ultimate hedge against uncertainty, and today's crises—currency debasement, soaring debt, and geopolitical risks—reinforce its value. Despite a rally, gold remains undervalued and under-owned, with miners lagging even further, offering significant upside. As central banks stockpile gold and monetary disruption looms, the case for gold—and its leveraged plays—has never been stronger. This report examines the forces driving the next gold bull run and why now is the time to act.*

**"Gold is money. Everything else is credit"**

- J.P. Morgan

**Special Report**  
**Q4 2024**



**HEYÓKHA  
BROTHERS**

## Contents

<b>The Story .....</b>	<b>3</b>
<b>Ahead of the Curve: A Look Back at Our Predictions .....</b>	<b>6</b>
Winning Calls: Gold's rise.....	6
Flooded with Cash, Drowning in Inflation.....	6
Deficits are out of control: Debt costs are eating America's lunch .....	9
<b>The Gold Paradigm Has Entered a New Supercycle.....</b>	<b>14</b>
1) 2022: The freezing of Russian assets – The weaponization of the US dollar.....	14
2) 2023: BRICS and the revolt against the dollar – The creation of a parallel system .....	15
3) 2025: Trump 2.0 – The point of no return for global fragmentation .....	16
BRICS and central banks: Gold strategists.....	17
Follow the smart money: Central banks are hoarding gold like never before .....	17
BRICS flexes hard: a bigger bloc with bigger ambitions.....	19
<b>Gold Price Leads Gold Equities—For Now .....</b>	<b>20</b>
The gold paradox .....	20
<b>A Market of Extremes.....</b>	<b>23</b>
<b>Gold Miners: The Case for Re-Rating and How We See It .....</b>	<b>26</b>
Historical leverage to gold prices: A pattern with temporary disruptions .....	26
Reaping operating and financial leverage in a gold boom.....	28
Unlocking gold reserves and its hidden option value.....	30
M&A cycle likely to resume: When digging isn't enough, buy the mine .....	33
<b>Is it Hard to Imagine Gold at \$10,000 or even \$20,000/oz?.....</b>	<b>35</b>
1. Gold bull markets have happened in inflationary and deflationary periods of time.....	35
2. Gold can soar past \$28,000 if the Gold to Fed monetary base ratio were to revert to its mean .....	36
3. Gold can reach \$9,000/oz if the M2 Supply to Gold Price Ratio were to drop again.....	37
4. Gold can hit \$22,000/ oz if it were to go back to historic Dow to Gold lows.....	37
5. Gold can reach over \$14,000/ oz if the gold to foreign debt ratio reverts to mean.....	38
<b>Final Note.....</b>	<b>39</b>
<b>References.....</b>	<b>41</b>



**HEYOKHA  
BROTHERS**

## The Story

Back in 1971, when President Nixon severed the U.S. dollar's link to gold, an ounce of gold was just \$35. A standard 400-ounce gold bar? A mere \$14,000. Fast forward to today, and that same bar will set you back over \$1 million. Has gold skyrocketed in value? Yes and no. What we're really seeing is the relentless debasement of fiat currencies.

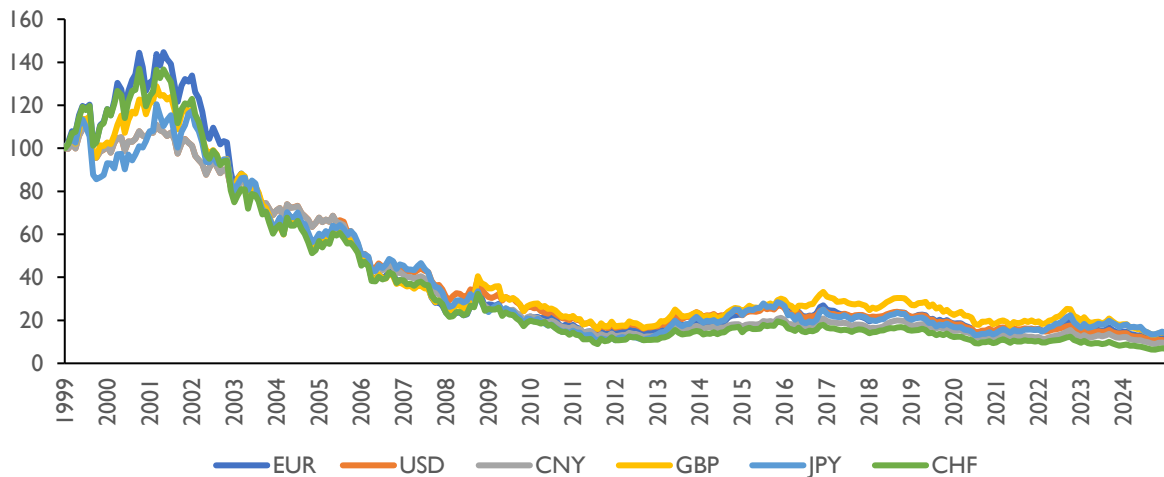
### **\$1 Million Gold Bar!**

COST OF 400 OZ GOLD BAR	
1971	\$14,000
2000	\$115,000
2024	\$1,000,000

Source: GoldSwitzerland by Von Greyerz

Governments have been on a money-printing spree, fuelling ever-growing deficits and runaway public spending. Meanwhile, interest payments on ballooning debt are devouring government revenues, trapping them in a brutal dilemma: stop printing and risk economic collapse, or keep printing and watch fiat currencies wither away. Spoiler alert: They kept printing.

**Figure 1: Since 1999 major currencies have lost ~90% of their value against gold currencies relative to gold price**



Source: Bloomberg



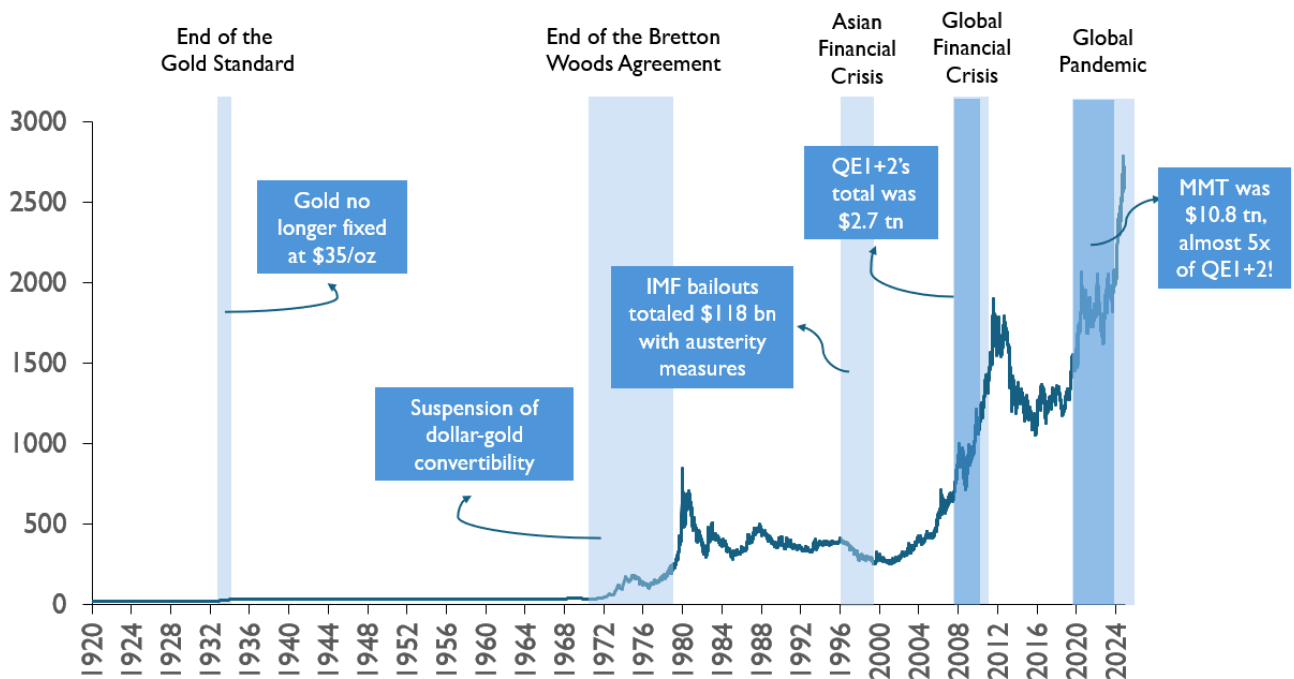
**HEYOKHA  
BROTHERS**

This isn't just a U.S. issue—it's a global phenomenon. Inflation and currency devaluation affect everyone, from everyday savers to billion-dollar family offices. When inflation bites, governments often turn to financial repression—a subtle yet powerful strategy that forces savers and investors to absorb national debt through artificially low interest rates, capital controls, and even forced savings programs.

Throughout history, major shifts in the global monetary system have fueled gold bull markets, underscoring gold's status as the ultimate hedge against instability. In the 1930s, abandoning the gold standard drove gold prices higher as paper money lost its backing. When Nixon dismantled the Bretton Woods system in 1971, gold surged again as the world transitioned to a fiat-based system. The 1998 Asian financial crisis was another wake-up call, as previously pegged currencies collapsed, triggering what financial historian Russell Napier dubbed the "No Name Revolution."

**Figure 2: Change in monetary systems coincide with gold rallies**

Gold price, US\$/oz



Source: Bloomberg

History offers a cautionary tale: no global reserve currency lasts forever. From the Roman denarius to the French franc, the British pound, and now the US dollar, the rise and fall of dominant currencies is a recurring theme. In fact, of all the currencies that existed in 1700, only 20% are still in use today—proof that monetary empires crumble more often than we like to admit. Recognizing this risk, central banks worldwide are bolstering their gold reserves—a politically neutral asset immune to manipulation or unilateral sanctions.

When paper money fades into history, gold remains. This shift is particularly evident in Eastern central banks, which are systematically selling US treasuries to increase their gold holdings. In 2023, the Bank for International Settlements (BIS) declared gold a strategic Tier 1 asset, underscoring its top-rated significance in safeguarding financial stability.



**HEYÓKHA  
BROTHERS**

The numbers tell the story. In the 1920s, \$5,000 could buy a house—equivalent to 250 ounces of gold. Today, that same \$5,000 won't even make a down payment, but 250 ounces of gold, worth roughly \$700,000, could still buy that same house. Gold hasn't changed—the dollar has.

Today, we are once again on the brink of a monetary upheaval. Government debt is skyrocketing, central banks are printing money like no tomorrow, inflation is persistent, and geopolitical instability is escalating. These forces, combined with an ongoing de-dollarization trend and the growing recognition of gold as a strategic asset, are setting the stage for the next great gold bull run.

To us, all of this seems quite obvious, and has done for over 4 years, yet gold makes up just 0.5% of global financial assets today, down from 5% in the 1960s. Even a small shift back to 2–5% would send prices soaring. Family offices allocate, at best, around 1% to gold, and central banks' gold reserves remain far below the 74% levels seen in the 1980s.

This is why gold prices are soaring. It's why a single gold bar now costs over \$1 million and why gold remains at the center of what may be the most significant financial story of our time. The question is not if paper money will lose its real value—it is when.



"MAN! WITH ITS EVER-RISING VALUE, YOU HAVE ENOUGH GOLD IN YOUR MOUTH TO ENSURE A GREAT RETIREMENT ... OF COURSE WITHOUT TEETH!"

CartoonStock.com



*FRANZISCA  
2009*

CartoonStock.com

## Ahead of the Curve: A Look Back at Our Predictions

### Winning Calls: Gold's rise

#### Flooded with Cash, Drowning in Inflation

One of our key observations over the past 7–8 years was that we had been living through a multi-decade era of very low interest rates and rising valuations in assets like equities. But we warned that once real rates turned negative, that era would end — and the old lens for understanding markets would no longer apply.

In our IQ 2018 report, we argued that the nearly 40-year cycle of low rates and low inflation was breaking down. We predicted a return to a 1970s-style environment: high inflation, high rates, and stagnant equities. Back then, the S&P 500 went nowhere for over a decade, while gold soared 24-fold.

By IQ 2020, with rates turning negative and no easy way out, we saw the writing on the wall. It would mean that it would be extremely difficult for governments to raise rates. Governments were backed into a corner — MMT wasn't just theory anymore, it became reality. And with deficits blowing out and the money printers humming, it was only a matter of time before CPI inflation caught up.

#### Insight in Retrospect: Reports That Got It Right

Publications	Our call	How it played out
 <p><b>"We Build Arks"</b> Q1. 2018</p>	<p>When you get to the point as extreme as negative real rates, we must be near the top of the disinflation cycle/beginning of an inflation cycle.</p>	<p>Post-2019, U.S. real rates dipped negative as nominal cuts outpaced steady inflation, deepening when COVID-era policies slashed rates to near-zero.</p>
 <p><b>"Turning massive challenges into meaningful change"</b> Q1. 2020</p>	<p>Gold is the go-to investment amid economic uncertainty.</p>	<p>Gold price remains in the bull market territory, defying the odds of higher interest rates. Highlighting the elevated geopolitical risk premium.</p>
 <p><b>"History: a better guide than good intentions"</b> Q2. 2020</p>	<p>Inflation is inevitable and could surge driven by Modern Monetary Theory (MMT).</p>	<p>Massive money printing occurred, and the U.S. is now facing a fiscal deficit that is ballooning.</p>
 <p><b>"The New Deal or Old Deal"</b> Q3. 2020</p>	<p>Governments will be forced to increase social assistance programs to prevent civil unrest, which could further drive inflation.</p>	<p>Large-scale deficit spending and debt monetization weakened fiat currencies and lead to higher inflation</p>

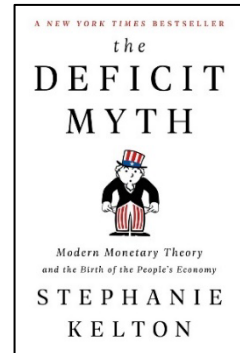
We reported our learnings and reflections into special reports, available on our website



HEYÓKHA  
BROTHERS

Amid the 2020 Great Lockdown, MMT emerged from obscurity. This economic idea posits that governments can fund expenditures by printing their own currency instead of relying on taxes. Stephanie Kelton's *The Deficit Myth* encapsulates this philosophy, emphasizing potential benefits and inherent risks.

Reflecting on this theory, a well-known example from the world of golf comes to mind. Tiger Woods, in his pursuit of improved performance, made changes to his swing that initially seemed beneficial but ultimately placed significant strain on his body. Over time, these adjustments led to chronic injuries, including multiple knee surgeries and severe back issues. Daniel Kahneman's *Thinking Fast and Slow* mirrors this dilemma: "fast thinking" sees a quick fix, while "slow thinking" evaluates long-term outcomes.



MMT enables governments to print money to fund expenditures without needing to rely on taxes fostering economic growth through increased liquidity and reduced borrowing costs. It acts as a rapid-response tool in crises, such as war or pandemics, where swift action can mitigate disasters. Keynesian echoes resonate: "In the long run, we are all dead." Governments, as lenders of last resort, can stabilize economies with immediate measures.

However, unchecked money printing can erode public confidence in a currency, akin to cigarettes functioning as prison currency—a trust-based system. Historian Yuval Harari highlights money's value as a shared story; its collapse could spark hyperinflation. Milton Friedman's theories show how an accelerated money velocity could destabilize economies.

The COVID-19 pandemic illustrated these risks. Governments applied "MMT-lite," printing money to fund stimulus packages. In the U.S., the money supply grew by 33% from February 2020 to February 2021, leading to stark inflation and a rising federal debt, which surpassed \$31 trillion by October 2022.

This strain is compounded by global inflation, supply chain bottlenecks, and geopolitical tensions.

MMT's allure lies in its immediate impact, but its risks demand caution. A Keynesian middle ground—limited money printing for essential projects—may offer equilibrium. Like the golf shortcut, unchecked MMT can become a hardwired habit, challenging to reverse. Balancing MMT with fiscal responsibility is daunting, yet essential. Success depends on prudence, as striking this balance is as challenging as playing golf with two clubs.

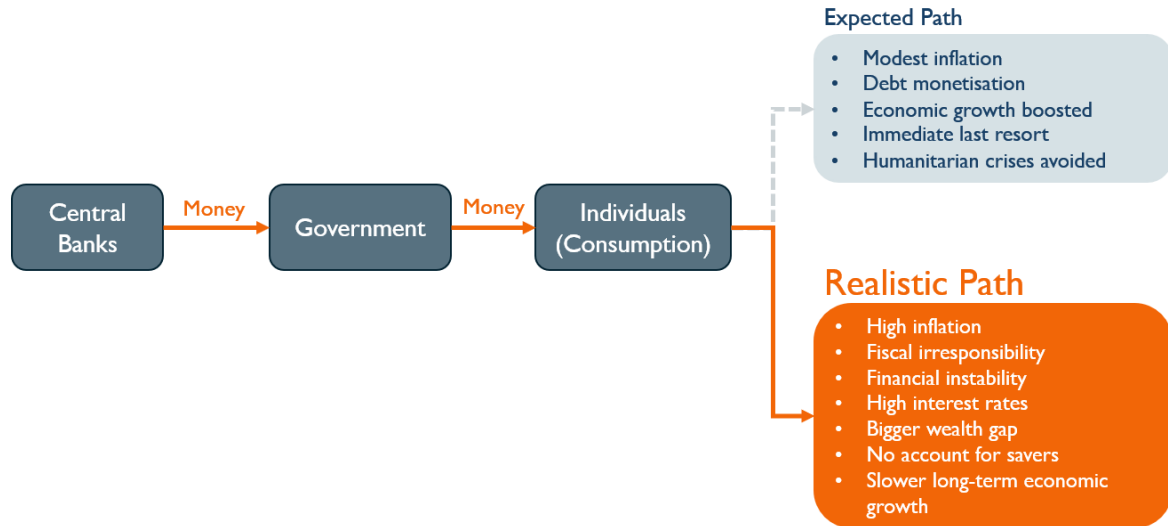
Unlike the asset price inflation that followed the global financial crisis, this time around, inflation spilled over into the broader economy.



*"Let us suppose now that one day a helicopter flies over this community and drops an additional \$1,000 in bills from the sky, which is, of course, hastily collected by members of the community. Let us suppose further that everyone is convinced that this is a unique event which will never be repeated."*

**-Milton Friedman on Helicopter Money-**

**Figure 3: Expectations vs. Reality of the Modern Monetary Theory (MMT)'s implementation**

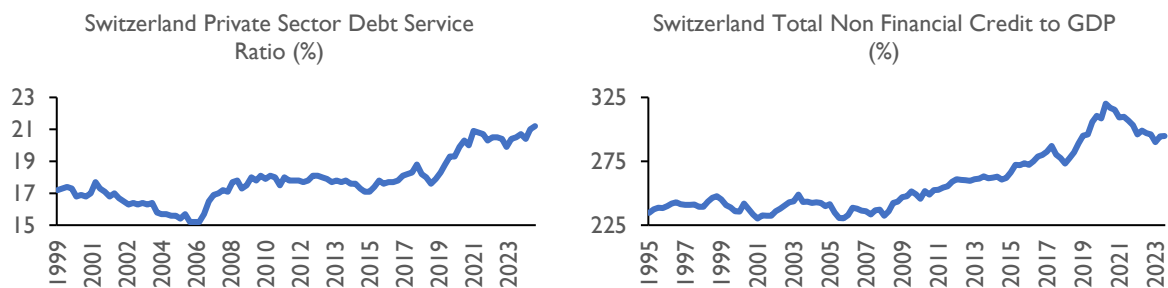


Source: Heyokha Research

As inflation heats up, real interest rates turn negative, further fuelling demand for gold as a store of value. This dynamic has a direct impact on the attractiveness of various asset classes. Rising interest rates and inflation erode the appeal of equities (although this has not yet happened with the S&P 500 at an all-time high), particularly in an environment where higher discount rates diminish valuations.

When inflation strikes, governments often turn to financial repression—a strategy that forces savers and investors to absorb the burden of national debt. This can include artificially low interest rates, capital controls, and even conscripting private savings for public sector needs. Even Switzerland, a nation with a strong tradition of respecting private property rights, has resorted to such measures under economic duress.

**Figure 4 & 5: Debt is ticking up**



Source: BIS

The consequences of financial repression are far-reaching. By limiting investment options and eroding real returns on savings, it pushes investors toward assets that preserve value outside of traditional financial systems. Gold, immune to government control and devaluation, becomes an increasingly attractive choice. Adding to this bullish scenario is the growing trend of rising deficits.



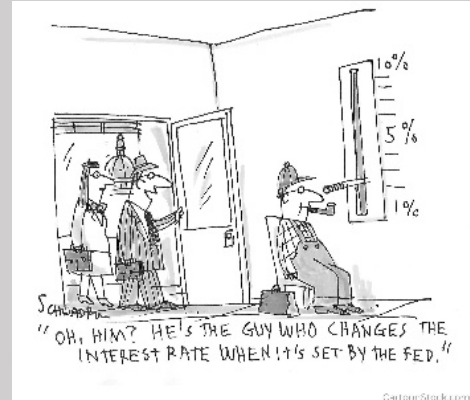


HEYÓKHA  
BROTHERS

## Yield Curve Control (YCC): Risks and Gold's Surge

Yield curve control (YCC) is a crisis-era monetary tool used to cap bond yields, but history shows it often comes with nasty side effects: market distortions, inflation, and weaker currencies. When real rates dive under YCC, gold tends to soar. Three notable cases offer lessons:

1. U.S. Federal Reserve (1942–1951)
  - o Capped yields to finance WWII, stabilizing borrowing costs.
  - o Resulted in post-war inflation peaking at 17%.
  - o Ended with the 1951 Accord, restoring Fed independence after tensions over inflation.
2. Bank of Japan (2016–Present)
  - o Pegged 10-year yields at 0%, cutting volatility and locking in low rates.
  - o BOJ now holds over half of JGBs, distorting markets.
  - o Yen weakened 18% in 2022, driving up imported inflation.
3. Reserve Bank of Australia (2020–2021)
  - o Capped 3-year bond yields at 0.1% during COVID.
  - o Abrupt exit triggered bond sell-off and hit RBA credibility.



### Gold's Winning Streak Under YCC:

- Real Yields Dive, Gold Rises: Japan's -5% real yields in 2022 sparked a 90% gold rally in yen terms; Australia saw a 25% gold surge during YCC.
- Weaker Currency Boosts Gold: YCC signals loose policy, weakening currencies. Japan's yen and Australia's dollar slumped under YCC, boosting gold demand.
- Market Confidence Shaken: YCC distorts bond markets and fuels fear of fiscal dominance. This often drives investors to gold as a hedge.

**Key Takeaway:** YCC may steady markets in a pinch but often inflames inflation and erodes trust in fiat currencies. History shows gold thrives when central banks suppress real rates. With debt and inflation still front and center, gold's status as a safe-haven asset looks stronger than ever.

## Deficits are out of control: Debt costs are eating America's lunch

The U.S. government has been swiping its fiscal credit card like there's no tomorrow, using debt-financed stimulus to keep the economy afloat. The result? A ballooning national debt and soaring interest payments that eat up a growing chunk of tax revenue. The real kicker? Rising interest rates make this burden even heavier, forcing the government to spend more on servicing debt instead of funding essential programs. It's like making only the minimum payment on your credit card—except in this case, the lenders are foreign central banks, and they are starting to sweat.

As we highlighted in our 3Q 2024 De-dollarization report, the U.S. budget deficit has hit a staggering \$1.8 trillion—the third-largest on record. Even more concerning, interest payments alone now account for over 50% of that deficit, reaching \$1.2 trillion.

Time and again, history has foreshadowed where this road leads. Economist Peter Bernholz, in his book *Monetary Regimes and Inflation*, found that nearly all cases of hyperinflation have roots in massive public deficits. When the deficit crosses 20% of GDP, economic stability isn't just at risk—it's on borrowed time. While the U.S. isn't there yet, the current trajectory raises serious red flags. How long before investors demand higher yields, or worse, start questioning the dollar's dominance?

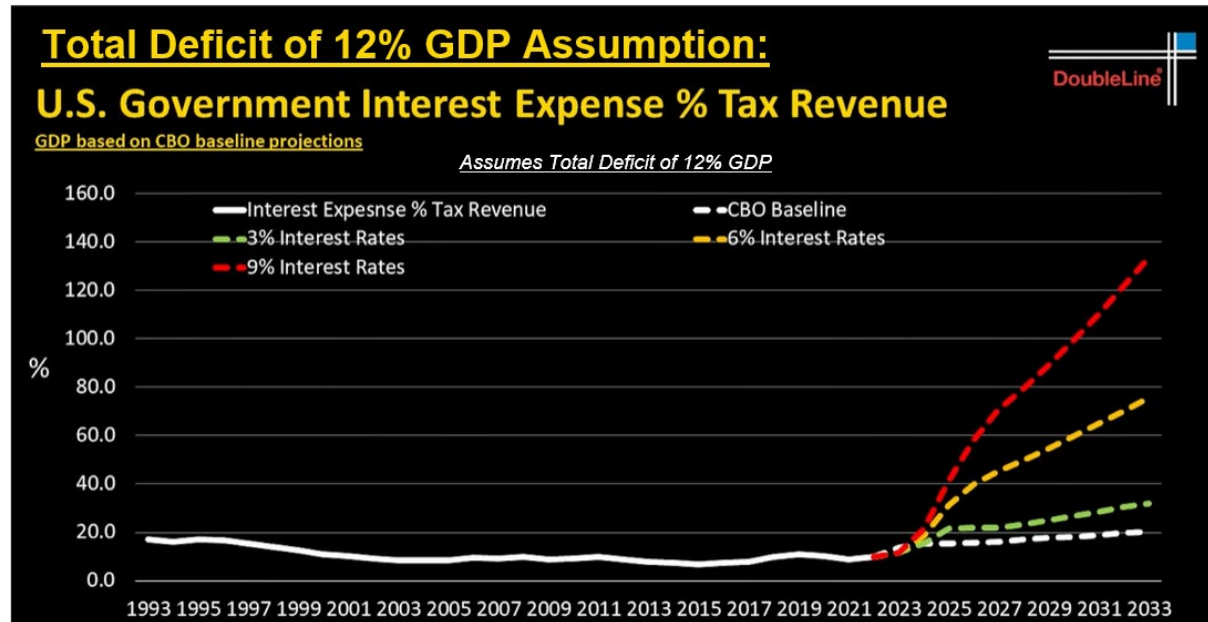


Q3 2024 Special Report on De-dollarization found in our website

The unsustainability of this trajectory is becoming increasingly evident. With the U.S. deficit already around 8% of GDP, an increase to 12% could push interest expenses to consume an overwhelming portion of tax revenue, potentially exceeding 100% of revenue if interest rates climb to 6% or higher.

**Figure 6: Rising rates and deficits are driving the US towards a debt spiral**

Projected scenarios of U.S. interest expense as a percentage of tax revenue if total deficits as a % of GDP were to increase



Source: Bloomberg, DoubleLine Capital

Note: Forecast is an estimate of current total deficit of 6-7% (in a non-recessionary economy) plus the historical average increase of 6% during recessions as of September 30, 2023



**HEYÓKHA  
BROTHERS**

If you thought Uncle Sam's credit card bill was bad before, brace yourself. We recently met with global strategist Chris Wood at our office, and he highlighted that net interest payments and entitlements have ballooned to a jaw-dropping 96% of U.S. federal government revenues in the 12 months to January 2025. Yes, you read that right—96%!

Nearly every dollar the government collects is being swallowed up just to service its debt and fund mandatory programs like Social Security and Medicare. That leaves little room for, well... anything else. Defense? Infrastructure? Education? Good luck!

Cue the cavalry. Elon Musk and his team at DOGE (Department of Government Efficiency) are now trying their hand at the impossible: reigning in America's runaway deficit. And while their efforts might eventually pay off, any meaningful reduction in the deficit will likely take time. Plus, let's not forget—belt-tightening often comes with a side effect: slower economic growth.

As gold investors, that's music to our ears. Whether the deficit gets trimmed or not, the environment still looks golden. Fiscal strain, slower growth, and the ever-present risk of market jitters keep gold's safe-haven appeal firmly intact.

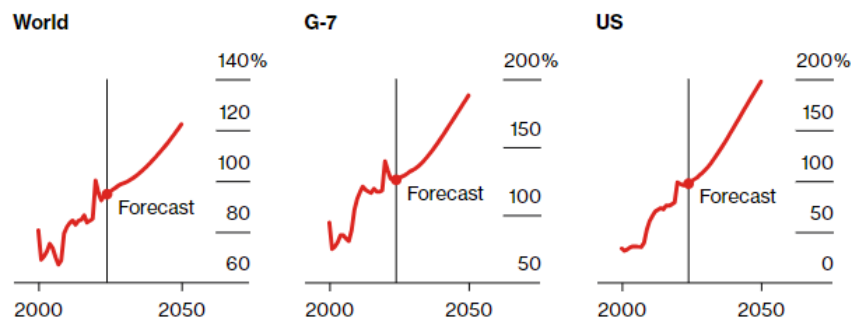
After all, when the world's largest economy is spending almost everything it earns just to stand still—you don't need to be a rocket scientist to see why holding a little gold makes sense.

Globally, total public debt has reached over \$100 trillion, raising concerns about the sustainability of fiscal policies. As fiscal imbalances grow, countries are turning to alternatives like gold, cryptocurrencies, and other currencies to hedge against instability and the risks associated with dollar-denominated assets.

---

**Figure 7: Public debt is expected to expand globally**

*Performance of public debt as proportion of GDP*



Source: Bloomberg Economics

---

The fiscal warning signs are becoming harder to ignore. With rising debt levels and persistent inflationary pressures, a mix of expiring Trump-era tax cuts, potential tax hikes, and a continued dovish stance on monetary policy could end up extending the inflation story rather than resolving it.

In this context, gold stands out as a reliable store of value. As inflation gradually chips away at the purchasing power of fiat currencies like the U.S. dollar, gold's role becomes increasingly relevant—not just as a hedge, but as a strategic asset in a shifting economic landscape.



**HEYÓKHA  
BROTHERS**

Short-term economic data can often mislead, prompting overreactions and masking deeper, more enduring trends. While the long term is notoriously difficult to forecast, certain inflationary drivers are clear: rising government spending on re-militarization, demographic shifts, and the restructuring of global trade.

These forces are likely to keep inflation elevated over time. If U.S. 10-year Treasury yields push beyond 5% and credit spreads widen, the stakes will escalate. As Jamie Dimon warned in September 2024, 'It becomes a big deal if we have stagflation (i.e., recession with inflation), and I would not rule that out.' In such a scenario, the combination of stagnant growth and persistent inflation could amplify systemic risks, further underlining gold's role as a hedge in uncertain times.

---

**“If something cannot go on forever, it will stop.”**

- Herbert Stein, American economist and 9th chairman of the Council of Economic Advisers (1986)

---

Against this backdrop, gold's prospects remain robust. Inflationary pressures, rising interest rates, and structural supply constraints all point toward higher prices. Meanwhile, gold miners stand ready to deliver outsized returns as the valuation gap closes, offering investors a compelling opportunity to capitalize on this unique moment in the market cycle.

Investors might soon find themselves in a situation where they don't have to ask, "How much gold should I own?" but rather, "How much fiat can I afford to hold?" After all, at the rate things are going, keeping too much cash might soon feel like holding a melting ice cube—only less refreshing.



HEYÓKHA  
BROTHERS

## Has the Market Overpriced Dollar Strength?

Finance & economics | Battles to come

### Why a stronger dollar is dangerous

It sets the stage for a nasty new things

EDITORS' PICK

### Super-Strong Dollar And Trade Conflict Fears Add To U.S. Equity Risks

Nick Sargen Contributor ©  
Nick writes about economics, financial markets and investing.

FORTUNE

### The dollar will stay strong if the world keeps 'shoveling all of its savings' into US stocks, strategist says

According to several media reports, a near-consensus among banks and asset managers in 2025 predicts further dollar strength, buoyed by expectations of tax cuts, deregulation, and rising interest rates under the incoming Trump administration. Markets believe the "Trump trade"—a focus on business-friendly policies while avoiding extremes—will keep the dollar strong, as higher U.S. yields attract global investors and tariffs reduce dollars leaving the country.

However, this consensus might be overly complacent. Three key factors could challenge the dollar's trajectory:

1. **Tariffs:** While tariffs may provide short-term support to the dollar by reducing imports, they tend to weaken the broader economy over time, leading to lower interest rates and a softer currency in the medium to long term. Additionally, trade partners may respond by devaluing their currencies or implementing counter tariffs, offsetting any dollar-strengthening effects.
2. **Trump's Weak-Dollar Intentions:** Despite market expectations, Trump's vocal desire for a weaker dollar shouldn't be dismissed. Historical parallels, like the Plaza Accord of 1985, suggest the administration could pursue multilateral agreements to adjust exchange rates, though replicating such deals in today's fragmented global economy would be difficult.
3. **Geopolitical Shifts:** The dollar's value is underpinned by U.S. security guarantees, which incentivize countries to hold reserves in dollars. If these guarantees are scaled back, the dollar's dominance in global reserves—and its value—could erode.

While the dollar has rallied strongly since September, assumptions driving its strength—like the sustainability of U.S. economic policy and global confidence in the greenback—may prove fragile. Short-term gains could give way to longer-term vulnerabilities, leaving room for surprises ahead.



HEYOKHA  
BROTHERS

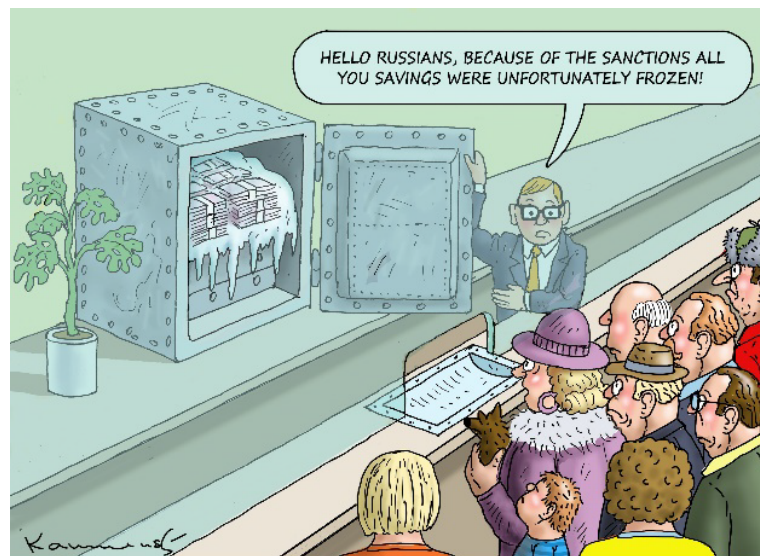
## The Gold Paradigm Has Entered a New Supercycle

Back in 2020, we made a bold call: gold and gold miners were poised for a major resurgence. The warning signs were there—soaring fiscal deficits, unchecked money printing, rising inflation, and the slow but undeniable erosion of trust in fiat currencies. Then came COVID-19, a crisis that exposed just how fragile the global financial system had become.

That was just the beginning. Since then, the world has been shaken by three seismic events that have shattered illusions of financial stability and pushed gold to center stage as the only true safe-haven asset. The signal couldn't be clearer: this isn't just another gold bull cycle—it's a structural shift. And it's accelerating.

### 1) 2022: The freezing of Russian assets – The weaponization of the US dollar

Imagine waking up one morning to find that your bank account has been frozen—not because you've been convicted of a crime, but because a big bully decided you no longer deserved access to your own money. That's exactly what happened to Russia in 2022 when nearly half of its \$640 billion in foreign reserves was seized, and its access to the SWIFT banking system was cut off overnight.



For the past century, central banks viewed their foreign reserves—predominantly held in U.S. dollars, euros, and other Western currencies—as risk-free stores of value, even in times of geopolitical tension. That illusion shattered in an instant. If a G20 economy can be financially robbed and exiled, who's next?

What if this happened to you? It's not just central banks reassessing their holdings—anyone with significant wealth is now asking hard questions. Do they really want a private bank account with a U.S. financial institution? Where should they keep their personal gold holdings? Even once-trusted vaults, like those of HSBC in Hong Kong and UBS in Zurich, are now being scrutinized for geopolitical risk.

Many countries are repatriating their gold altogether, recognizing that reserves held abroad are at risk of being frozen, confiscated, or even handed over to geopolitical adversaries. What if China is next? What if your country is next? If you still think money in a bank is safe, think again. The game has changed. Central banks know it. Smart investors know it.

Where do you keep money when even the world's largest financial institutions can't guarantee its safety? The answer: gold. Unlike fiat reserves, gold is immune to political whims, sanctions, or financial blacklisting. Central banks have responded accordingly, triggering one of the largest gold-buying sprees in history.

## 2) 2023: BRICS and the revolt against the dollar – The creation of a parallel system

Think of the global economy like a massive grocery store, where the U.S. dollar is the only currency accepted. For decades, everyone played along. But after seeing what happened to Russia, the BRICS nations (Brazil, Russia, India, China, and South Africa – at that time) realized they needed a new store where the rules weren't dictated by Washington. The 2023 BRICS Summit was their first major step toward building it. No longer content with being dependent on the dollar, BRICS nations accelerated plans for alternative financial systems, including potential gold-backed trade settlements, which they currently call BRICS Pay.



*"I'm sorry, sir, but your cash is expired."*

CartoonStock.com

China, for its part, has taken a major step by allowing insurance companies to invest directly in gold for the first time. A new pilot program permits ten of the country's largest insurers, including PICC Property & Casualty Co. and China Life Insurance Co., to allocate up to 1% of their assets to bullion—potentially unlocking \$27 billion for gold purchases. This is part of a broader push to counter the weaponization of the dollar and accelerate de-dollarization efforts.

Further underscoring China's gold ambitions, the Shanghai Gold Exchange has become the world's largest purely physical spot gold exchange. Its growing prominence reflects China's rising influence in the gold market and signals a shift toward a more multipolar financial landscape in the precious metals space.

What does this mean for BRICS member states and other emerging markets? For instance, Indonesia historically maintained a neutral stance in global conflicts. However, these events are forcing nations to pick sides. The world is polarizing, and as economic power shifts toward the BRICS bloc, neutrality may no longer be an option.

With trade alliances changing and global finance being weaponized, every country must make a choice—align with the old system, be part of the new one, or stand alone. With BRICS now controlling nearly half the world’s population and a growing 28 % share of global GDP, the shift is not speculation—it’s happening. The question is what side are you on?

### 3) 2025: Trump 2.0 – The point of no return for global fragmentation



If you thought things were tense before, Trump’s return in 2025 has poured gasoline on the fire. His administration is bringing back tariffs, trade wars, and economic blackmail. Interestingly, traders have started moving gold from the UK’s London Metal Exchange (LME) to the U.S.-based COMEX. Now, more than ever, the jurisdiction where you store your gold can have a critical impact on your wealth and security.

In his first term, he projected strength against adversaries like Russia, China, North Korea and Iran. Now? He’s brainstorming ways to annex Canada, buy Greenland, and reclaim the Panama Canal. While these ideas may sound like late-night comedy fodder, they tie into a larger strategy to gain control of natural resources and strategic assets whilst reasserting American dominance in its own backyard—call it the Monroe Doctrine 2.0.

But this kind of bluster injects uncertainty, prompting central banks and investors to flock to gold, the ultimate geopolitical comfort blanket.

#### The Munroe Doctrine:

Introduced in 1823 by President James Monroe, it became a key pillar of U.S. foreign policy, aimed at limiting European interference in the Americas. Initially framed as a defensive stance to safeguard the region’s sovereignty, it later morphed into a broader tool for justifying U.S. dominance. Over time, it was frequently invoked to exert influence over neighbouring countries, often under the pretence of protecting their independence. Ultimately, it marked the Americas as a U.S. sphere of influence and laid the groundwork for numerous interventions in the region's history.



Source: Bill Bramhall



Trump's re-election means America is once again upending the so-called "rules-based international order," which has been undermined by the very Western power that once championed it. Institutions like the United Nations (UN), the World Trade Organization (WTO), and the International Monetary Fund (IMF), which were established in the post-1945 era, no longer reflect the realities of today's world.

As Trump's second administration withdrew from key international agreements such as the Paris Climate Accord and the World Health Organization (WHO), the pretense of a cooperative global order has faded.

With financial alliances shifting and protectionism on the rise, gold is no longer just an investment—it's a necessity.

### BRICS and central banks: Gold strategists

These three events aren't isolated—they're part of a broader fracture in the global financial system.

For emerging markets and BRICS, reliance on the U.S. dollar leaves them vulnerable to economic pressure, accelerating de-dollarization and gold accumulation. Beyond BRICS, the EU is rumored to push for gold reserves equal to ~4% of GDP, reinforcing the shift toward hard assets.

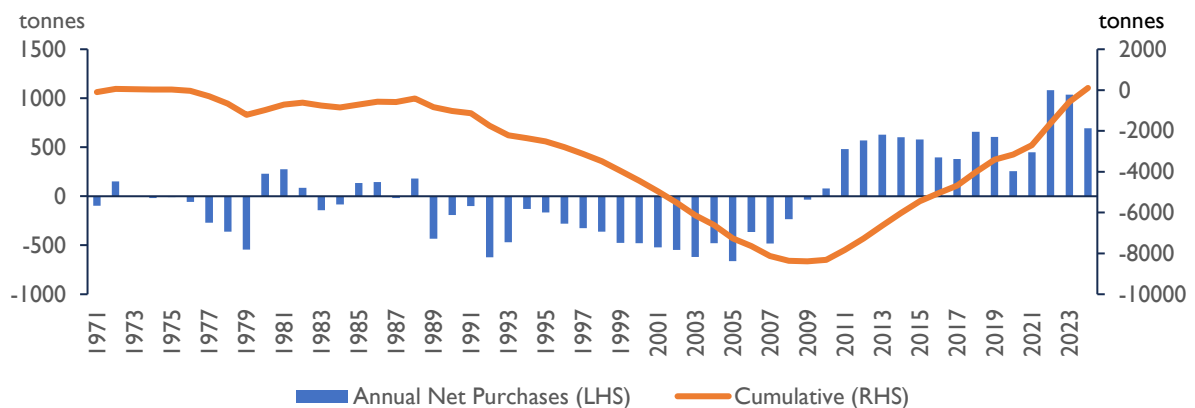
A multipolar financial system is emerging, with gold at its core.

### Follow the smart money: Central banks are hoarding gold like never before

Since 2009, central banks have been net buyers of gold. Between 2020-2024 alone, they purchased nearly 4,000 tonnes, marking one of the greatest periods of gold accumulation in history. In 4Q 2024, central banks have bought a net 333 tonnes of gold, up 194 tonnes in 3Q 2024.

**Figure 8: Central Banks have been net buyers since 2009**

Central Banks annual and cumulative net purchase of gold in tonnes



Source: World Gold Council

According to a World Gold Council survey, over 80% of central banks in emerging markets plan to increase their gold reserves in the coming year. Gold, unlike fiat currencies, is not a liability of any government and cannot be frozen or manipulated by financial sanctions.

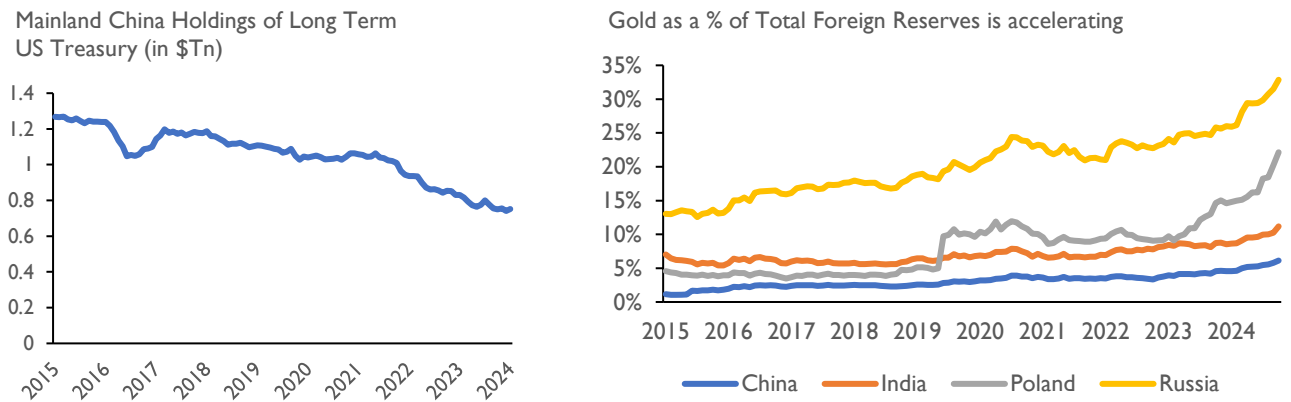


**HEYOKHA  
BROTHERS**

Countries such as Poland, Russia, China, India and Singapore are leading the charge in this gold-buying spree:

- Poland was the single biggest buyer in 2024, increasing its gold reserves to 448 tonnes by the end of the year. After Russia invaded its neighbour, Ukraine in 2022, Poland set a target of keeping 20% of its reserves in gold. It is now at 18%.
- China has made significant moves to reduce its U.S. Treasury holdings—down 42% since 2013—and increase its gold reserves. This strategy reflects a broader aim to insulate its economy from external shocks and dollar dependence.
- India added 73 tonnes of gold to its reserves in 2024, complementing its shift toward local currency payments and gold settlements for trade. This approach mitigates risks like reserve freezing and rising oil prices, especially in light of its energy import dependency.
- Russia, already among the top global holders of gold, continues to prioritize it as a safeguard against sanctions and currency volatility.
- Singapore’s central bank, the MAS, was the third-largest gold buyer globally, acquiring approximately 76.5 metric tons of gold. This made a huge increase in its reserves.

**Figure 9 & 10: Major developing economies increasing gold holdings while reducing US treasury investments**

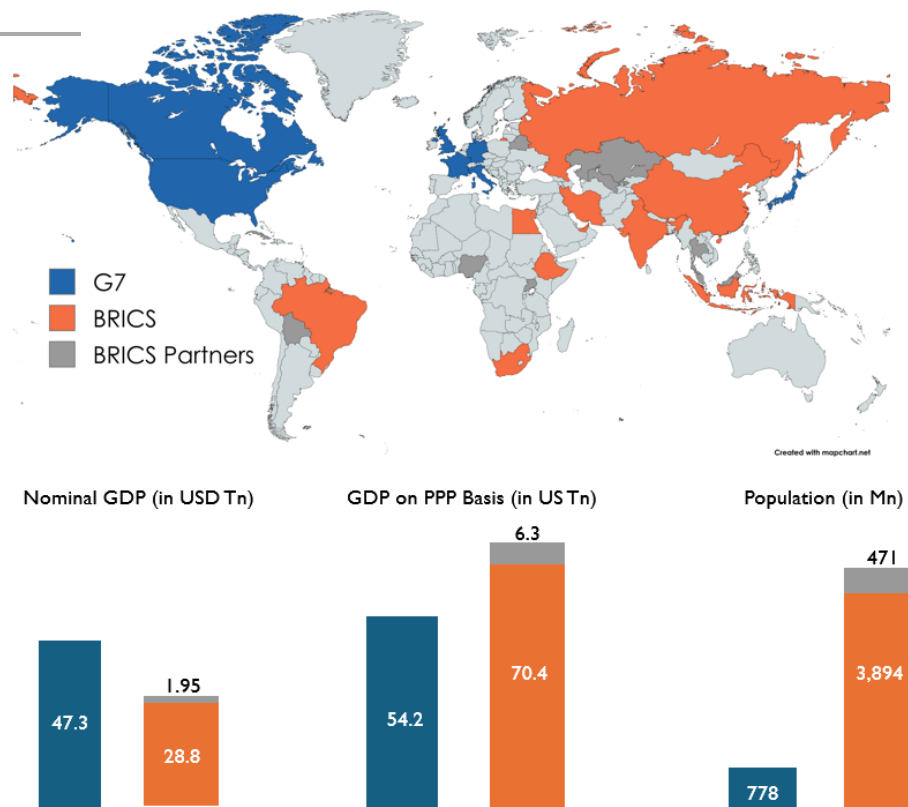


Source: Bloomberg

## BRICS flexes hard: a bigger bloc with bigger ambitions

The rise of BRICS, which as of January 2025 composes Brazil, Russia, India, China, South Africa, Egypt, Ethiopia, Iran, United Arab Emirates, and Indonesia, offers a different but no less potent source of tension. Representing 48% of the global population and 28% of global GDP, the bloc wields significant economic and demographic influence.

**Figure 11**



Note: \*BRICS Partners include: Belarus, Bolivia, Cuba, Malaysia, Kazakhstan, Thailand, Uganda, Uzbekistan, and Nigeria  
 \*\*Cuba's GDP on PPP Basis was calculated as of 2017

With this expansion, BRICS is no longer just a loose economic alliance—it has evolved into a geopolitical force actively reshaping the global financial system. Nations like Malaysia, Thailand, and Nigeria are now seeking membership, further reinforcing the trend toward a multipolar world.

The U.S. dollar, increasingly used as a political weapon, remains the backbone of the global economy. But every time it is wielded against a rival, it accelerates efforts to escape its grasp. More than ever, the world is being split into two financial camps—those within the Western-dominated system and those making deliberate moves to distance themselves from it.

**“It’s not normal for the world to simply have a unipolar power. That was an anomaly. It was a product of the end of the Cold War, but eventually you were going to reach back to a point where you had a multipolar world, multi-great powers in different parts of the planet.**

- Marco Rubio, Secretary of State (Jan 30, 2025)



**HEYÓKHA  
BROTHERS**

In this shifting landscape, gold stands apart. It is beyond the reach of sanctions, immune to currency devaluation, and remains the only universally trusted store of value. The rush into gold—by both central banks and investors—isn't just speculation. It's a rational response to a world where financial safety is no longer guaranteed.

For gold miners, the opportunity is immense. With demand soaring and financial uncertainty at record levels, those positioned to meet this demand stand to gain the most. The golden age of gold is only just beginning.

## Gold Price Leads Gold Equities—For Now

While the allure of artificial intelligence (AI) dominates headlines, the enduring value of gold and its mining sector continues to warrant attention. Despite a notable rise in gold prices, gold mining stocks have underperformed, failing to match the pace of the precious metal's appreciation. This section delves into the key factors contributing to this divergence and examines why gold miners have struggled to capitalize on favorable market conditions.

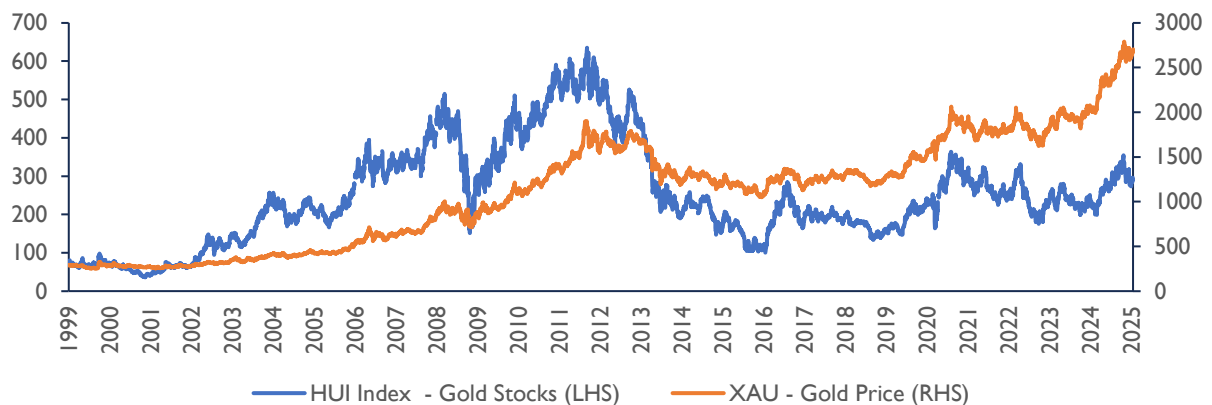
### The gold paradox

The last major bull run in gold spanned from 1999 to 2011, during which the price of gold soared from \$252 to \$1,900 per ounce—a nearly eightfold leap. After a steep correction from 2011 to 2015, gold resumed its climb and now sits over 50% higher than its 2011 peak. But while gold has shone, gold stocks have struggled to keep pace.

The NYSE Arca Gold Bugs Index (HUI), a key gauge of gold mining equities, currently sits at 340—over 40% below its peak from September 2011. For context, the HUI has risen just 24% since August 2016, a time when gold traded at a far lower \$1,300 per ounce. What's striking is that HUI constituents are expected to deliver earnings per share four times higher this year than in 2016, while gold prices have surged 125% over the same period. This underscores a glaring disconnect between gold mining stocks and the metal they produce.

**Figure 12: Gold stocks are lagging the gold price**

HUI Gold Bugs Index vs. Gold Price \$/oz



Source: Bloomberg

The divergence between gold prices and gold equities can largely be traced back to interest rate trends and central bank policies. Real U.S. 10-year interest rates have climbed dramatically since 2020, rising from -0.40% to 2.03%. Unsurprisingly, Western investors, who tend to sell gold when real rates rise, have significantly reduced their holdings.

From 2020 to 2024, gold ETFs experienced outflows of 31 million ounces—about 25% of their total assets—as investors shed both physical gold and gold stocks. Similarly, the largest gold stock ETF, GDX, saw continuous outflows, losing nearly 20% of its assets. This pattern is not new; a similar trend played out between 2012 and 2015, when real rates rose from -0.20% to 0.80%, leading to the liquidation of 36 million ounces from gold ETFs.

Gold miners have faced several challenges in recent years, leading to underperformance even as gold prices have surged. The factors contributing to this underperformance include rising production costs, operational inefficiencies, geopolitical risks, and declining ore feed grades. Below, we delve into these challenges in detail, with a focus on their impact on EBITDA and profitability for key underperforming companies in the industry.

**Figure 13 & 14: Rising Costs and Operational Challenges**

Figure 13: Australian Mining cost: Open pit VS Underground

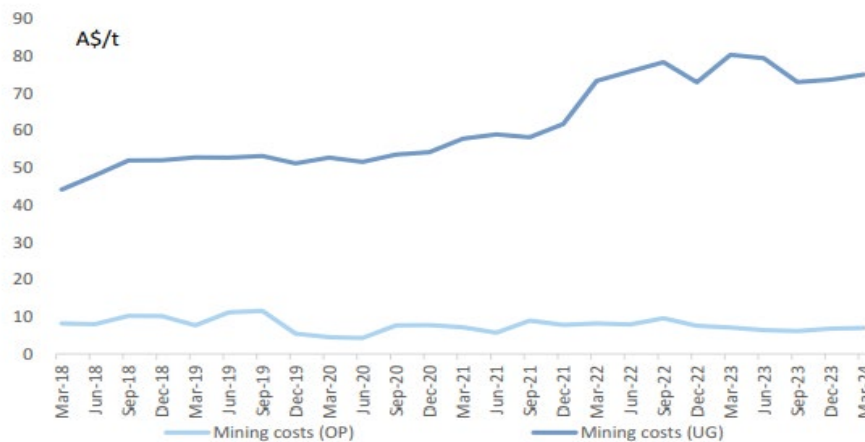
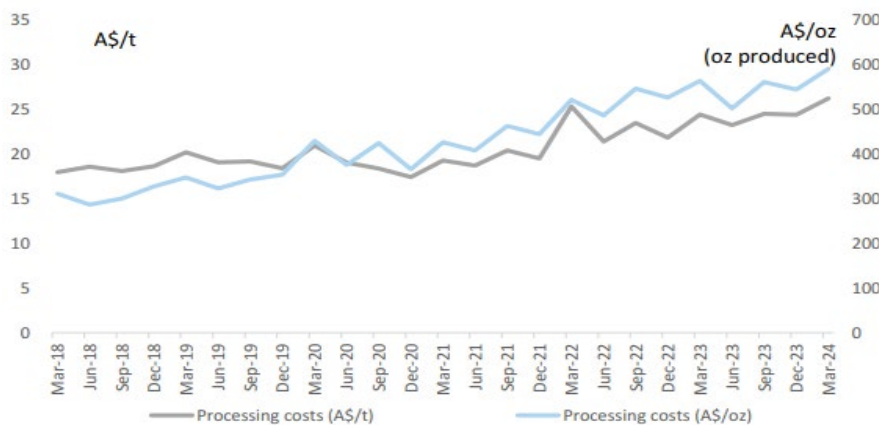


Figure 14: Australian Processing cost



Source: Goldman Sachs

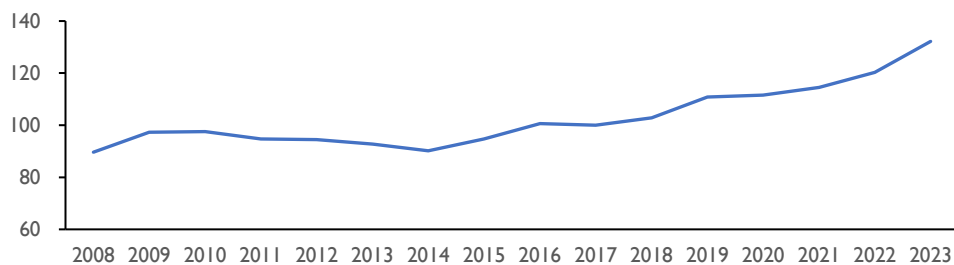


The increase in oil costs has played a significant role in driving up production expenses, adding as much as \$91 per ounce to production costs in 2024. Between 2022 and 2024, fuel accounted for approximately 13 percent of total mine-site costs, highlighting its critical impact on the overall cost structure.

Wage inflation has further compounded these challenges, with labor costs increasing by 20 percent over the last five years due to a high-inflation environment. Underground mining operations have been particularly affected, as they rely on larger labor forces for safety measures and have limited capacity for using heavy equipment. Consequently, these operations are more vulnerable to rising labor costs.

**Figure 15**

U.S. Mining labor cost index



Source: St. Louis FED

Processing costs have also surged, driven largely by higher energy and labor expenses. Declining feed grades have further exacerbated the issue, as miners have increasingly resorted to blending lower-grade ore from existing stockpiles to capitalize on rising gold prices. This strategy has led to inefficiencies and increased costs, putting further pressure on profitability.

Poor management of strip ratios and inefficient mining plans have negatively impacted profitability in the industry. Strip ratios, which measure the amount of waste material that must be removed to access ore, play a crucial role in determining operational expenses.

Companies with poorly managed strip ratios often face elevated costs, which erode their EBITDA. Additionally, while the ore mined grade has remained relatively stable in recent years, the increased reliance on stockpiled lower-grade ore has further strained processing efficiency and elevated costs.

The result of all this translates into the all-in sustaining cost (AISC) of gold mining having risen by more than 50 percent over the past five years, reaching an average of \$1,438 per ounce.

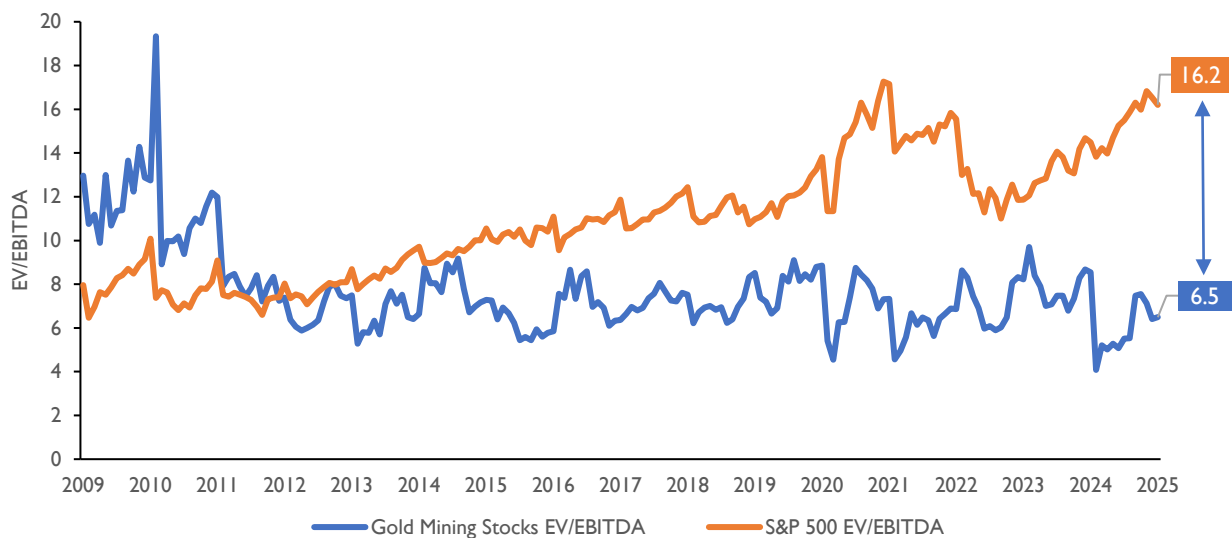
Geopolitical risks are squeezing gold miners, with higher royalty fees and mine shutdowns making it harder to maintain profit margins. Franco-Nevada saw this firsthand when its Cobre Panama mine shut down in 2023, cutting into revenue. Resolute Mining faced a similar setback in 2021 when Mali suspended its Syama mine license, while Barrick Gold has battled resource disputes in Tanzania. These cases highlight how political instability disrupts operations, reinforcing the need for strong risk management.

## A Market of Extremes

There are many ways to think about relative market valuations and asset class bubbles. For instance, Apple Inc., with its staggering \$3.6 trillion market capitalization, is worth more than five times the U.S. Federal Reserve's gold reserves, valued at just over \$700 billion. These reserves are the largest in the world, making the comparison even more striking. This underscores a dramatic shift in modern wealth dynamics, where the market value of a single tech giant now dwarfs the gold reserves of the world's largest economy.

**Figure 16: The discount is getting wider**

Forward EV/EBITDA on a monthly basis of the HUI Index and S&P 500 (market cap weighted)



Source: Bloomberg

In addition, Berkshire Hathaway has amassed a record \$325 billion in cash, signaling Warren Buffett's anticipation of opportunities in a potential downturn. Buffett's favourite valuation metric—the ratio of the stock market's value to the size of the U.S. economy—is at an all-time high. If the Oracle of Omaha is reducing equities at a historic pace, it's a warning sign that also bodes well for gold.

Recent events have underscored the relative underappreciation of tangible assets like gold. On a single trading day after DeepSeek's announcement of its new R1 AI model, NVIDIA lost almost \$600 billion in market value, while the tech-heavy S&P 500 shed nearly \$1 trillion. To put this into perspective, the total valuation of the world's top 50 mining companies stands at \$1.3 trillion—less than what the Mag 7 lost in a day.



HEYÓKHA  
BROTHERS

### Gold as the Ultimate Hedge in an AI-Dominated World

DeepSeek, an innovative AI model developed in China, represents the nation's adaptation to Western-imposed AI restrictions. By optimizing machine learning under resource constraints, it challenges the assumption that cutting-edge AI requires high-performance computing. This shift underscores China's resilience and long-term pursuit of technological independence.



The US-China AI rivalry is reshaping global power dynamics. The U.S. continues to restrict China's access to GPUs, critical datasets, and open-source tools, while China counters by developing efficiency-focused AI models and strengthening its independent ecosystem. With AI dominance becoming a tool of economic warfare, the U.S. seeks to limit China's progress, while China prioritizes efficiency and self-sufficiency, leveraging its role in semiconductor supply chains.

As AI accelerates digital finance, algorithmic instability and market volatility highlight the fragility of digital systems. Gold is re-emerging as a hedge against AI-driven financial risks, with China's growing reserves signaling a broader strategy to balance AI-powered expansion with tangible assets. In a world where AI governs markets, gold remains a stable store of value, ensuring security against digital uncertainty.

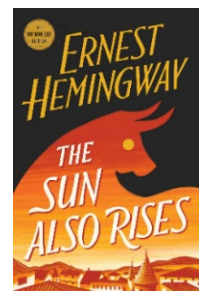
This highlights the stark valuation distortions in today's market, where speculative excess in AI and tech stocks dwarfs the combined worth of real-world resource producers. As we enter a period of macroeconomic stress, history suggests that hard assets like gold will reassert their role in preserving wealth.

Ruchir Sharma in two December 2024 articles in the FT, similarly, warns of a massive bubble forming in U.S. financial markets, fuelled by global investors' belief in "American exceptionalism." The U.S. stock market now dominates nearly 70% of the global stock index, far exceeding its 27% share of the global economy. Valuations have reached record highs, driven more by sentiment than fundamentals.

Sharma highlights that unsustainable government spending and tech sector super-profits prop up the bubble, while America's growing reliance on debt—requiring \$2 of new debt for every \$1 of GDP growth—poses a serious risk. History shows that bubbles often burst suddenly, and Sharma warns that U.S. outperformance may be nearing its end.

It reminds us of a famous line from Ernest Hemingway's novel *The Sun Also Rises*. In the book, a character is asked how he went bankrupt, and he replies:

"Two ways. Gradually and then suddenly."



Echoing Sharma, Howard Marks, the co-founder of Oaktree Capital, has recently revisited the topic of market bubbles and irrational exuberance in his latest memo, "On Bubble Watch", marking the 25th anniversary of his famous 2000 memo, [bubble.com](https://www.bubble.com).

---

**"I can't speak authoritatively about whether we're in a bubble. I just want to lay out the facts as I see them and suggest how you might think about them . . . just as I did 25 years ago."**

- Howard Marks in 'Bubble.com' (January 2025)

---

What does this say about U.S. equity markets? While the exact timing of a reversal is uncertain, one outcome seems likely: In the event of a market crash, gold will likely prove to be a more dependable store of value, having served as the world's original reserve currency for thousands of years.





**HEYOKHA  
BROTHERS**

### The Gold-Silver Ratio and Silver's Unique Role

In precious metal bull markets, the gold-silver ratio contracts as silver outperforms gold. Conversely, in bear markets, silver declines more sharply, causing the ratio to expand.

**Figure 17**

Gold to Silver



A gold-silver ratio above 80:1 has historically signaled strong demand. As of January 10, 2025, the ratio stands at 88.3x, surpassing a key inflection point. Since 1971, four out of five instances of such high ratios have preceded significant price increases in both metals.

At nearly 90:1, the current gold-silver ratio suggests silver is deeply undervalued. Historically, when gold rallies, silver follows with amplified

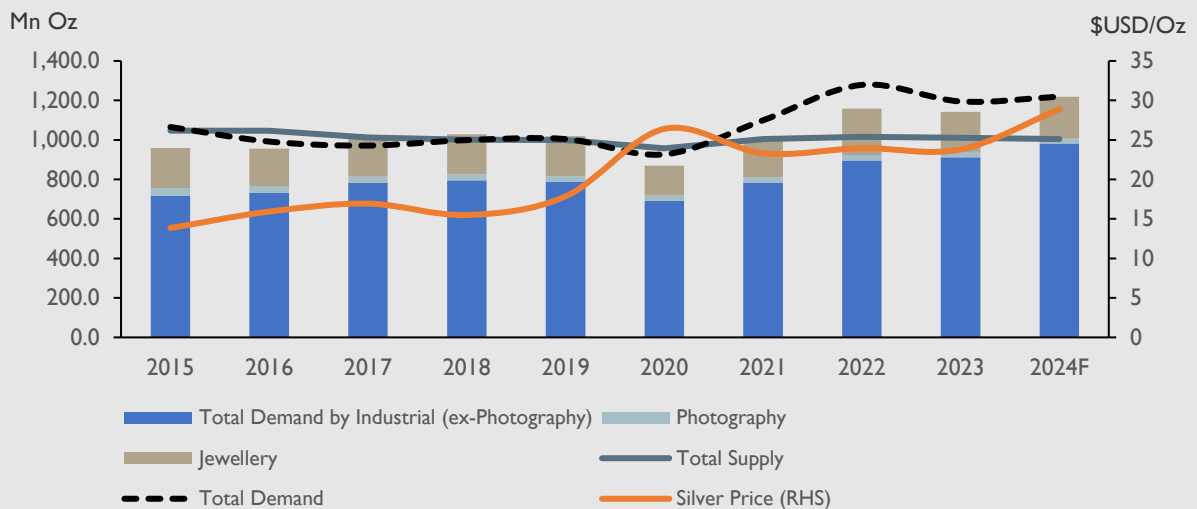
moves due to its smaller market size and industrial demand inelasticity. If the gold-silver ratio contracts to 70:1 in 2025 and gold rises to \$3,000–\$3,300 per ounce, silver could reach \$42–\$47 per ounce, delivering potential annual returns of +45% to +62%.

Often called "poor man's gold," silver shares gold's safe-haven qualities. Approximately 38% of silver demand comes from investment and jewelry, reinforcing its role as a store of value, particularly during economic uncertainty. Historically, silver has been used as currency more frequently than gold.

Silver's dual role as both a precious and industrial metal makes it more volatile. Its demand spans key sectors such as electronics, solar panels, and manufacturing, making it highly sensitive to economic shifts. With a market size only one-tenth that of gold, even minor demand fluctuations can trigger significant price swings. The metal's scarcity can exacerbate volatility during periods of heightened demand, giving silver the potential to outperform gold in a bull market for precious metals.

**Figure 18: Silver demand spiking up while price remains inelastic**

Silver supply and demand by type in million ounces with silver price in \$USD/oz



Source: The Silver Institute



HEYÓKHA  
BROTHERS

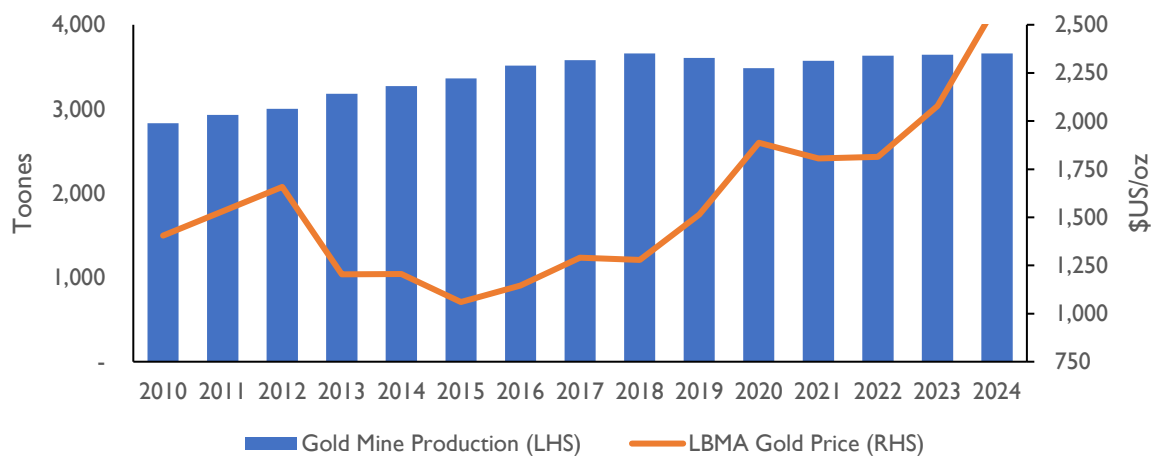
## Gold Miners: The Case for Re-Rating and How We See It

Think of gold mining like tending an orchard that many have written off as neglected. Yes, there's been significant negative sentiment, driven by slashed exploration budgets and flat production levels. Since 2018, production has been relatively steady with the latest 2024 number at 3,661 tonnes despite the LBMA (London Bullion Market Association) gold auction prices doubling from \$1,279 to \$2,609 in 6 years.

But to us, that “under-investment” is precisely what makes the current setup compelling: with fewer new trees planted, each harvested apple becomes more valuable. For miners, this tightened supply dynamic can bolster margins and potentially catalyze a re-rating in their share prices. Now, let's take a closer look at one of the most powerful forces behind this story—how gold miners' share prices often magnify movements in the metal itself.

**Figure 19: Gold mine output has been flattening while prices have doubled since 2018**

Annual gold mine production in tonnes and annual LBMA Gold PM Price



Source: Bloomberg, LBMA, World Gold Council

### Historical leverage to gold prices: A pattern with temporary disruptions

Gold miners' share prices have historically shown strong leverage to gold prices—rising even faster when gold prices increase. A modest 1% uptick in gold can drive a 2–3% surge in miners' valuations, making these stocks a compelling choice for investors seeking amplified exposure to gold.

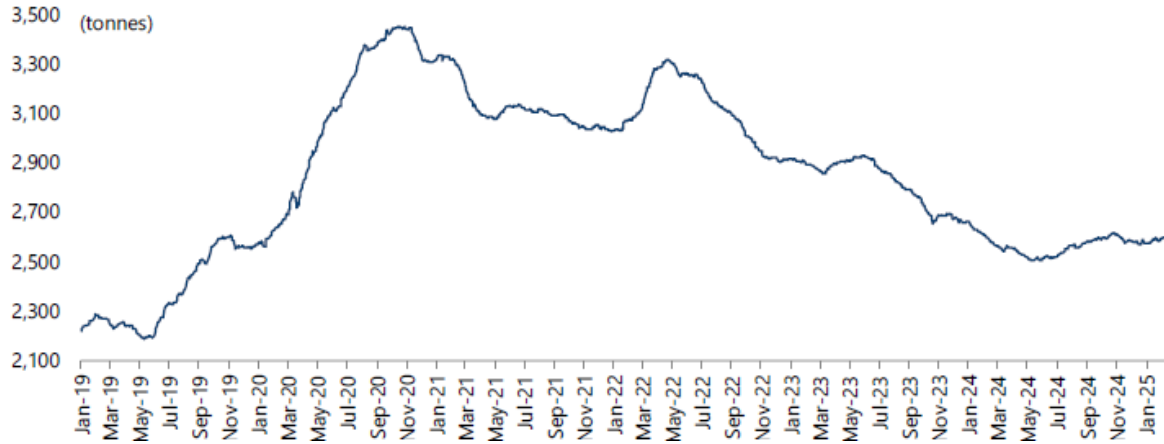
This dynamic is especially pronounced when miners maintain cost discipline and sound financial management. Under favorable conditions, higher gold prices can significantly boost earnings, further enhancing their investment appeal.

However, in recent years, this correlation has weakened. Market dislocations and heightened investor skepticism, as exemplified by the massive ETF outflows and undervalued HUI, have thrown the long-standing pattern off track. Factors such as rising production costs, regulatory uncertainty, and general risk aversion have contributed to this decoupling. Some investors have also become more discerning, prioritizing companies with strong balance sheets and efficient operations rather than blindly chasing gold price momentum.



**HEYÓKHA  
BROTHERS**

**Figure 20: Massive outflows from gold ETFs**



Source: Bloomberg. Data up to February 12, 2025

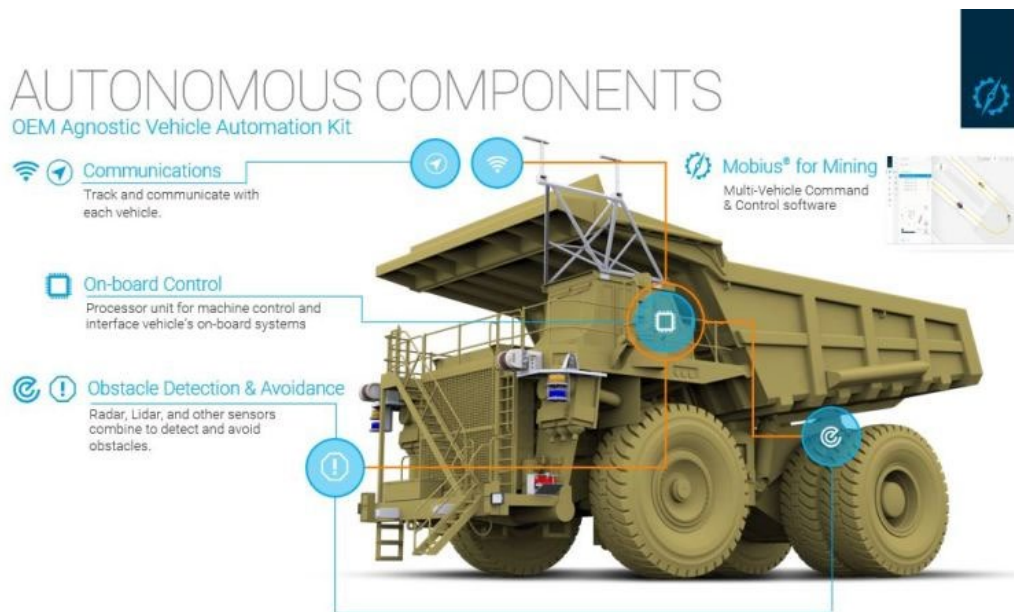
Yet, history suggests such deviations rarely last forever. As market fundamentals realign—whether through stabilization in investor sentiment or cost efficiency improvements among miners—the traditional leverage effect is likely to reassert itself. For companies that effectively manage expenses and optimize production, even a modest gold price rally could significantly boost profitability, driving stock re-ratings.

For now, the timing of when this deviation returns to the norm remains uncertain, creating a potential opportunity for contrarian investors. If the gold-miner leverage effect re-emerges, savvy investors who position themselves early could reap the rewards when the pendulum swings back toward historical norms. At current valuations, gold miners may just be offering a buy-one-get-one-free deal on future profits.

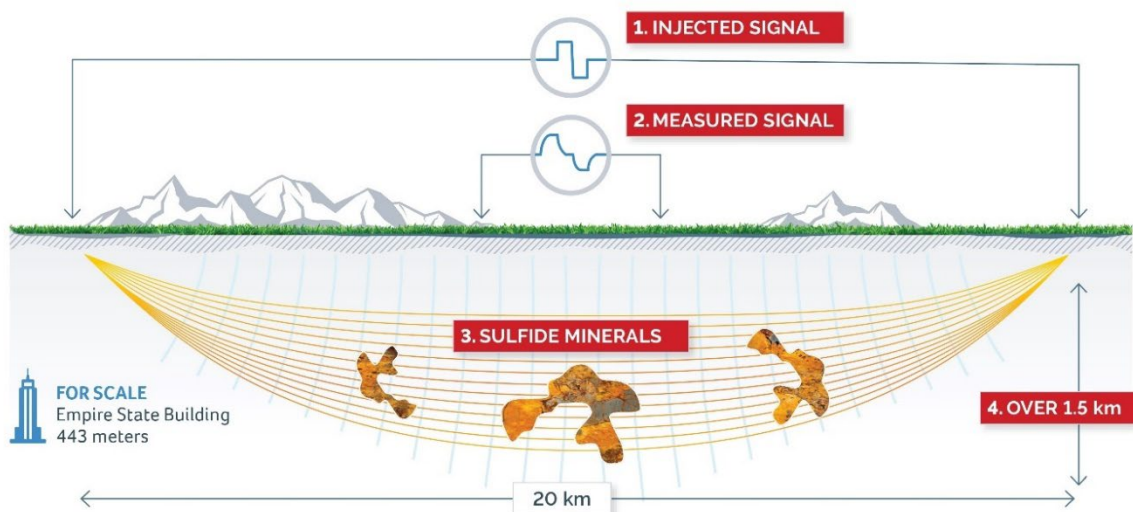
## Reaping operating and financial leverage in a gold boom

Operational leverage in the gold mining sector primarily stems from changes in production costs, particularly energy. Energy expenses, including fuel and electricity, constitute a significant portion of mining operational costs. These costs have always been, and continue to be, beyond the control of mining companies.

**Figure 21 & 22: Vital Technological Advancements seen in Mining Companies**



Autonomous Solutions Inc (ASI)'s Mobius Haulage A.I.




Ivanhoe's Typhoon™ Geophysical Surveying System

Technological advancements are transforming the mining industry, providing another layer of operational leverage. These innovations enable gold miners and other major mining groups to enhance efficiency, cut costs, and minimize environmental impact, creating a more sustainable and profitable industry. Key technological developments include:

- Barrick Gold (GOLD): Deploys autonomous drilling systems and real-time data analytics to optimize production while integrating solar power into its operations.
- Newmont Corporation (NEM): Utilizes AI to refine exploration accuracy and drones to monitor environmental impacts. Electrification of equipment is further reducing its carbon footprint.
- AngloGold Ashanti (AU): Incorporates bulk ore sorting to reduce waste and energy-intensive processing while enhancing efficiency.
- Ivanhoe Mines (IVN.TO): Employs the Typhoon™ Geophysical Surveying System, a proprietary technology combining pulsed power and AI to locate deep mineral deposits with precision, accelerating exploration and reducing costs.
- BHP Group Limited (BHP): Leverages AI-powered operations to optimize mineral recovery and predict equipment failures, thereby reducing downtime.

These advancements not only meet rising demand for precious metals but also improve sustainability and cost efficiency across the industry. Together with lower oil prices, technological innovation strengthens operational leverage, positioning miners to capitalize on rising gold prices more effectively. This dual advantage enhances margins and bolsters the sector’s appeal to investors.

**Figure 23: AI technology utilized for improvements across the mining value chain**



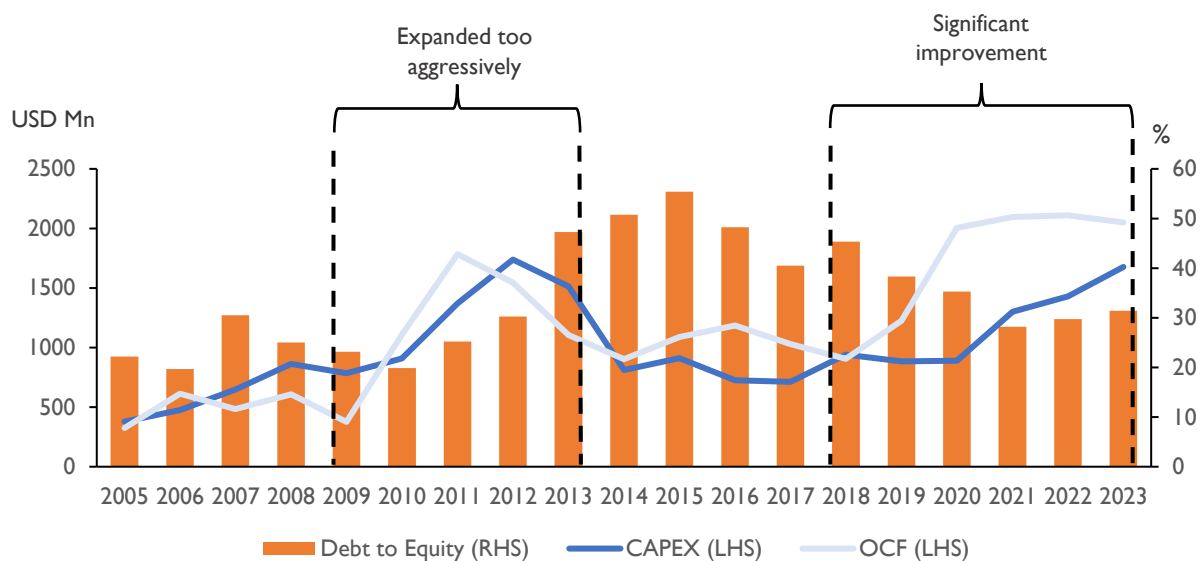
Value Chain Stage	Mine	Processing plant	Inventory	Rail	Port	Shipping	Market
<b>AI technology example</b>	<b>Autonomous Vehicles:</b> self-driving trucks, drills, and loaders use AI for navigation and operation, enhancing efficiency and safety.	<b>Plant Optimisation:</b> AI systems monitor and control processing plants, adjusting parameters to optimise performance and reduce energy consumption.	<b>Ore Sorting:</b> AI-powered sensors and machine learning sort ore from waste material, improving ore quality and reducing processing costs.	<b>Predictive Maintenance:</b> AI analyses sensor data from transportation equipment to predict failures and schedule maintenance, reducing downtime and costs.	<b>AI-Powered Cranes:</b> AI systems control cranes for loading and unloading bulk materials, improving speed, precision and safety.	<b>Dynamic Routing:</b> AI algorithms analyse weather data, sea conditions, and vessel performance to determine the most efficient and safe routes.	<b>Demand forecasting:</b> AI models can be used to forecast demand for mining products, allowing companies to adjust production and inventory.

Source: BHP

Beyond operational improvements, the gold mining sector has undergone a significant transformation in its financial structure over the past decade. Starting at just \$255 per ounce in 2001, gold prices rocketed to \$1,906 per ounce by 2011—only to tumble back down to \$1,056 per ounce by the end of 2015. That harsh reality check forced debt-laden gold miners, who had splurged on acquisitions during the good times, to tighten their belts. The result? All-in sustaining costs (AISC) were slashed by 20% to \$879 per ounce between 2012 and 2017, while \$129 billion in impairments were painfully written off from 2011 onward.

Fast forward to 2024-2025, and the financial landscape of the gold mining industry has changed dramatically. Companies have prioritized deleveraging and financial discipline, leading to a marked reduction in debt levels. The average debt-to-net-assets ratio for major gold miners has fallen to just 14%, a significant decline compared to the peak of 2011. This improvement has been driven by several factors, including enhanced cost management, a shift in strategic priorities towards cash generation, and a more measured approach to growth.

**Figure 24: Mining companies are achieving healthier leverage ratios**  
Average Annual Debt to Equity, CAPEX, and OCF of the Top 10 mining companies in the HUI Index



Source: Bloomberg

The reduced leverage has had several benefits for the industry. With healthier balance sheets, miners now have greater financial flexibility to navigate market volatility and capitalize on opportunities during periods of rising gold prices. Furthermore, lower debt burdens reduce interest expenses, freeing up resources for reinvestment and shareholder returns.

This financial resilience strengthens the overall investment case for gold mining stocks, particularly in a rising gold price environment. At this point, gold miners must be wondering: If we're more efficient, financially stronger, and operating in a record gold price environment—why are our stock prices still acting like it's 2015?

### Unlocking gold reserves and its hidden option value

The value of a gold mining company is correlated with the value of its proven and probable gold reserves. As gold prices rise, the value of these reserves – along with the size of the economically viable reserves – increases significantly, enhancing miners' intrinsic worth.

Barrick Gold's recent 23% increase in gold reserves (89 million oz) and 224% surge in copper reserves (18 million tonnes) underscore the hidden option value in untapped resources and highlights the upside potential of miners with large reserves during rising prices.



**HEYÓKHA  
BROTHERS**

The valuation of gold mining companies reveals a striking disconnect between their intrinsic value and market pricing, creating a compelling opportunity for contrarian investors. This analysis draws on the methodologies outlined by Goehring & Rozencwajg, who emphasize the importance of both real options value and enterprise value per ounce of proven reserve in assessing the true worth of gold equities.

The real options value approach views gold mining stocks as a series of call options, where the underlying asset is the gold price, the strike price is the cash cost of production, and the quantity corresponds to expected annual production.

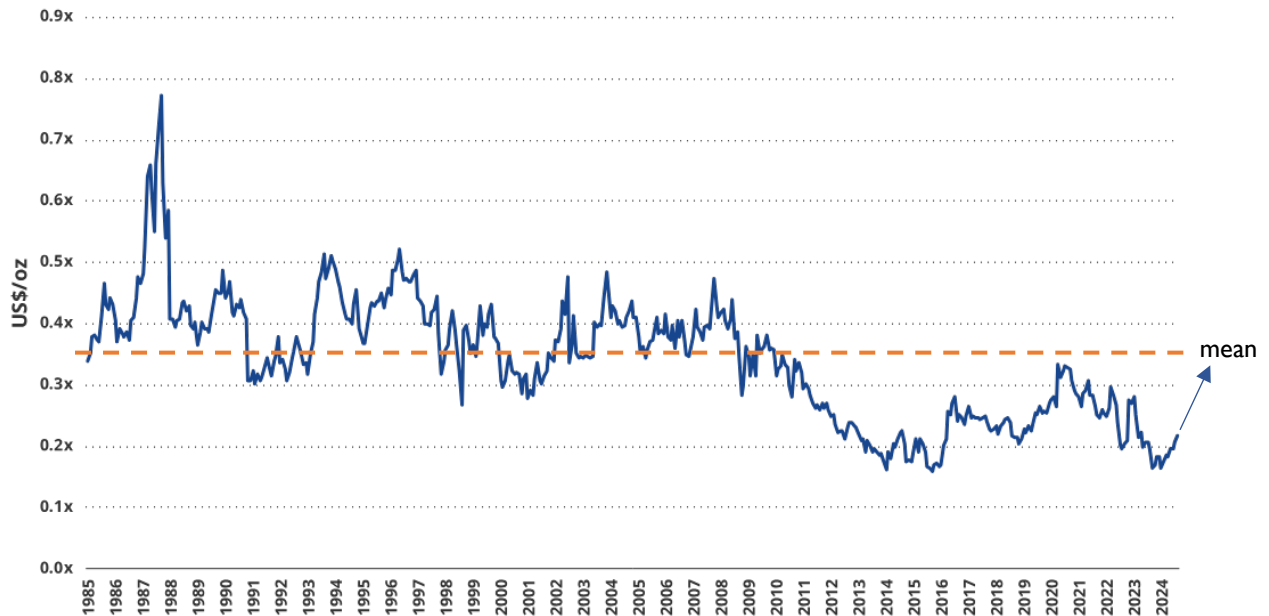
Using the Black-Scholes model, this method quantifies the strategic value embedded in reserves, even when current profitability appears limited due to depressed gold prices. By discounting this option value to the present, it provides a forward-looking perspective that accounts for the potential upside in a rising gold price environment.

In 1999, the combined real option value of our six companies was nearly \$18 billion, against an enterprise value of \$15 billion, suggesting they traded at 0.80x their real option value.

The enterprise value per ounce of proven reserve calculates the total enterprise value (market capitalization plus net debt) of a company relative to its proven reserves, offering a straightforward measure of the market's valuation of gold in the ground. Historically, this figure provides a benchmark for comparing market sentiment with gold price levels.

**Figure 25: Mining companies are extremely undervalued compared to spot gold price**

Adjusted market cap per ounce of reserve (divided by gold price)



Source: VanEck, Scotiabank. Data as of August 2024. Figures represent the average of Scotiabank's North American coverage

As of Q2 2024, the six leading gold producers—Newmont, Barrick, Harmony, Gold Fields, Agnico Eagle, and AngloGold—were valued at \$292 per ounce of proven reserves. That's just 12% of the then-spot price of \$2,500 per ounce.



**HEYÓKHA  
BROTHERS**

For context, back in 1999, the beginning of the previous gold bull market, these miners were valued at \$61 per ounce of reserves, or roughly 23% of the spot price of \$300 per ounce, after which the HUI Index went on a 5-6x bull run. Does this mean that gold miners are about to pop 10x? Who knows, but things like this have happened before, like in the period from late 1969 to the late 1980 when the Barron's Gold Mining Index rallied by 12x.

One thing's for sure - current valuations for gold miners are scraping the bottom of the historical barrel—one of the lowest on record. And, remarkably, they've drifted even lower in recent months. Goehring & Rozencwaig's framework drives home just how extreme this undervaluation is. Despite gold hitting all-time highs, leading producers were trading last year at just 0.60x their discounted cash flow (DCF) value and a mere 0.38x their real options value—levels not seen since the cyclical lows of 1999 and 2015.

What makes this disconnect even more striking is that gold miners are enjoying some of the fattest profit margins in over a decade. Consider this:

- Today as of Feb 14, 2025 (HUI Index: \$340)
  - Gold Price: \$2,915
  - AISC: \$1,456
  - Profit per Ounce: \$1,459

Compare that to the last time gold mining stocks peaked in September 2011 (HUI > \$600):

- Q2 2011 (HUI Index: ~\$600)
  - Gold Price: \$2,000
  - AISC: \$900
  - Profit per Ounce: \$1,100

In other words, profit per ounce is now nearly 33% higher than at the 2011 peak, yet gold equities are languishing at half their former valuation levels. With gross profit margins above 50%, miners offer a rare blend of low valuation and high potential returns, creating a margin of safety seldom seen in recent history.

It's a setup that value investors dream of—world-class assets, robust cash flow, and bargain-bin prices. If history is any guide, this kind of disconnect doesn't last forever.



## M&A cycle likely to resume: When digging isn't enough, buy the mine

Recent stirrings in the mining sector suggest the next wave of mergers and acquisitions (M&A) could be gathering momentum—this time with gold assets in the spotlight. Unlike the debt-fueled deal frenzies of the past, today's consolidation push looks more calculated. With few major gold discoveries in recent years and exploration success becoming the exception rather than the rule, miners are confronting an uncomfortable truth: if you can't find it, you'll have to buy it.

Cue the return of M&A. With gold prices hovering near record highs, miners are racing to secure ounces the fast way—by buying them. Newmont's acquisition of Newcrest was just the start. Since then, deal flow has picked up: in December, Northern Star moved to acquire De Grey Mining in an all-stock deal worth \$3.26 billion. And on 21st March, Gold Fields launched a \$2.1 billion all-cash bid for Australia's Gold Road Resources. Meanwhile, Chinese miners continue scouring the globe, snapping up gold and critical mineral assets as Beijing tightens its grip on key supply chains.

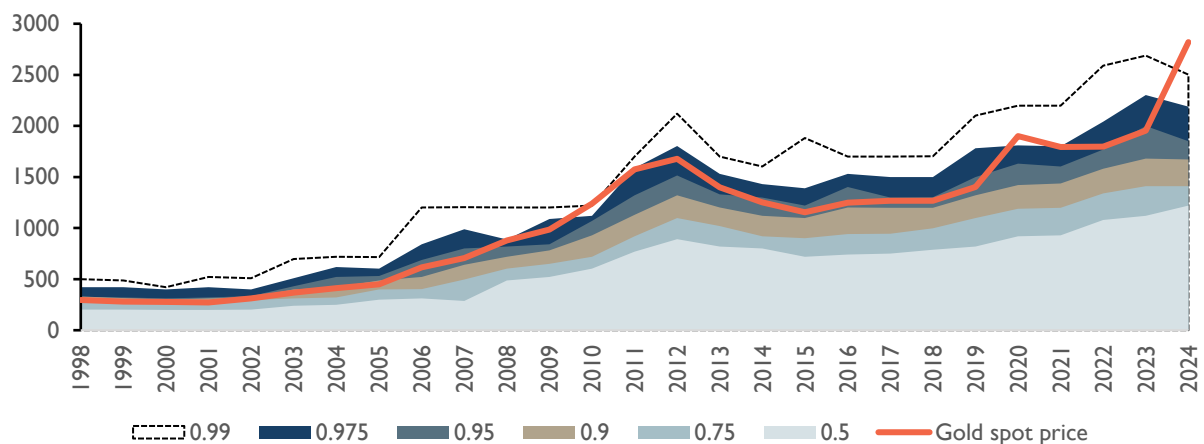
Of course, we've seen this movie before—particularly during the 2000s bull run. From 2000 to 2010, the gold sector saw over 1,000 acquisitions worth \$121 billion, dwarfing the more modest \$27 billion in deals from 1990 to 2000. The frenzy peaked in 2011, with over \$38 billion spent on acquisitions in a single year—right as gold prices were topping out.

But this time, the mood feels different. Miners, having learned some hard lessons from that boom-and-bust cycle, are displaying more fiscal discipline. Rather than chasing frothy valuations, they are targeting producing mines, low-cost operations, and assets with strong production pipelines in geopolitically stable regions. This more rational approach is unfolding against a highly favorable backdrop.

Gold prices are hovering near record highs, and according to CLSA, the spot price premium over the industry's 90th percentile cost curve has never been greater. Historically, such premiums tend to revert to the mean—and when they do, two things typically follow: gold mining equities rally, and M&A activity shifts into high gear.

**Figure 26: Gold prices are now at the greatest premium to industry costs since 1998**

*Estimated industry cost curve with their respective percentiles against gold price*



Source: CLSA, S&P Capital IQ, Bloomberg

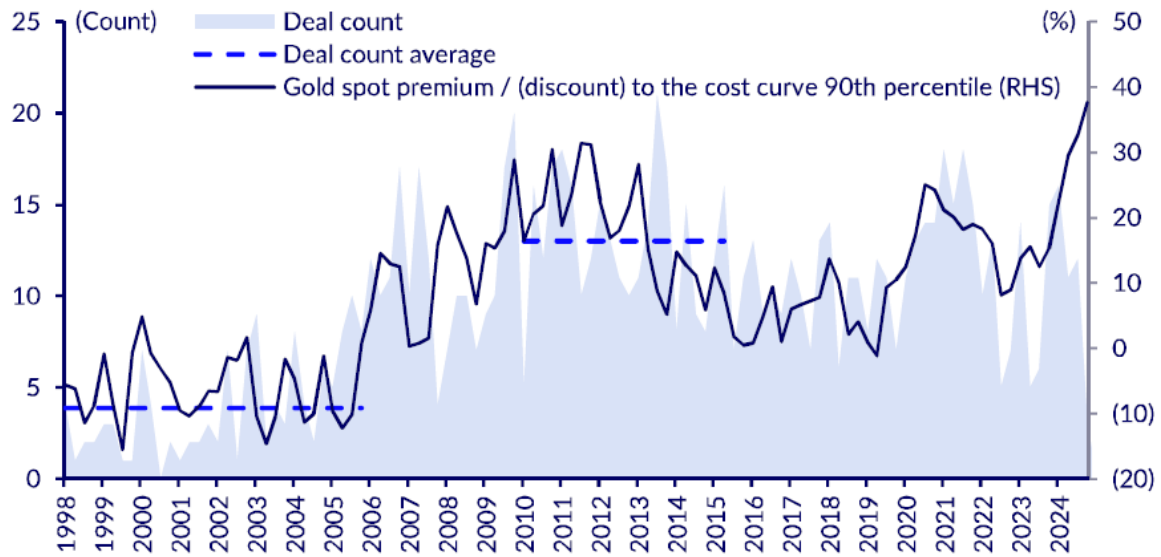


**HEYOKHA  
BROTHERS**

The last time gold prices maintained such a sustained premium to costs was back in 1998. What followed was a decade-long acquisition spree. Based on CLSA estimates, current gold prices are approximately 38% above this threshold.

**Figure 27: M&A deals have increased with gold prices**

Historical M&A deal count to the gold price premium/ discount over the 90<sup>th</sup> percentile of industry costs



Source: CLSA, S&P Capital IQ, Bloomberg

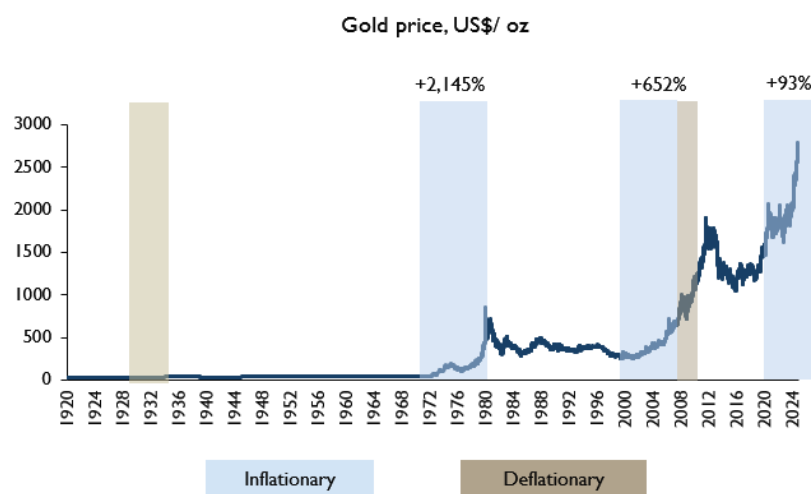
Note: Deal count data includes any publicly listed company acquiring all part of a primary gold producer. All deal sizes included.

With supply growth constrained and demand showing no signs of letting up, this consolidation cycle appears to be just getting started. As miners position themselves for the future, expect more boardroom chess moves in 2025 and beyond. After all, when gold is expensive and new discoveries are scarce, the fastest way to grow is often to buy your neighbor's mine.

## Is it Hard to Imagine Gold at \$10,000 or even \$20,000/oz?

Sounds outrageous right? Gold at \$2,900 to \$10,000 is like bottled water—no one believed people would pay for it, yet here we are. For decades, gold has been dismissed as a relic, a barbarous asset overshadowed by stocks, bonds, and digital innovation. Yet, when measured against history, macroeconomic shifts, and sheer mathematical reality, a five-figure gold price is not just plausible—it's increasingly inevitable. So much so, it happens in both inflationary and deflationary periods. Sometimes, simultaneously!

### I. Gold bull markets have happened in inflationary and deflationary periods of time



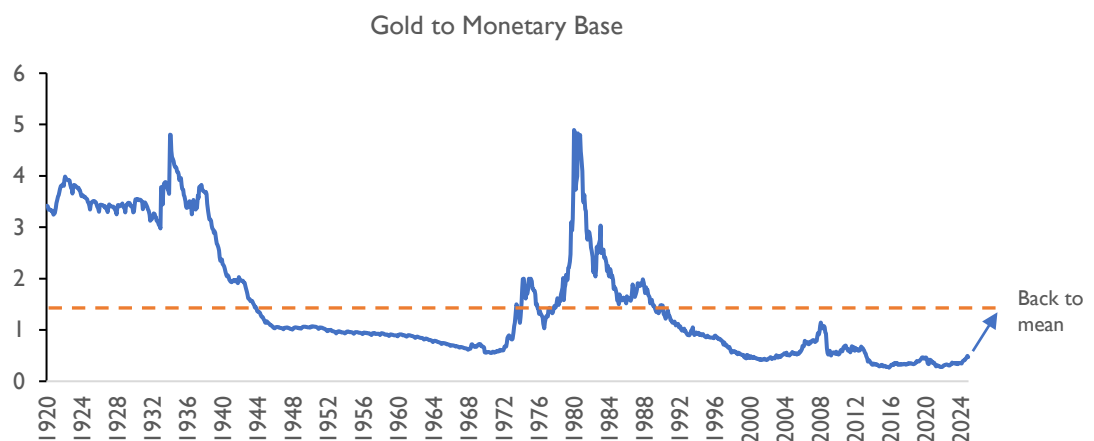
Source: Bloomberg

- 1929-1934: 1st gold bull market (+68%) took place in the middle of a **massive deflationary economic collapse**
- 1971-1980: 2nd gold bull market (+2,145%) took place amidst a **massive surge in inflationary expectations**
- 1999-2011: 3rd gold bull market (+652%) **took place when inflationary and deflationary forces** strongly exerted themselves in different areas of the world economy **simultaneously**
- 2020-2025: Current gold bull market **during a period of inflation**. Gold has gained 93% since Jan 2020 and another 27% in 2024, notwithstanding the strength of the U.S. dollar and relatively high UST yields
- In 2024 gold prices increased 27%, and, **in five of the past six years when gold rose by at least 20%, prices rose again the subsequent year, posting an average gain of more than 15% - this has just happened in 2025 and we are only in March**

Sceptics scoff at the idea of gold reaching \$10,000, \$20,000, or even higher. But ask yourself this: was it hard to imagine gold at \$2,000 back when it was \$300? Was Bitcoin at \$100,000 unthinkable when it traded for pennies? Markets have a way of defying expectations, and gold is no exception—especially when its true value is measured relative to the global financial system.

Numbers don't lie. If gold simply realigns with historical valuation ratios, the price potential is staggering.

## 2. Gold can soar past \$28,000 if the Gold to Fed monetary base ratio were to revert to its mean



Source: Bloomberg, FRED

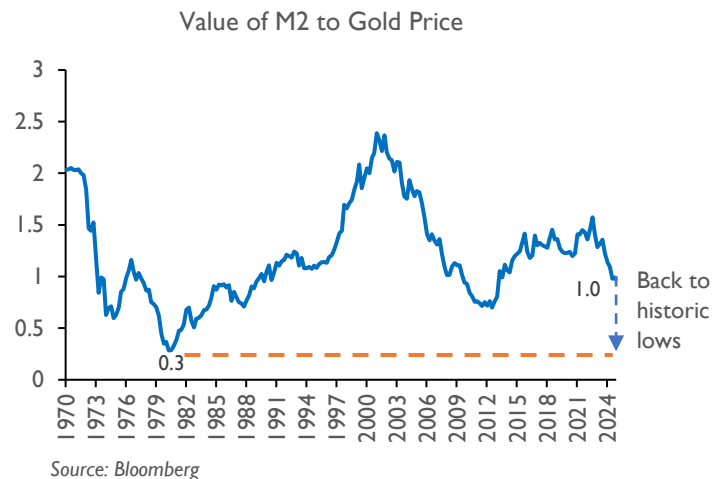
- Gold serves as the ultimate store of value, with its price often reflecting changes in the money supply
- The gold price is at an all-time low compared to the Fed's monetary base
- In 1980, the gold to the Fed's monetary base peaked as the market had lost faith in the ability of central banks to control inflation, leading to high gold prices.
- In 2000 – low ratio at the advent of a gold bull market.
- Now – ratio is at an extreme low due to the money printing activities
- **If this ratio was to revert to even just the mean of 1.5 as it did in 1945, 1972, and 1989, gold would trade 3x at over \$28,000 per ounce**



In previous monetary resets, gold prices surged to match rapid expansions in money supply. With global debt at record highs and central banks continuing to print, gold at \$9,000 per ounce is hardly extreme—it's logical.

### 3. Gold can reach \$9,000/oz if the M2 Supply to Gold Price Ratio were to drop again

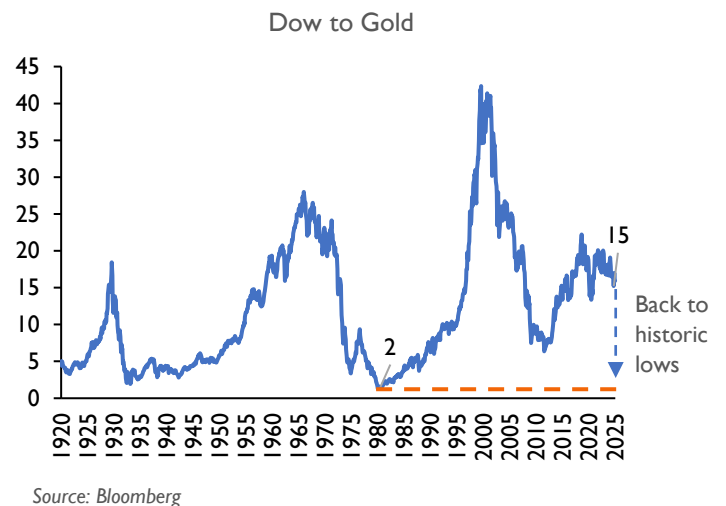
- In 1970, the ratio of global financial assets, as measured by M2 supply to gold, stood at 2x.
- In 1971 the \$35/oz gold peg ended, and the US entered a period of high inflation and by 1980 this ratio dropped to less than 0.3x.
- By 2001, the ratio reached a peak of 2.3x.
- As of Q1 2025, the ratio is just below 1x—significantly below past gold bull market highs.
- **If the ratio once again traded at 0.3x, gold would reach \$9,000/oz.**



A Dow-to-Gold reset doesn't suggest \$22,000 gold—it demands it. History has spoken, and the pattern is undeniable.

### 4. Gold can hit \$22,000/ oz if it were to go back to historic Dow to Gold lows

- Gold is undervalued relative to the Dow
- Its major swings often align with secular trends, monetary policy shifts, inflation cycles, and global economic sentiment.
- The Dow/Gold ratio peaked in four cases of extreme overvaluation of financial assets taking place in 1929, 1970, 1999, and 2020.
- When the Dow/Gold ratio was at its lowest in 1930 and 1980, gold had surged in value due to the end of the Gold standard and the Bretton Woods Agreement.
- **If the ratio were to go back the historic low of 2, like in the 1930s and 1980s, and assuming Dow doesn't change, gold can reach \$22,000/ oz**

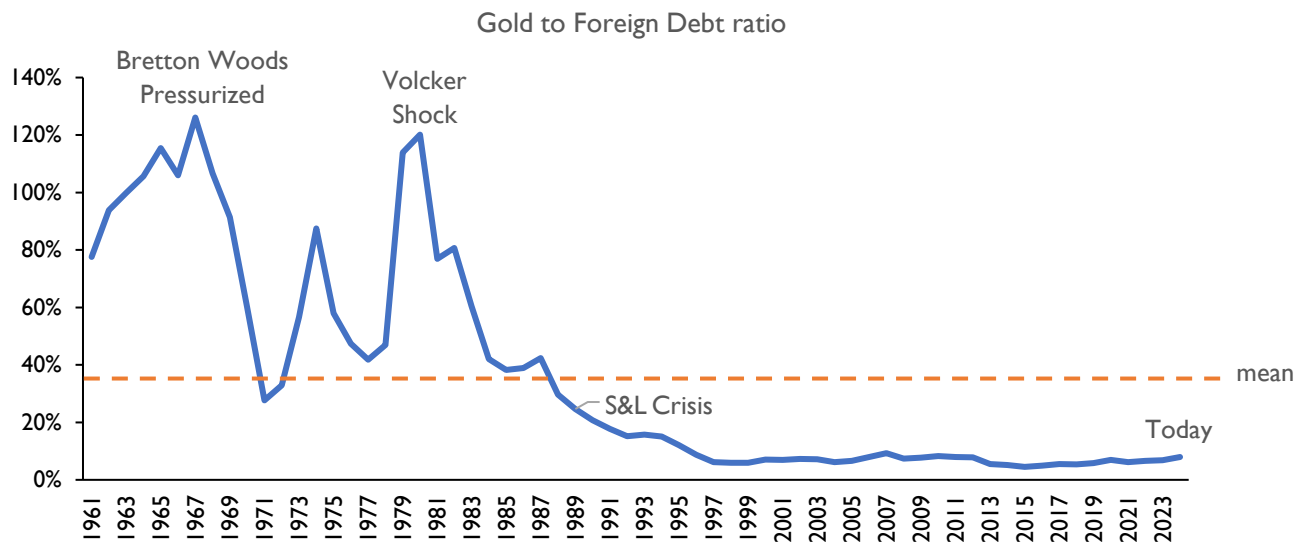




HEYOKHA  
BROTHERS

In periods of turmoil, gold has the potential to safeguard America's foreign-held obligations, reassuring investors that reserves can cover debt if trust in U.S. bonds wavers. With benchmark examples highlighting gold's pivotal role in preserving creditworthiness, a rise beyond \$14,000 isn't far-fetched.

## 5. Gold can reach over \$14,000/ oz if the gold to foreign debt ratio reverts to mean



Source: IMF, FRED

- **If the gold-to-U.S. foreign debt ratio were to return to its historical average, the price of gold could theoretically rise to about \$14,000 per ounce.**
- **1967 —Bretton Woods Under Pressure:** During this strain on the post-World War II monetary system, the **ratio rose to 126%, implying a gold price of approximately \$46,000 per ounce.**
- **1979–80 —Volcker Shock:** In response to high inflation and the energy crisis, Federal Reserve Chair Paul Volcker raised interest rates to nearly 20%; this **period saw the ratio at 120%, suggesting a gold price of roughly \$44,000 per ounce.**
- **1989 —Savings & Loans Crisis:** Under-capitalized regional banks failed in significant numbers, and the **gold-to-debt ratio was about 25%, equating to a possible gold price of \$9,000 per ounce.**

Gold is not just another asset—it is the financial system's fire escape. When trust erodes, when currencies wobble, when the artificial stability of debt-fueled markets is exposed, gold is where capital runs for safety. So, is it hard to imagine gold at \$10,000 or \$20,000? Not if you're looking at the right charts. The writing is on the wall—it's just a matter of when the market catches up.



## Final Note

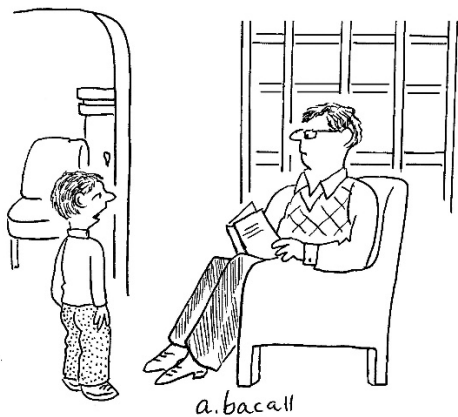
At Heyokha Brothers, we have consistently stayed ahead of the curve, accurately identifying trends that shape the financial landscape. From pinpointing the relentless debasement of fiat currencies to highlighting the undervaluation of gold and miners, our insights have anticipated the dynamics propelling the next great gold bull run.

Historical context underscores the opportunity. From the 1970s stagflation to the dissolution of the Bretton Woods system, gold has repeatedly demonstrated its resilience and value during times of upheaval. Today, it remains profoundly undervalued despite its recent rally, with miners trailing even further behind—positioning them as leveraged opportunities for exponential returns.

Triggers for a surge in gold miners are becoming increasingly evident. Rising central bank demand, de-dollarization, and the growing allure of gold as a geopolitical hedge point to a structural re-rating. Furthermore, at higher gold prices, miners unlock hidden value as previously uneconomical deposits become viable, offering real option value that amplifies their upside.

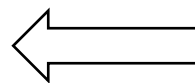
The global stage is set for the next monetary upheaval, creating fertile ground for gold's outperformance. With our focused strategy and deep understanding of these forces, Heyokha Brothers stands ready to deliver exceptional returns in this pivotal moment for gold.

In times of uncertainty, gold's brilliance endures—and so too does the opportunity to capitalize on its strength. The question isn't if this bull run will materialize; it's simply a matter of when.



"Can I have my allowance in gold or silver coins?"

CartoonStock.com



Because one day,  
they'll ask why you  
didn't buy precious  
metals sooner.

We got your back.



## HEYOKHA BROTHERS

### **Contact Us**

Written enquiries relating to this report should be addressed to:

Olle Wennerdahl

Tara Mulia

[Olle@heyokha-brothers.com](mailto:Olle@heyokha-brothers.com)

[Tara@heyokha-brothers.com](mailto:Tara@heyokha-brothers.com)

Heyokha Brothers Limited

Disclaimer: This report has been prepared by Heyokha Brothers for informational purposes only. It should not be considered an offer to sell or a solicitation to buy any securities or commodities. While reasonable care has been taken to ensure that the information provided is neither untrue nor misleading, no representation is made regarding its accuracy or completeness, and reliance on it is not advised.

From time to time, Heyokha Brothers, its affiliated companies, and any of their officers may hold interests in transactions, securities, or commodities mentioned in this report. Additionally, Heyokha Brothers or its affiliated companies may provide services to, or solicit business from, companies referred to in this report.

Past performance is not indicative of future results; the value of shares may decrease as well as increase, and no guarantee can be made. No part of this report may be reproduced or cited in any publication without the express written permission of Heyokha Brothers.





HEYOKHA  
BROTHERS

## References

- I3D Research & Strategy. (2025a, January 9). What i learned this week.
- I3D Research & Strategy. (2025b, January 16). What i learned this week.
- I3D Research & Strategy. (2025b, January 30). What i learned this week.
- I3D Research & Strategy. (2025b, February 27). What i learned this week.
- Ahmed, U. (2023, November 30). *Deep learning in mining: Advancements in mineral exploration*. AZoMining. <https://www.azomining.com/Article.aspx?ArticleID=1776>
- Artificial Intelligence is unearthing a smarter future*. Our products help build a better, clearer future. (n.d.). <https://www.bhp.com/news/bhp-insights/2024/08/artificial-intelligence-is-unearthing-a-smarter-future>
- Artificial Intelligence Key to successful mine rehabilitation*: Tyton Ei. Tyton Ecological Intelligence. (2024, October 10). <https://tytonei.com/artificial-intelligence-key-to-successful-mine-rehabilitation/>
- Autonomous Solutions, Inc. (ASI) begins work with Barrick Gold on first major autonomous haulage project in the United States*. ASI Robots. (n.d.). <https://asirobots.com/barrick-autonomous-haulage/>
- Barrick - Barrick Grows Gold and copper reserves significantly, setting it apart from peers as it positions for Growth*. Barrick. (n.d.). <https://www.barrick.com/English/news/news-details/2025/barrick-grows-gold-and-copper-reserves/default.aspx>
- Bloomberg News. (n.d.). *China frees possible \$27 billion from insurers to buy gold - bloomberg*. Bloomberg. <https://www.bloomberg.com/news/articles/2025-02-10/china-frees-possible-27-billion-from-insurers-to-invest-in-gold>
- Bulk ore sorting and coarse particle recovery – leading the way in Mineral Processing Innovation*. Anglo American. (2025, February 6). <https://www.angloamerican.com/futuresmart/stories/our-industry/mining-explained/bulk-ore-sorting-and-coarse-particle-recovery-leading-the-way-in-mineral-processing-innovation>
- Callaway, G., & Ramsbottom, O. (2019b, April 12). *Can the gold industry return to the Golden Age?*. McKinsey & Company. <https://www.mckinsey.com/industries/metals-and-mining/our-insights/can-the-gold-industry-return-to-the-golden-age>
- Christensen, N. (n.d.). *Gold will do well in 2025 but silver prices will do much better - AuAg Fund's Strand*. Kitco News. <https://www.kitco.com/news/article/2025-02-04/gold-will-do-well-2025-silver-prices-will-do-much-better-auag-funds-strand>
- CNBC. (2024, September 10). *Jamie Dimon says "the worst outcome is stagflation," a scenario he's not taking off the table*. CNBC. <https://www.cnbc.com/2024/09/10/jamie-dimon-says-the-worst-outcome-is-stagflation-a-scenario-hes-not-taking-off-the-table.html>
- Dmitracova, O. (2025, February 7). *The second-largest gold storage in the world suddenly has long lines to withdraw bars | CNN business*. CNN. <https://edition.cnn.com/2025/02/07/business/gold-bank-of-england-trump-tariffs-intl/index.html>
- Goehring, L. R., & Rozencwajg, A. A. (n.d.-a). *Beware of the Collapse in Non-OPEC Oil Supply*. 2Q 2018 Goehring & Rozencwajg Commentary. <https://info.gorozen.com/2018-2q-goehring-and-rozencwajg-commentary>
- Goehring, L. R., & Rozencwajg, A. A. (n.d.-b). *The Gold Bull Market is Here*. G&R. <https://www.gorozen.com/commentaries/2q2019>
- Goehring, L. R., & Rozencwajg, A. A. (n.d.-c). *What is the cost of being early?*. Goehring & Rozencwajg. <https://blog.gorozen.com/blog/what-is-the-cost-of-being-early>
- Gold price surge adds glitter to tarnished miners*. (n.d.). <https://www.mining.com/web/gold-price-surge-adds-glitter-to-tarnished-miners>
- Goldman Sachs. (2024). (rep.). *Australia Metals & Mining Costs impacting gold price pass through, and in focus into FY25; Preview June-Q; Buy EVN, BGL, GOR, & DEG*.
- Gopaul, K. (n.d.). *Central Bank Gold Statistics: November 2024*. World Gold Council. <https://www.gold.org/goldhub/gold-focus/2025/01/central-bank-gold-statistics-november-2024>
- Gundlach, J. (n.d.). *Grants 40th Anniversary: "Rates Can Never Rise" (Redux)*. YouTube. <https://www.youtube.com/watch?v=7RLfKaxH-Og>
- Ma, J. (2025, January 5). *The dollar will stay strong if the world keeps "shoveling all of its savings" into US stocks, strategist says*. Fortune. <https://fortune.com/2025/01/05/dollar-outlook-strong-global-investors-shoveling-savings-us-stock-market/>
- Marks, H. (2000, January 2). Bubble.com.
- Marks, H. (n.d.). *On Bubble watch*. OaktreeCap. <https://www.oaktreecapital.com/insights/memo/on-bubble-watch>
- Moore, B., Costa, M., & Sharp, J. (2025). (rep.). *Newmont - U-PF (Initiation Marketing: Key Takeaways)* (pp. 1–26).: CLSA. Retrieved 2025, from <https://www.clsa.com/member/report/607947751?reportLanguage=EN>.
- Napier, R. (2024a, December 17). The solid ground.
- Napier, R. (2024b, December 20). The solid ground.
- Paul Tudor Jones: We are going to be broke really quickly unless we get serious about our spending*. (n.d.). Youtube. Retrieved from <https://www.youtube.com/watch?v=49-2-NWoiL>.
- Sargen, N. (2025, January 7). *Super-strong dollar and trade conflict fears add to U.S. equity risks*. Forbes. <https://www.forbes.com/sites/nicksargen/2025/01/07/a-super-strong-dollar-adds-to-us-equity-risk/>
- Shofa, J. N. (n.d.). *Indonesia finally seeks BRICS membership*. Jakarta Globe. <https://jakartaglobe.id/news/indonesia-finally-seeks-brics-membership>
- The Economist Newspaper. (n.d.-b). *Why a stronger dollar is dangerous*. The Economist. <https://www.economist.com/finance-and-economics/2024/04/23/why-a-stronger-dollar-is-dangerous>
- TyphoonTM*. Ivanhoe Electric Inc. (n.d.). <https://ivanhoeelectric.com/technologies/typhoon/>
- Weldon, D. (2025, January 19). *The consensus on a strong dollar may be too complacent*. Financial Times. <https://www.ft.com/content/24dca960-9d41-4f50-8fab-c42666b50d4e>
- Wood, C. (2025, February 13). Greed & fear.