gold.org

Gold Demand Trends
Q4 and Full Year 2024

Gold demand hits new record in 2024

Central banks and investors drive market strength

Total gold demand (including OTC investment) rose 1% y/y in Q4 to reach a new quarterly high and contribute to a record annual total of 4,974t.

Central banks continued to hoover up gold at an eye-watering pace: buying exceeded 1,000t for the third year in a row, accelerating sharply in Q4 to 333t.

Annual investment reached a four-year high of 1,180t (+25%). Gold ETFs had a sizable impact: 2024 marked the first year since 2020 in which holdings were essentially unchanged, in contrast to the heavy outflows of the prior three years.

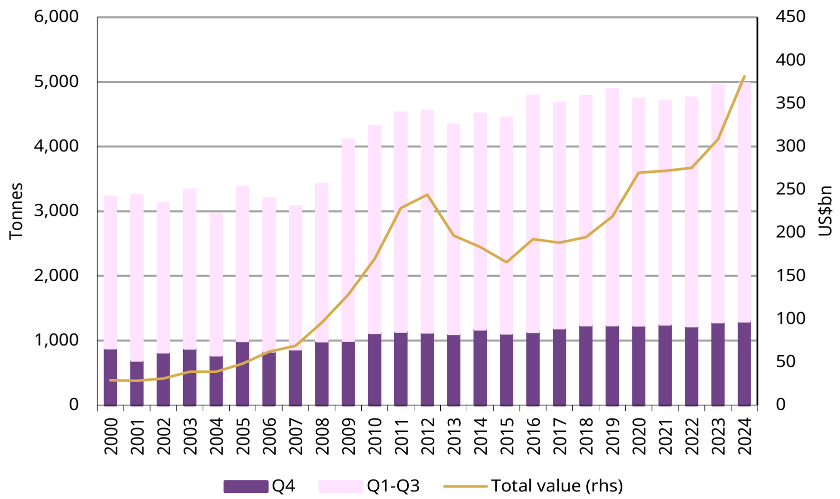
Full-year bar and coin demand was in line with 2023 at 1,186t. The composition shifted as bar investment grew and coin buying reduced.

Annual technology demand was also additive to the global total: it grew by 21t (+7%) in 2024, largely driven by continued growth in AI adoption.

Gold jewellery was the clear outlier: annual consumption dropped 11% to 1,877t as consumers could only afford to buy in lower quantities. Nonetheless, spend on gold jewellery jumped 9% to US$144bn.

Chart 1: Gold demand at record levels for Q4 and full year

Quarterly gold demand in volume, tonnes, and value, US$bn*



*Data to 31 December 2024.
Source: ICE Benchmark Administration, Metals Focus, World Gold Council

Highlights

The LBMA (PM) gold price reached 40 new record highs during 2024. The average Q4 price of US$2,663/oz was also a record and yielded an annual average price of US$2,386/oz (+23%).

Demand in value terms reached previously unseen levels. The combination of record gold prices and volumes produced a Q4 value of US$111bn. This took 2024 over the line to reach the highest-ever annual value of US$382bn.

Total gold supply inched up 1% y/y to 4,975t – a high for our data series. Growth in both mine production and recycling contributed to the increase in total supply of gold.

A sharp slowdown in Q4 OTC investment led to a slight annual decline. Demand from high net worth investors remained healthy, but contrasted with profit-taking in some areas of OTC investment.

2025 full year outlook: central banks and ETF investors likely to drive demand with economic uncertainty supporting gold's role as a risk hedge, but on the flipside, keeping pressure on jewellery.

For more information please contact: research@gold.org

Gold supply and demand

Table 1: Gold supply and demand by sector, tonnes

	2023	2024		Annual y/y % change	Q4'23	Q4'24		Quarterly y/y % change
Supply								
Mine production	3,644.1	3,661.2	▲	0	955.4	953.6	▼	0
Net producer hedging	67.4	-56.8	▼	-	19.9	-15.0	▼	-
Recycled gold	1,234.4	1,370.0	▲	11	311.2	358.8	▲	15
Total supply	**4,945.9**	**4,974.5**	▲	1	**1,286.5**	**1,297.4**	▲	1
Demand								
Jewellery fabrication	2,191.0	2,003.5	▼	-9	583.6	516.5	▼	-12
Jewellery consumption	2,110.6	1,877.1	▼	-11	620.9	547.1	▼	-12
Jewellery inventory	80.4	126.4	▲	57	-37.3	-30.6	▲	-
Technology	305.2	326.1	▲	7	82.2	83.7	▲	2
Electronics	248.7	270.6	▲	9	67.6	69.6	▲	3
Other industrial	47.1	46.5	▼	-1	12.3	11.9	▼	-4
Dentistry	9.4	8.9	▼	-5	2.3	2.2	▼	-6
Investment	945.5	1,179.5	▲	25	259.8	344.0	▲	32
Total bar and coin	1,189.8	1,186.3	▼	0	315.2	325.4	▲	3
Bars	781.7	860.0	▲	10	223.1	236.2	▲	6
Official coins	293.5	201.0	▼	-31	60.3	53.4	▼	-11
Medals/Imitation coins	114.6	125.2	▲	9	31.9	35.8	▲	12
ETFs & similar products	-244.2	-6.8	▲	-	-55.4	18.6	▲	-
Central banks & other inst.	1,050.8	1,044.6	▼	-1	216.8	332.9	▲	54
Gold demand	**4,492.5**	**4,553.7**	▲	1	**1,142.4**	**1,277.1**	▲	12
OTC and other	453.4	420.7	▼	-7	144.1	20.3	▼	-86
Total demand	**4945.9**	**4974.5**	▲	1	**1,286.5**	**1,297.4**	▲	1
LBMA Gold Price (US$/oz)	1,940.5	2,386.2	▲	23	1,971.5	2,663.4	▲	35

Note: For an explanation of these terms, please see the Notes and definitions download: https://www.gold.org/goldhub/data/gold-demand-by-country
Source: Metals Focus, Refinitiv GFMS, ICE Benchmark Administration, World Gold Council

Outlook

We expect central banks to stay in the driving seat and gold ETF investors to join the fray. Jewellery demand will remain under pressure and we may see further growth in recycling. Mine supply is expected to remain robust

The macroeconomic backdrop we laid out in our Gold Outlook 2025 is broadly in line with market expectations with some changes, partly reflected by less aggressive rate cuts by central banks.

In line with consensus economic estimates, the following developments are likely in the four major gold regions:[1]

- A soft landing in the US with intermittent risks of overheating. Interest rates recede slowly but it's a bumpy ride. The US dollar on course to decline
- European growth remains weak but benefits from both lower inflation and rates in the latter half of the year; any additional pickup in Chinese growth can provide a welcome boost to exports
- China continues to battle weak domestic activity but could improve on continued stimulus measures that have seen a nascent recovery in retail and property sales
- India sees slowest growth in four years – albeit higher than most regions – accompanied by a welcome decline in interest rates and inflation.

Investment

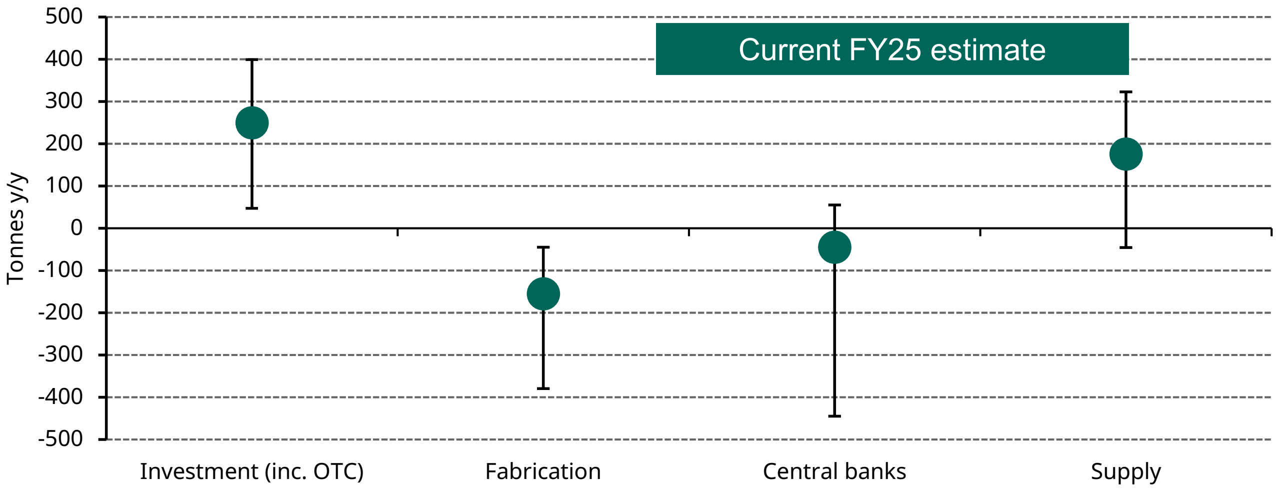
We see tailwinds for gold ETF, OTC and futures-based investment stemming from generally lower interest rates, richly valued equities, a softer US dollar and geopolitical risk mostly expressed though trade and economic uncertainty.

We expect the trajectory for rates in the US will be down but bumpy, given the Trump administration's all-out pro-growth agenda stoking temporary inflationary fires in a late business cycle. This uncertainty is likely to keep term premia intact and the bond-equity correlation elevated – a positive for gold. In addition, there's potential for US dollar weakness stemming from a combination of 'extreme' overvaluation[2] and a push for both lower rates and a more competitive dollar by the administration,[3] as well as a likely narrowing in German Bund-US Treasury spreads as German elections push local growth policies to the fore.

Regionally, gold ETF investment in the US has the potential to bring in substantial flows overall, even if we see transient periods of outflows. In Europe, the ECB is expected to cut rates by 1% during 2025.[4] This could be enough to get some European ETF investors back in the fold. However, it might be a slow return given that real rates remain attractively positive at close to 1%, one factor that anecdotally drove investors out of European ETFs in 2023.

Chart 2: We see central banks and ETF investors at the forefront, while consumer-led sectors face challenges in 2025

Expected change in annual gold demand*



*Data as at 31 December 2024.
Source: Metals Focus, World Gold Council

1. Consensus economic estimates represent median analyst forecasts for Real GDP growth, CPI ,PCE, US policy rate and bond yields as well as EUR/USD and USD/JPY exchange rates from Bloomberg's Economic Forecasts (ECFC) function.
2. Wall Street Journal | The Dollar Is Way Overvalued by This Measure | Dec 31, 2024.
3. FT | Dollar falls after Trump calls for lower interest rates | Jan 24, 2025.
4. Based on Overnight Index Swaps (OIS) pricing from Bloomberg's World Interest Rate Probability (WIRP) function as of 30 January.

China's ETF demand hit a record in 2024. We expect robust rather than remarkable demand there this year, with tailwinds from RMB weakness and declining benchmark yields fighting headwinds from the high base and the possibility for risk-on sentiment.

In the bar and coin segment, the outlook is a little less rosy. In the West, economic malaise in Europe and high prices are likely to weigh on demand as will declining inflation fears and conflict risk, but lower interest rates might attract European activity back in H2. In the US, Republican presidencies have historically been accompanied by below-average bar and coin demand; however, the geopolitical environment could soften the pullback. Chinese and Indian demand is likely to remain robust but slightly weaker than 2024 as growth slows in India and equity and real estate markets recover somewhat in China offering alternatives to domestic investors.

Fabrication

If the gold price remains at current or higher levels, it could further erode jewellery demand, particularly as growth is also weak or slowing in all four major gold regions. China faces a pessimistic outlook should the economy continue to slow and prices stay high or rise. A glimmer of hope may come from benchmark lending rates which have come down, which could entice a pickup in activity.

More auspicious wedding days can provide some support to jewellery demand in India following a resilient 2024. Key to the fortunes of Indian jewellery buying is stable prices. With economic growth set to slow but still humming along at an impressive pace, price volatility becomes a key determinant for demand in 2025. Elsewhere, the familiar tale of softer economic growth and high prices will likely exert pressure on demand in 2025.

Continued capital investment in AI and its related infrastructure should ensure technology demand remains solid in 2025. Other electronic demand will likely continue to be weighed down by economic uncertainty in China and Europe.

Central Banks

Having positively surprised for three years in a row, there's more evidence that supports the idea that central banks can repeat again their 1,000t-plus net buying in 2025. However, we reserve caution by reflecting it in potential downside risk rather than our central view.

We believe that armed conflict giving way to global trade and economic conflict may support central bank's net buying trend. We can see this in part by the pickup and broadening of demand, especially in Q4. Further, central banks seem to have taken advantage of temporary pullbacks in the gold price as entry points, while sales remained limited and mostly tactical as the price rose. Yet, forecasting demand for central banks is inherently challenging given that it's often linked to policy decisions and not just macroeconomic drivers, leading us to widen the band of uncertainty around our estimate – mostly to the downside. For example, recent announcements of sales to manage currency volatility[5] leads us to account for the risk further such developments elsewhere.

Supply

High margins provide an incentive for mine production to reach new highs, but downside risks remain. This year's total was lower than previously anticipated, so we attach caution to a material rise, despite near-record AISC margins currently. De-hedging's contribution to the lower mine supply figure could also be a factor next year as miners anecdotally opt for exposure to the spot price.

Recycled gold supply breached 350t in Q4 for only the fourth time in a decade. The trend is rising and tonnage is expected to increase again in 2025 on the back of slowing global economic growth, a high gold price level, and a slight reduction in the geopolitical risk premium that's been key to dampening supply for the past two years. Constraining higher recycling is a lack of near market supplies in China and Western markets.

.

5. Mining.com | Kazakhstan to sell gold abroad in bid to prop up tenge | 17 January 2025; Suomenpankki.fi | Bank of Finland increases its foreign exchange reserves | 19 December 2024.

Jewellery

Gold's price strength thumped jewellery demand volume in 2024, but drove value to record levels

- Q4 set the seal on a very weak year for global gold jewellery demand as record price levels impacted affordability
- A 12% y/y drop in Q4 demand to 547t took the annual total down to 1,877t (-11%) as unrelenting gold price strength impacted consumers' ability to buy
- Weakness was global, although India's 2% y/y decline showed resilience, particularly compared with China's 24% y/y drop.

Tonnes	2023	2024	Year-on-year % change
World total	2,110.6	1,877.1	-11 ▼
India	575.8	563.4	-2 ▼
China, P.R.: Mainland	630.2	479.3	-24 ▼

Full-year jewellery demand fell 11% as the rip-roaring price performance impacted volumes. With the exception of covid-stricken 2020, when demand crashed below 1,400t, we need to go back to 2009 to find the last comparable year for gold jewellery demand. In stark contrast, the sharp rise in the gold price during the year saw the value measure of jewellery demand shoot up to a record US$144bn (+9%).

The Q4 picture was similar: global demand was down 12% y/y, sinking to a four-year low for a fourth quarter, while value reached a new record high of US$47bn.

By far the largest contributor to the weakness in volume was China, which, for the second time in three years, ceded its position to India as the largest jewellery market.

China

Despite a seasonal quarterly improvement in Chinese Q4 gold jewellery demand, the y/y comparison showed a sharp decline. Demand for the full year fell to 479t, 26% below the 10-year average and 10% lower than 2020 when demand was ravaged by COVID.

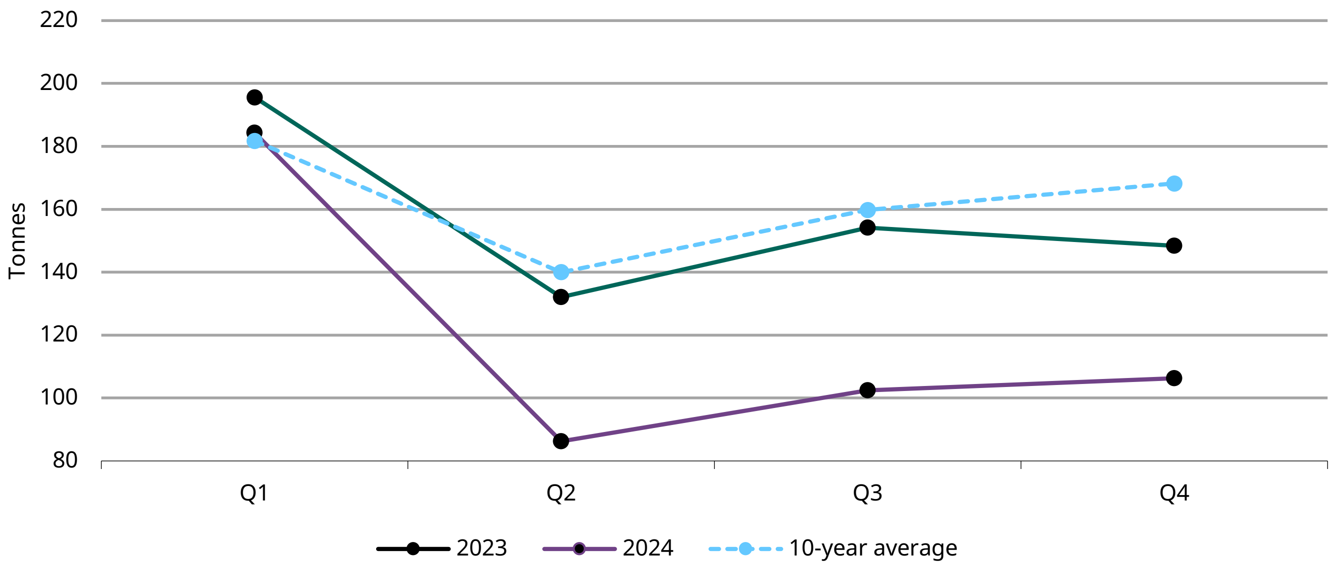
The environment for Chinese jewellery demand was very challenging throughout 2024, hit by a combination of poor consumer confidence amid declining income growth and surging gold prices. The jewellery retail sector has faced challenges and stores have been closing throughout the year.

Although Golden Week sales in early October were disappointing, Q4 demand improved by 4% q/q as restocking activity picked up in December ahead of the calendar New Year and Spring Festival sales boosts. But the outlook remains pessimistic, given China's slowing economy, and the shift towards lighter weight items continues.

To protect margins, retailers have been promoting products with higher added-value and major brands continue to develop exclusive special collections to differentiate from their competitors. Fashionable designs integrating gold with alternative colourful materials including gems, enamel and even feathers, are attracting young consumers.

Chart 3: Jewellery demand in China responded to the surging gold price and slower economic growth

Chinese gold jewellery consumption, quarterly and 10-year average, in tonnes*



*Data to 31 December 2024.
Source: Metals Focus, World Gold Council

Table 2: Jewellery demand in selected countries, tonnes

	2023	2024		Annual y/y % change	Q4'23	Q4'24		Quarterly y/y % change
India	575.8	563.4	▼	-2	199.6	189.8	▼	-5
Pakistan	21.1	17.5	▼	-17	5.1	4.6	▼	-10
Sri Lanka	10.5	5.8	▼	-45	2.6	1.3	▼	-52
Greater China	671.9	511.4	▼	-24	160.9	114.3	▼	-29
China, P.R.: Mainland	630.2	479.3	▼	-24	148.4	106.2	▼	-28
Hong Kong SAR	37.4	27.9	▼	-25	11.3	7.1	▼	-37
Taiwan Province of China	4.4	4.2	▼	-4	1.2	1.0	▼	-17
Japan	16.3	15.1	▼	-7	4.7	4.2	▼	-10
Indonesia	25.1	22.8	▼	-9	8.3	7.7	▼	-7
Malaysia	11.3	11.5	▲	2	3.1	2.6	▼	-15
Singapore	7.2	6.8	▼	-5	2.0	1.6	▼	-20
Korea, Republic of	12.2	11.7	▼	-5	3.1	2.8	▼	-10
Thailand	9.2	9.0	▼	-2	3.0	2.9	▼	-3
Vietnam	15.1	13.2	▼	-13	3.8	3.3	▼	-13
Australia	11.7	8.9	▼	-24	3.3	2.9	▼	-10
Middle East	171.5	157.0	▼	-8	41.0	40.8	▼	-0
Saudi Arabia	38.1	35.0	▼	-8	8.7	9.8	▲	12
UAE	39.7	34.7	▼	-13	10.3	8.8	▼	-14
Kuwait	14.3	12.3	▼	-14	3.8	3.5	▼	-7
Egypt	26.7	26.1	▼	-2	6.0	6.3	▲	5
Islamic Republic of Iran	27.3	26.7	▼	-2	6.1	6.8	▲	10
Other Middle East	25.3	22.3	▼	-12	6.1	5.6	▼	-8
Turkey	42.2	40.9	▼	-3	10.9	12.0	▲	10
Russian Federation	39.7	41.2	▲	4	12.1	12.4	▲	2
Americas	180.1	175.0	▼	-3	63.7	61.4	▼	-4
United States	136.9	132.1	▼	-3	49.1	47.1	▼	-4
Canada	14.4	13.8	▼	-4	5.8	5.5	▼	-4
Mexico	13.6	13.5	▼	-1	3.8	3.7	▼	-3
Brazil	15.2	15.6	▲	2	5.0	5.1	▲	1
Europe ex CIS	70.1	67.5	▼	-4	30.2	29.0	▼	-4
France	14.2	13.8	▼	-2	6.0	5.9	▼	-2
Germany	10.7	9.8	▼	-8	4.8	4.4	▼	-9
Italy	18.7	17.8	▼	-5	9.4	9.0	▼	-5
Spain	8.3	8.6	▲	3	2.5	2.6	▲	4
United Kingdom	18.2	17.4	▼	-4	7.5	7.2	▼	-4
Switzerland	-	-	-	-	-	-	-	-
Austria	-	-	-	-	-	-	-	-
Other Europe	-	-	-	-	-	-	-	-
Total above	1,891.0	1,678.8	▼	-11	557.3	493.5	▼	-11
Other & stock change	219.6	198.3	▼	-10	63.6	53.6	▼	-16
World total	2,110.6	1,877.1	▼	-11	620.9	547.1	▼	-12

Source: Metals Focus, Refinitiv GFMS, ICE Benchmark Administration, World Gold Council

Looking ahead, with gold prices having reached a fresh record high in early 2025, we expect Chinese gold jewellery demand to remain weak, albeit the rate of decline will likely slow. Continued industry consolidation will likely pressure wholesale gold jewellery demand and, should the domestic economy continue to slow, we would expect discretionary consumer to shrink further. This could be offset to some degree if we see cuts to benchmark lending rates, which should support growth, and if gold prices stabilise.

India

After posting the strongest third quarter since 2015 (following the sharp cut in import duty), gold jewellery demand in India lost some momentum in the final quarter. Q4 demand was 5% lower y/y due to continued strength in the gold price. Full-year demand was 2% lower at 563t.

The fact that annual demand only shrank by 2% during a year in which the gold price reached multiple record highs is testament to the resilience of gold jewellery demand in India, highlighting both the strength of the response to the July duty cut and the country's relatively healthy economic growth. Many consumers front-loaded their gold jewellery buying in late Q3 when the duty cut effectively offset much of the recent price increase.

Demand reached exceptional values in 2024: annual demand was valued at INR3.6tn with around 70% of that occurring in the second half of the year.

Demand in the fourth quarter was concentrated between late October – peak Diwali festival buying season – and November, when the gold price saw a notable correction coinciding with the onset of the wedding season.

Nevertheless, demand remained lacklustre due to high and fluctuating prices. And in mid-December, the onset of an inauspicious period in the Hindu calendar put many consumers on hold during the closing weeks of the year.

We expect gold jewellery demand to recover gradually from mid-January, driven by wedding-related buying, although this would also require an element of price stability. Any periods of volatility in the gold price would be expected to curb demand.

Middle East and Turkey

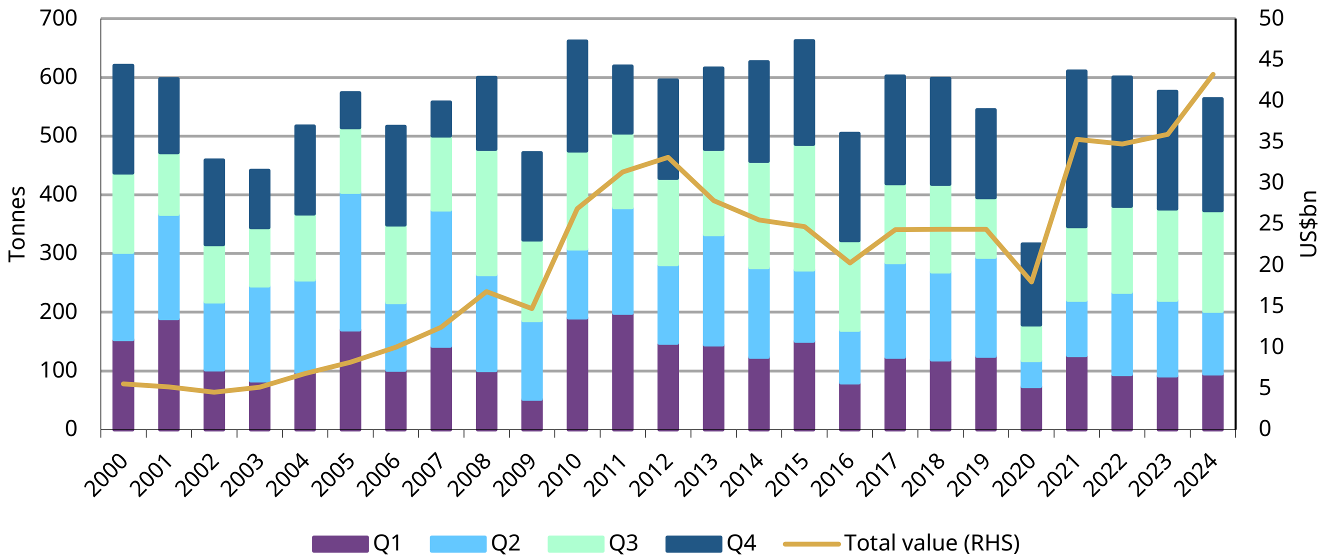
Gold jewellery demand in Turkey jumped to its highest in Q4 since 2016, primarily driven by investment motives. After reaching new record highs in October, the gold price saw a subsequent healthy correction, which offered buying opportunities and spurred demand. Despite the Q4 boost, a slight slowdown in annual demand was largely attributed to the surging gold price. Nevertheless, full year consumption was in line with the average of the prior 10 years at 41t.

Full-year demand was universally lower across the Middle East due to the combination of the gold price and the Q3 Indian gold import duty cut. The latter hit demand among Indian tourists as it reduced the price advantage of buying gold abroad rather than at home. The UAE was particularly affected by this, given the importance of Indian tourists to that market.

The profile of Q4 demand in Iran was similar to that of Turkey, with consumers making the most of the price pullback. Q4 y/y growth in Egypt, meanwhile, was due to falling inflation; this, and the November price drop, boosting consumer confidence.

Chart 4: Jewellery demand in India was resilient in the face of record gold prices

Indian quarterly gold jewellery consumption in volume, tonnes and value, US$bn*



*Data to 31 December 2024.
Source: Metals Focus, ICE Benchmark Administration, Refinitiv GFMS, World Gold Council

US and Europe

Q4 represented the 11th consecutive quarter of y/y losses in US jewellery demand, which was the weakest fourth quarter for seven years. Full-year demand consequently hit a five-year low as a combination of record gold prices and persistent cost-of-living pressures affected jewellery consumption. Lower income groups in particular are feeling the pinch, as rising rents and grocery bills undermine discretionary spending.

On a value basis, the US saw record levels in both Q4 and 2024 as a whole, of US$4bn and US$10bn, respectively.

European consumers remained beset by poor sentiment and a weak economic backdrop, which took their toll on demand. Regional gold jewellery consumption sank to its lowest since 2020. Germany and the UK were the weakest performing markets.

Value measures in Europe mirrored trends seen elsewhere, reaching record levels for the region of €2bn and €5bn for Q4 and FY 2024, respectively.

ASEAN markets

Gold prices throughout 2024 posed a significant challenge to consumers across our covered ASEAN markets. Annual declines were most notable in Vietnam and Indonesia, both impacted by high gold prices and constrained discretionary spending. In the former, a government crackdown on tax evasion was a further deterrent, while in the latter, consumers continued to shift towards lower carat items.

Thailand was a little more resilient, seeing only a modest y/y decline. A robust domestic economy, buoyed in particular by healthy tourist numbers, helped to limit losses in demand.

Although Malaysia saw a modest increase in annual 2024 demand, this was entirely due to a strong first quarter. In contrast, the market weakened considerably during the second half – particularly in Q4 as sharp domestic currency depreciation magnified the October gold price rise.

Rest of Asia

Jewellery consumption remained under pressure in Japan, reflecting both higher retail prices and the inflation environment more generally. Stubborn core consumer inflation hit households and impacted discretionary spending on items like gold jewellery.

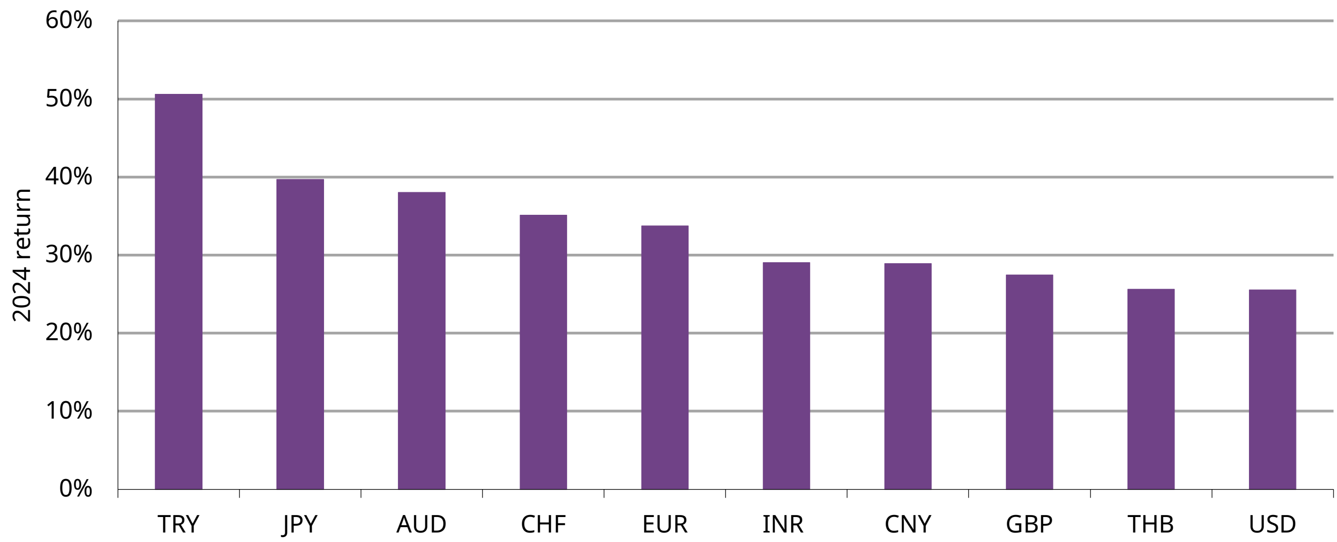
South Korean gold jewellery demand reached a fresh record low for our data series. Gold's price strength was amplified by domestic currency weakness as the Korean won weakened sharply against the US dollar, most notably in the fourth quarter when the country was hit by political instability, which rocked its financial markets. Together with slower-than-expected economic growth, this affected consumers' willingness to purchase.

Australia

After six consecutive quarterly y/y losses in Australian gold jewellery demand, annual demand sank to a four-year low. Continued record price levels and a challenging consumer environment have been responsible for the decline.

Chart 5: Some markets – most notably Turkey, Japan and Australia – saw even steeper rises in the local gold price

Annual return in the gold price, %*



*Data to 31 December 2024.
Source: Bloomberg, ICE Benchmark Administration, World Gold Council

Investment

Global investment reached a four-year high in 2024, helping fuel gold's stunning 26% annual return

- Annual investment totalled 1,180t, with a value of US$90bn
- Increased demand for gold ETFs fuelled the rise in overall investment, notably in the second half of the year as US-listed funds attracted inflows
- Bar and coin investment was in line with 2023 as gains in India and China offset declines in the US and Europe.

Tonnes	2023	2024	Year-on-year % change	
Investment	945.5	1,179.5	25	▲
Bar & Coin	1,189.8	1,186.3	0	▼
India	185.2	239.4	29	▲
China, P.R.: Mainland	279.5	336.2	20	▲
Gold-backed ETFs	-244.2	-6.8	-	▲

Annual gold investment grew 25% – the strongest annual growth rate since 2020. This was concentrated in the second half of the year as rate cuts, geopolitical uncertainty and gold's price performance attracted inflows into gold ETFs.

Bar and coin demand was unchanged at 1,186t, while the value of this investment surged 23% to a record US$91bn.

OTC investment held firm throughout much of the year. This category, as well as being a statistical residual from the balance of other categories of demand and supply, captures flows in the over-the-counter market, which has been increasingly reflective of demand from HNW investors seeking to hedge geopolitical and economic risks. The recent price performance has added fuel to these flows.

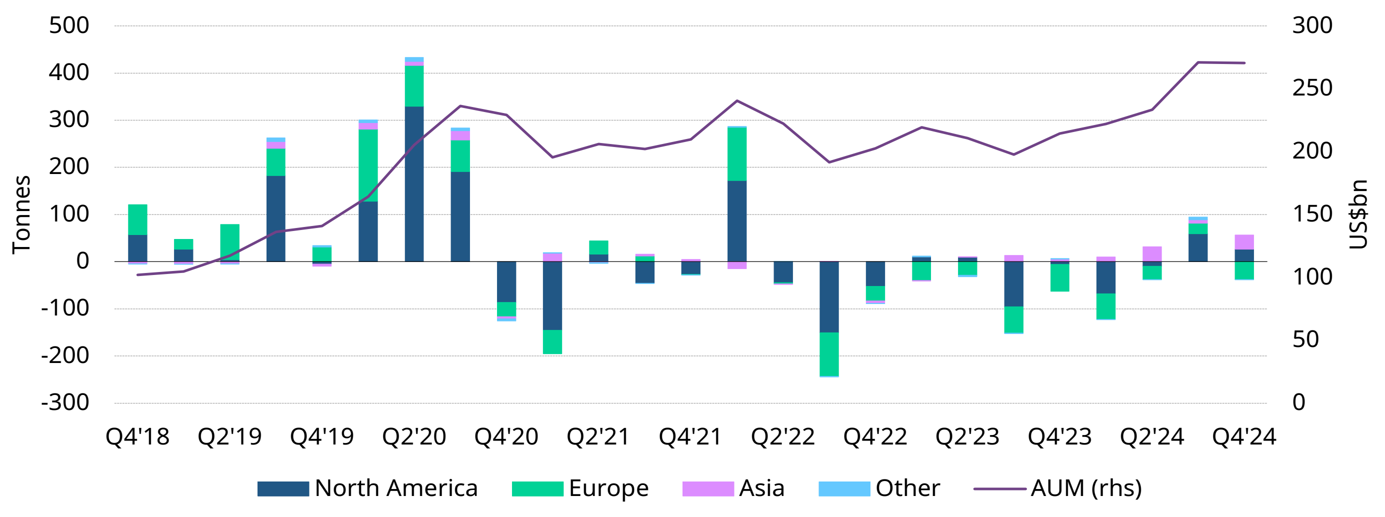
ETFs

Global gold-backed ETFs posted a second consecutive quarter of inflows: holdings increased by 19t during the quarter. The net result for 2024 was a very small (7t) annual outflow, as growth in the second half of the year reversed the sizable Q1 outflows.

After sinking to a four-year low of 3,080t in April,[6] global holdings of gold ETFs recovered throughout the remainder of 2024 (with the exception of a slight November dip), ending the year very close to where they had started (3,219t vs 3,226t). Heightened geopolitical uncertainties, shifting expectations of the future path of interest rates, and the strongest annual gold price performance since 2010 were all key drivers of the annual increase.

Chart 6: A surge of inflows into gold ETFs in H2 2024 almost fully reversed the outflows from H1

Quarterly gold-backed ETF demand by region, tonnes, and global AUM, US$bn*



*Data to 31 December 2024.
Source: Bloomberg, Company Filings, ICE Benchmark Administration, World Gold Council

6. Refers to month-end levels. Intra-month lows may differ.

Table 3: Total bar and coin demand in selected countries, tonnes

	2023	2024		Annual y/y % change	Q4'23	Q4'24		Quarterly y/y % change
India	185.2	239.4	▲	29	66.7	76.0	▲	14
Pakistan	21.9	19.0	▼	-13	5.3	5.6	▲	5
Sri Lanka	-	-	-	-	-	-	-	-
Greater China	**287.2**	**345.7**	▲	**20**	85.0	86.2	▲	1
China, P.R.: Mainland	279.5	336.2	▲	20	82.7	83.6	▲	1
Hong Kong SAR	1.2	1.5	▲	24	0.3	0.4	▲	25
Taiwan Province of China	6.4	8.0	▲	25	2.0	2.2	▲	15
Japan	-0.4	2.5	▲	-	-1.3	-1.3	▼	-
Indonesia	20.6	24.5	▲	19	4.5	5.8	▲	29
Malaysia	5.3	6.4	▲	21	1.6	2.0	▲	24
Singapore	5.3	6.5	▲	22	1.6	1.9	▲	19
Korea, Republic of	15.3	19.4	▲	26	4.6	5.9	▲	29
Thailand	34.0	39.8	▲	17	12.1	14.6	▲	20
Vietnam	40.4	42.1	▲	4	9.9	8.2	▼	-17
Australia	13.4	11.1	▼	-17	3.0	3.6	▲	20
Middle East	**114.1**	**109.5**	▼	**-4**	24.5	27.6	▲	13
Saudi Arabia	14.1	15.4	▲	9	3.6	4.3	▲	20
UAE	11.5	13.3	▲	15	3.1	3.4	▲	10
Kuwait	5.2	6.1	▲	16	1.3	1.4	▲	8
Egypt	30.3	24.0	▼	-21	5.5	5.9	▲	7
Islamic Republic of Iran	44.4	42.3	▼	-5	8.9	10.4	▲	18
Other Middle East	8.5	8.5	▲	0	2.2	2.2	▲	2
Turkey	150.1	112.2	▼	-25	29.6	23.5	▼	-21
Russian Federation	31.5	34.4	▲	9	7.5	9.0	▲	20
Americas	**127.9**	**87.8**	▼	**-31**	28.4	22.0	▼	-23
United States	115.7	77.8	▼	-33	25.9	18.9	▼	-27
Canada	9.4	7.5	▼	-21	1.7	2.5	▲	46
Mexico	1.1	0.8	▼	-24	0.3	0.2	▼	-52
Brazil	1.7	1.8	▲	4	0.5	0.5	▲	2
Europe ex CIS	**132.1**	**66.6**	▼	**-50**	30.2	23.1	▼	-24
France	2.7	-2.6	▼	-	-0.4	-0.5	▼	-
Germany	46.9	16.8	▼	-64	11.3	8.7	▼	-23
Italy	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-
United Kingdom	12.8	10.0	▼	-22	2.1	1.8	▼	-11
Switzerland	35.8	16.9	▼	-53	8.8	5.4	▼	-39
Austria	4.1	2.4	▼	-40	1.1	1.1	▲	8
Other Europe	29.9	23.1	▼	-23	7.3	6.5	▼	-11
Total above	**1,183.9**	**1,166.9**	▼	**-1**	313.2	313.7	▲	0
Other & stock change	5.9	19.4	▲	228	2.0	11.7	▲	483
World total	**1,189.8**	**1,186.3**	▼	**-0**	315.2	325.4	▲	3

Source: Metals Focus, Refinitiv GFMS, ICE Benchmark Administration, World Gold Council

Asian-listed funds were at the forefront of this trend, registering a 78t increase in holdings over the year and taking holdings to a record 216t, driven by exceptional growth in both India and China. This far outstripped the 8t increase in North American-listed funds, although that was nevertheless notable for being the first positive annual increase for the region since 2020. Funds listed in the 'Other' region added a modest 5t.

European funds were the exception: the region saw its fourth consecutive annual decline in holdings, although at 98t this was a significant improvement on 2023's 180t drop. For a detailed review of gold ETF flows, please see our ETF flows commentary.

Bar and coin

Global bar and coin investment closed 2024 on a high note: Q4 demand surged 20% q/q. After hitting a new record in October the gold price corrected in November and investors globally seized on this as an opportunity to buy gold at lower levels, anticipating a resumption of the strong upward trend.

US dollar strength throughout 2024 meant that gold's price performance was stronger still when measured in other currencies. This ensured that gold gained attention across global markets, delivering an impressive investment performance, while also clearly fulfilling its recognised role as a currency hedge.

While annual demand stalled at 2023 levels (1,180t), this was nevertheless a healthy outcome: the average of the prior ten years is 1,073t.

China

Q4 bar and coin investment in China rebounded to produce the highest annual total for over 10 years. Gold's local price performance kept it firmly on the investor radar in 2024, reaching 38 fresh record highs during the year.

Against a backdrop of domestic economic uncertainty, government bond yields that plunged to a historic low, increased equity market volatility, and a still lacklustre property market, Chinese investors faced a dearth of alternative assets in which to invest. Furthermore, the 3% depreciation in the renminbi against the dollar encouraged investors into gold to meet their value-preservation needs.

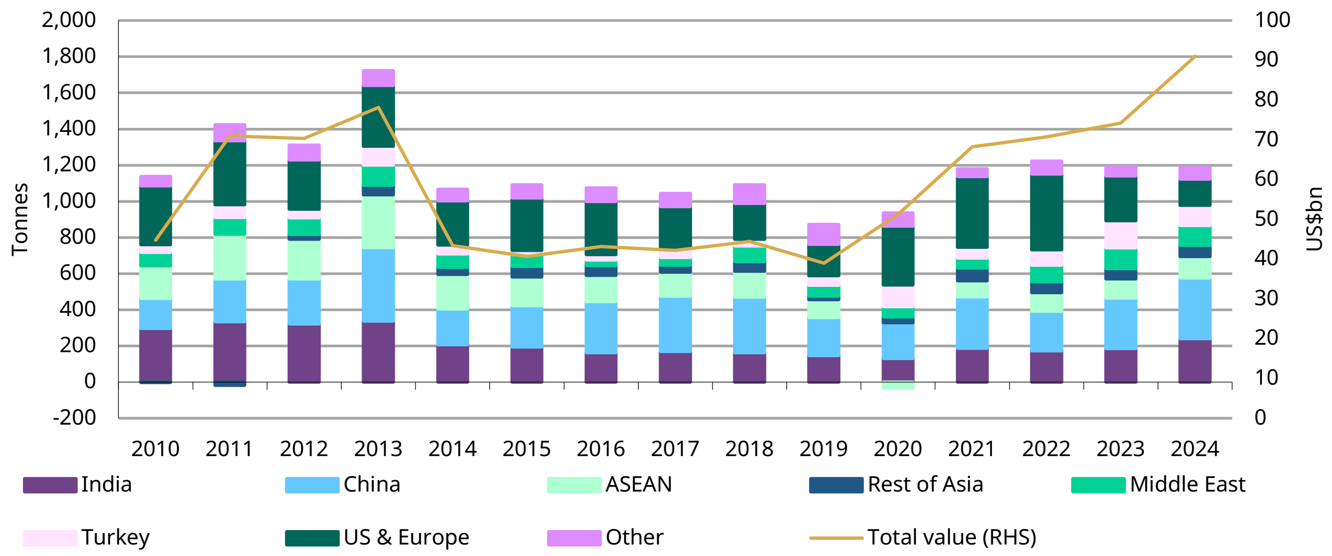
And we believe announcements from the Chinese central bank about its gold purchases during the year gave an additional boost to investor sentiment.

We anticipate that investment demand will remain healthy in 2025, supported by the macro environment. Interest rates are expected to fall further, which would reduce the opportunity cost of holding gold and will likely exert continued pressure on the local currency if the differential between China and US rates widens (given that expectations of further Fed rate cuts have been dialled back significantly for 2025). Gold investment sentiment may rise further should the PBoC continue to announce gold purchases.

But the performance of gold in tandem with other assets will remain key; investors may be diverted away from gold if local assets, such as equities, offer robust returns.

Chart 7: Global bar and coin investment was steady in 2024, with growth in Asia cancelling out weakness in the West

Annual bar and coin investment by region in volume, tonnes, and value, US$bn*



*Data to 31 December 2024.
Source: Metals Focus, ICE Benchmark Administration, Refinitiv GFMS, World Gold Council

India

Indian gold investment remained strong in Q4 at 76t, almost matching Q3's exceptional performance and taking full-year demand to 239t – the highest since 2013. In local currency terms that equated to demand of INR1.5tn (US$18bn), an increase of 60% over the prior record set in 2023.

As with most other markets, investment demand was cemented by gold's price rise throughout the year. Prices swiftly resumed their upward march following the July duty cut, and a subsequent correction in November attracted bargain hunting investors keen to add to their holdings at a lower price.

The auspicious festival period of Dhanteras and Diwali in October/November spurred buying during the final quarter. This was boosted further in the big metropolitan cities by e-commerce platforms offering super-quick delivery of small gold investment bars and coins, sometimes in as little as 10-15 minutes.[7]

Also working in gold's favour was the relatively lacklustre performance of other assets, with domestic stock markets generating mediocre returns in H1 and ending the year with a notable downward correction after touching record highs in Q3.

We expect the trend of healthy investment demand in India to continue in 2025, with investment interest in gold broadening to include gold ETFs and mutual funds. An extension of gold's recent strength would likely fuel continued strong investment interest in gold.

Middle East and Turkey

After a record 2023, retail investment demand in Turkey fell by 25% in 2024 as high domestic interest rates lured investors away from gold and into the attractive returns on offer from domestic savings accounts and money market funds.

That said, gold's eye-catching price performance – returning around 50% in lira terms during the year – produced investment demand of almost double the 66t average of the previous 10 years. And, measured in local currency, the value of demand smashed the previous year's annual record to hit 283bn (+27%).

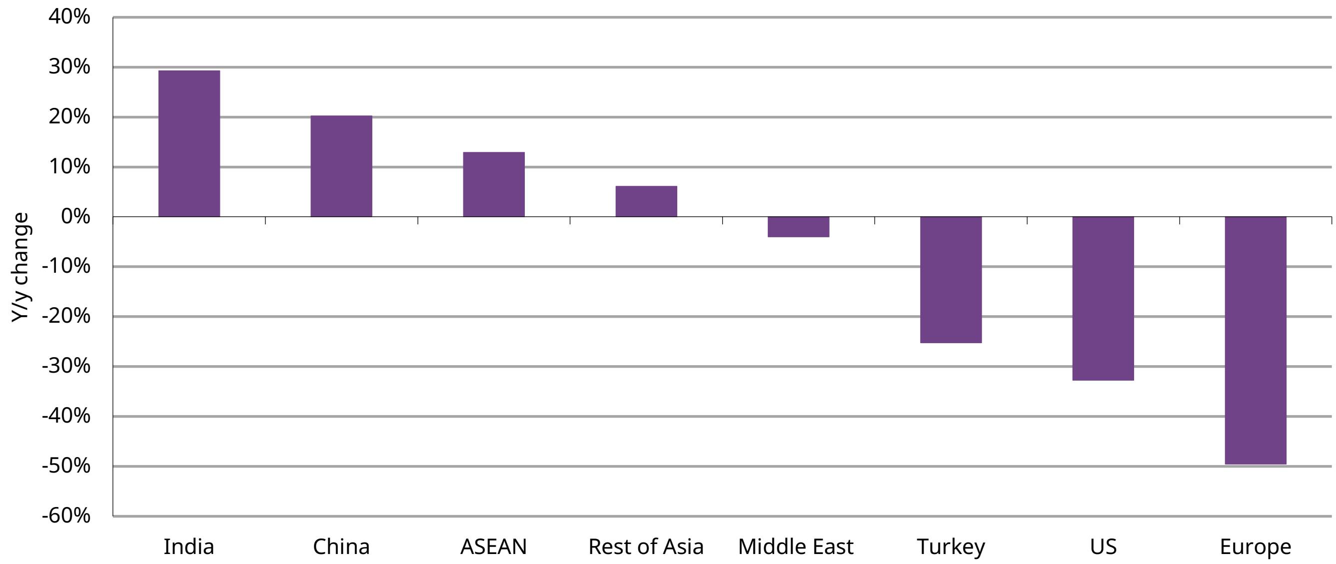
Demand jumped in Q4 from a relatively weak Q3, as a fresh peak in the gold price during October was followed by a corrective dip that attracted opportunistic buying.

Investment in Turkey is likely to remain elevated in comparison with historical levels, but could be somewhat restrained by continued tight monetary policy, given the still-high inflationary environment.

Regional gold investment demand for the Middle East fell slightly short of the record level set in 2023, but was nevertheless very strong on a historical basis: annual demand of 110t was the third highest in our data series. In the fourth quarter investors across the region were universal in their response to the gold price dip in November, using it as an opportunity to add to/build gold holdings in expectation of a return to the strong upward trend.

Chart 8: Increased investment in India and China offset the slowdown in Europe and the US

Y/y change in bar and coin investment by country, %*



*Data to 31 December 2024.
Source: Metals Focus, World Gold Council

7. The Times of India | Q-commerce sees consumers order gold, silver coins | Oct 21, 2024.

The annual decline was solely driven by Egypt and Iran, both of which saw y/y declines. This comparison is, however, set against a relatively strong base of 2023: in a longer-term context, demand in both markets remains healthy.

Elsewhere, demand in Saudi Arabia, UAE and Kuwait improved on the previous year's levels as investors were attracted by gold's price performance.

The West

US gold investment saw four consecutive quarters of y/y decline in 2024, resulting in the lowest annual total for bar and coin demand since 2020. This was true for both volume and value measures of demand. Nonetheless, applying a longer-term perspective suggests annual tonnage remains healthy, 11% above the 10-year average.

While investment remained firmly positive, with gold's price performance attracting considerable interest, the slowdown in demand during the year can be attributed to a combination of market saturation and profit-taking on existing holdings. Anecdotally, the slowdown in retail investment is apparently not being replicated in the HNW investor space; demand from this segment is captured in our OTC figure.

2024 marked a 17-year low in European retail gold investment: regional demand halved from an already low base in 2023. Germany and Switzerland were key contributors to the decline as high gold prices encouraged significant profit-taking, which offset still-healthy levels of fresh investment demand. From a sequential quarterly perspective, investment across the region perked up in the second half of the year as the price continued to rally, but it remains very weak compared with historical averages. The challenging economic backdrop across Europe makes it likely that 2025 will see a continuation of the scenario in which new investment is countered by sizable liquidations.

ASEAN markets

All of the ASEAN markets covered in this report saw growth in 2024 annual gold investment demand: each posted multi-year highs. Local currency performance was a key driver of this growth, with investors focused on gold's role as a hedge. And currency moves across the region resulted in a local price performance that exceeded the US dollar gold price return, which made a more compelling case for investing.

Vietnam bucked the regional Q4 trend with a y/y decline. Limited availability restricted investors' ability to buy gold bars, and resulted in higher premiums. In this environment some investors switched to buying gold chi rings. Although classed as jewellery, these crude gold rings are often used as an investment proxy.

Rest of Asia

Although very modest, Japanese bar and coin demand posted its strongest year since 2018, just above 2t. Japanese investors have, historically, tended to sell into gold price rallies. The fact that demand was positive during a year of record gold prices seems to reflect the broadening appeal of gold, with investors increasingly focusing on gold's potential to generate returns as well as its role as an inflation and currency hedge.

Demand for gold investment products in South Korea jumped in 2024; the market has now seen five consecutive quarters of strong double-digit y/y gains. While the gold price was a key driver of this strength, the market was further galvanised in Q4 by domestic political strife and weak economic growth.

Australia

Annual bar and coin investment slowed again in 2024, although the year ended with a flourish: Q4 demand picked up sharply as the gold price dip presented a buying opportunity for investors.

Central banks

Central banks score a hat-trick, with demand topping 1,000t for the third year in a row

- Central banks add 1,045t to global gold reserves in 2024[8]
- The National Bank of Poland led the charge (90t) but demand was seen from a broad range of emerging market banks
- By comparison, reported selling during the year appeared tactical and more modest.

Tonnes	2023	2024	Year-on-year % change
Central banks and other institutions	1,050.8	1,044.6	-1 ▼

Central banks' insatiable appetite for gold reached a significant milestone in 2024. Having added 712t in the first three quarters of the year, central banks bought a further 333t in Q4 to bring the net annual total to 1,045t. As a result, they have extended their buying streak to 15 consecutive years, and, remarkably, 2024 is the third consecutive year in which demand surpassed 1,000t – far exceeding the 473t annual average between 2010-2021 and contributing to gold's annual performance.

Gold has long proven to be a beacon of financial confidence and stability. In our 2024 Central Bank Gold Reserves Survey respondents were clear that the central banking community would continue to increase its allocations to gold in the near term. But while central bank demand itself should come as little surprise, the continued strength of demand exceeded even our already-lofty expectations.

Beyond the general purchasing trend there have been notable changes in the gold reserves of specific central banks.[9] Similar to the previous 14 years, activity in 2024 was driven by a broad range of emerging market banks.

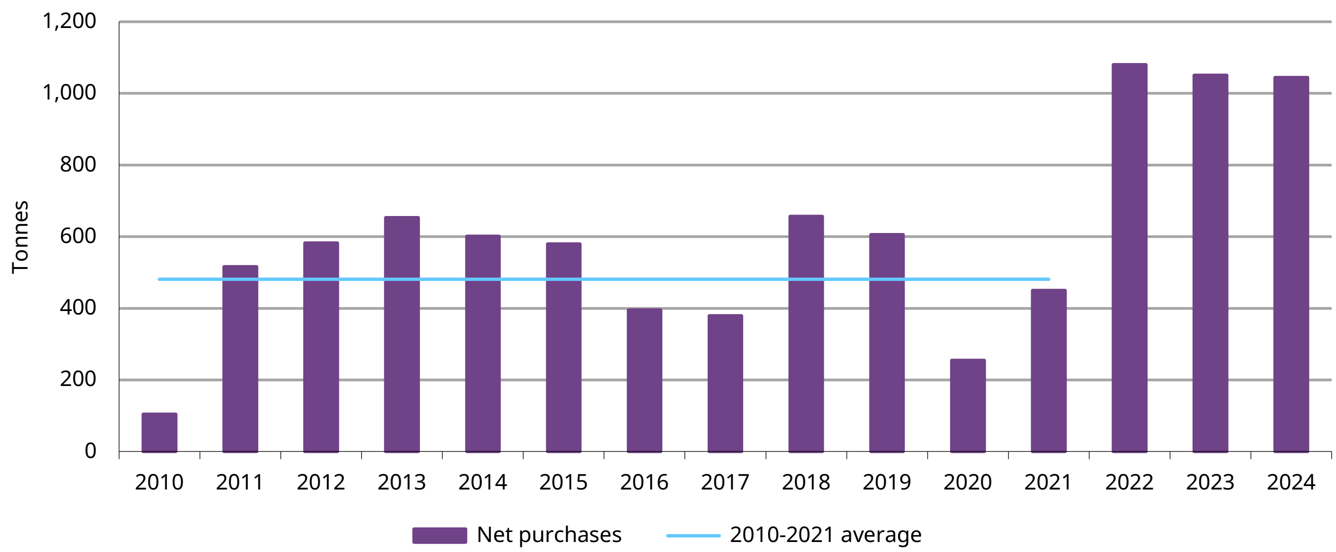
The **National Bank of Poland** (NBP) was the largest gold buyer during the year, adding a further 90t to its gold reserves. The bank's President, Adam Glapiński, has been a vocal proponent of owning gold and has previously been open about raising the NBP's gold allocation to 20% of total reserves.[10] Following the accumulation last year, the bank's gold reserves stood at 448t at the end of 2024; 17% of its total international reserves.

But Poland was far from the only central bank in the region to buy gold:

- The **Czech National Bank** continued its steady accumulation of gold, adding 20t to its reserves during the year, slightly more than in 2023. This has lifted the bank's total gold holdings to over 50t, a more-than threefold increase since the end of 2022

Chart 9: Central banks have been net buyers for 15 consecutive years

Annual central bank net purchases, tonnes*



*Data to 31 December 2024.
Source: Metals Focus, Refinitiv GFMS, World Gold Council

8. Central bank demand presented here comprises aggregate reported changes as well as an estimate for unreported buying. This differs from our monthly central bank statistics, which consist solely of reported changes.

9. Country-level data is based on reported figures available at the time of writing. Revisions may occur as more data is released.

10. Polskieradio.pl | Polish central bank increases gold reserves | 4 October, 2024.

- The **Central Bank of Hungary (MNB)** announced a 16t increase in its gold reserves in September. The MNB's first addition since March 2021 lifted its gold reserves from 94t to 110t. The bank cited greater economic uncertainty as a key rationale for the purchase.[11]
- Elsewhere in central and eastern Europe, the National Bank of Serbia (8t) and the National Bank of Georgia (7t) were notable buyers.

As in previous years, the Central Bank of Turkey (CBRT) was a sizeable gold buyer. The CBRT increased its official gold reserves – central bank and Treasury holdings – by 75t during the year.[12] There was no repeat of the selling seen in 2023, although average monthly buying was more modest in 2024 by comparison.

The Reserve Bank of India (RBI) was once again a major purchaser in 2024, having bought gold every month before leaving reserves unchanged in December. Its annual purchases totalled 73t, more than four times the level of its gold buying in 2023 (16t). The bank remained somewhat tight-lipped about its activity, with previous RBI Governor, Shaktikanta Das, stating in April: "*...we are building up gold reserves, the data is released from time to time...*".[13] At the end of 2024 RBI gold reserves totalled 876t, or 11% of total reserves.

The RBI was one of two banks – the other was the **Central Bank of Nigeria**[14] – to disclose that it repatriated gold from overseas in 2024.[15] As we have noted previously: "*such activity represents a change only in location – not ownership – of gold, and therefore has no impact on our demand estimates. It does, however, highlight the fact that some banks place importance on domestic storage of gold.*"

The People's Bank of China (PBoC), reported buying 44t of gold during the year. The bank bought 29t between January and April, after which it reported no changes to its gold reserves for six months before buying resumed in November. At the end of 2024 the bank reported holding 2,280t of gold, still accounting for 5% of its total international reserves.

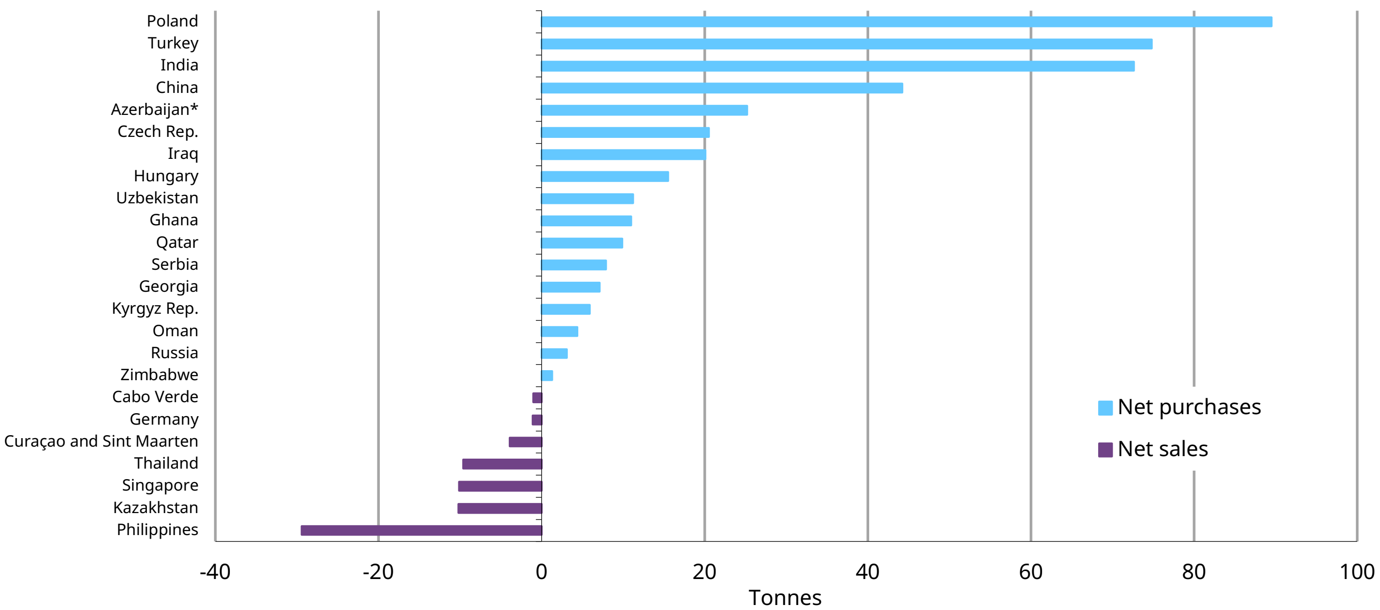
The State Oil Fund of Azerbaijan, the country's sovereign wealth fund, resumed gold buying this year. Having bought 72t between 2018-2020, it added a further 25t in the first three quarters of 2024. At the time of writing, Q4 data was unavailable. At the end of Q3, gold accounted for just under 18% of the fund's investment portfolio.

Beyond this, the long tail of other buyers included: the Central Bank of Iraq (20t), Central bank of Uzbekistan (11t), Bank of Ghana (11t), National Bank of Kyrgyz Republic (6t), Central Bank of Oman (4t), Central Bank of Russia (3t, likely for coin minting purposes), and Central Bank of Zimbabwe (1t).

Selling activity was also seen throughout the year, although in most cases appearing more tactical than strategic in the face of a rapidly rising gold price, as well as in more modest volumes than the purchases seen elsewhere.

Chart 10: Central bank buying far outstripped selling again in 2024

2024 central bank net purchases and sales by country*



*Data to 31 December 2024 where available at the time of writing. Note: chart includes only purchases/sales of 1t or more. **Represents the gold reserves of the State Oil Fund of Azerbaijan (SOFAZ).
Source: IMF IFS, respective central banks, World Gold Council

11. MNB.hu | The MNB increased Hungary's gold reserves to a record high level of 110 tonnes.
12. Turkey data for December 2024 was delayed at time of publication.
13. Reserve Bank of India | Speeches & Media Interactions | 8 April, 2024.
14. The Star | Nigeria repatriates Gold reserves amidst concerns over US economy | 22 April 2024.
15. CNBC TV18 | RBI sources explain why India brought back 100 tonne of gold reserves from the UK | 1 June 2024.

In Q3, the **Central Bank of the Philippines** confirmed that the rising gold price was responsible for its gold sales between March and August – totalling 30t – and formed part of an active management strategy around its gold reserves.[16] Based on available data, the bank resumed modest gold purchases in September and October.

In April a Bloomberg report stated that the National Bank of Kazakhstan (NBK) may resume gold sales owing to the "positive dynamics" of the gold price. The bank sold gold each month between May and September. And while it resumed buying in Q3, the net annual result was a 10t decline in its gold reserves.

In a more recent development, the NBK announced in January that it will use the proceeds of international gold sales to mop up excess domestic liquidity in order to help it achieve its aim of reducing inflation to 5%.[17] The transactions will have no impact on the foreign exchange or gold reserves held at the NBK, but instead allow the bank to use gold to help support its monetary policy.[18]

While on the face of it the **Bank of Thailand** appears to be the second largest seller of 2024, the bank noted that: "*The reduction was not due to any gold sale.*" The bank further clarified: "*Starting March 29, 2024, monetary gold is revised to be in line with gold reported in International Reserves and to comply with IMF definition where only gold with a purity of at least 995/1,000 should be recorded.*"[19]

Other notable net sellers over the course of the year were: the Monetary Authority of Singapore (10t), Central Bank of Curaçao and Sint Maarten (4t), the Bundesbank (1t, likely related to its coin-minting programme), and the Central Bank of Cabo Verde (1t).

Reported purchases, however, do not always paint a full picture. Disclosures by central banks often come with a lag. In addition, other official institutions, such as sovereign wealth funds, rarely ever publish their holdings. As such, the IMF IFS data only reflects 34% of our total official sector demand estimate for 2024 – down from 47% last year.

Central banks have been net buyers for the last 15 years, yet their hunger for gold shows no sign of being quelled. And while forecasting the level of demand for any specific central bank is particularly difficult, given that it is often dictated by policy, we can look to the macroeconomic environment, in addition to their collective actions and the drivers of these, as guidance for might lie ahead. Following the colossal buying in 2022 and 2023, net purchases in 2024 surpassed our expectations. Geopolitical and economic uncertainty remains high in 2025 and it seems as likely as ever that central banks will once again turn to gold as a stable strategic asset. For more on this, please see the Outlook section.

16. Bangko Sentral NG Pilipinas | Statement on BSP's Gold Sales for GIR Management | 24 September, 2024.
17. The bank, which has the right to purchase domestically-mined gold destined for export, will sell the gold it buys from domestic producers onto the international market in exchange for dollars. It will then sell the equivalent amount of US dollars into the domestic market in exchange for domestic currency, thereby helping to support its value.
18. Nationalbank.kz |On Certain Issues of Exercising the Priority Right to Purchase Refined Gold | 21 January 2025.
19. Bank of Thailand | EC_XT_030 International Reserves 1/ 2 | 10 Jan 2025.

Technology

Demand for gold in the technology sector was 84t in Q4, the strongest quarter since Q4 2021. Overall, 2024 was a solid year: annual demand rose by 7% to 326t

- A modest rise in gold volumes used in electronics in Q4 (+3% y/y to 70t) drove growth in the broader technology sector during the quarter (+2% y/y to 84t)
- Full-year technology demand increased 7% to 326t
- Much of this recovery was driven by strong demand for high-end AI infrastructure, bolstering a subdued but gradually recovering, consumer electronics market.

Tonnes	2023	2024	Year-on-year % change
Technology	305.2	326.1	7 ▲
Electronics	248.7	270.6	9 ▲
Other Industrial	47.1	46.5	-1 ▼
Dentistry	9.4	8.9	-5 ▼

A solid final quarter completed an improved year of gold demand in the technology sector. During 2024 electronics demand (the dominant category of demand in this sector) was bolstered by ongoing strength in **AI-related applications** and some recovery in the consumer electronics markets after a particularly weak 2023. Leading market analysis firm, IDC, estimates that smartphone shipments grew by 6% in 2024.[20] This was driven by "super aggressive" growth among Chinese vendors focusing on sales of low-end devices within China and to emerging markets. As a result both Apple and Samsung – whose high-end products tend to contain more gold – saw y/y market share decline. IDC forecasts ongoing growth during 2025, albeit at a slower pace. Gartner has reported a similar trend in the PC and laptop market, with demand expected to continue improving in 2025.[21]

Electronics

Gold demand in the electronics sector rose by 3% y/y to 70t during Q4, with full year demand rising by 9% to 271t. This recovery underlines the growing importance of AI applications to gold demand in the sector.

Gold used in printed circuit boards (PCB) saw a y/y increase during Q4. AI-related applications and satellite infrastructure both drove demand in the sector. AI server upgrades are likely to remain a focus during 2025. Anecdotal reports suggest there have been renewed efforts in thrifting gold PCB coatings (i.e. further reducing gold plating thickness), although increasing volumes in the sector may compensate for any fall in gold usage per unit.

Gold usage in wireless applications declined in Q4 as high-end smartphone shipments stagnated and factory utilisation rates fell back as a consequence. However, WiFi 7 is seeing increased penetration and this is likely to drive demand in the wireless sector in the coming quarters given that WiFi 7 infrastructure requires considerably more power amplifiers than WiFi 6. Continued growth in demand for low Earth orbit satellites (LEOS)[22] is also expected, along with the corresponding upgrades needed in many ground stations. Both of these applications, combined with a recovering high-end smartphone sector, may see an upturn in wireless demand in the coming quarters.

The light emitting diode (LED) sector recorded a small decline during the quarter as demand for backlight components fell. Newer technologies such as mini- and micro-LEDs (which generally require less, and in some cases no gold) also made further inroads across various applications as manufacturers increasingly focused on cost reduction.

However, there are some areas of growth which are offsetting this downward trend: sales of high-end 3D and IR sensors continued to grow, finding increasing application across a range of sectors. The automotive industry continues to see new areas of demand for high-end sensors; for example the EU has announced regulations that stipulate advanced driver distraction warning (ADDW) systems will be mandatory in all new vehicles by July 2026.[23] Going forward we expect these opposing factors will broadly offset one another throughout 2025.

20. IDC | Worldwide Smartphone Shipments Grew 6.4% in 2024, Despite Macro Challenges | 13 Jan 2025.
21. Gartner | Gartner Says Worldwide PC Shipments Increased 1.4% in Fourth Quarter of 2024 and 1.3% for the Year | 16 Jan 2025
22. LEO satellites operate in a revolving network relatively close to the earth's surface, and can provide internet coverage in remote locations: World Economic Forum | How low-earth orbit satellite technology can connect the unconnected | Feb 2022.
23. Data.consilium.europa.eu | Council of the European Union Explanatory Memorandum | July 14, 2023.

Finally, gold demand in the memory sector registered a small increase during the quarter. Much of this was due to AI applications driving shipments of large capacity solid state drives (SSDs),[24] as well as strong demand for high performance computing and data centre infrastructure. The World Semiconductor Trade Statistics Group recently revised upwards its expectations for 2024 growth to 19% y/y thanks to a strong second half, and it sees growth continuing into 2025.[25] Recent advancements in NAND memory chips announced by market leading manufacturers, SK Hynix and Samsung,[26] may pose some threat to gold demand in the sector; triple-layered NAND chips are thought to require less gold bonding wire than preceding technologies.

The outlook for memory in 2025 is a weak Q1, due to inventory adjustment, followed by improving demand as the year progresses.

At the aggregate level, three of the four major electronics fabrication hubs around the world recorded small increases in gold demand during Q4: Mainland China and Hong Kong SAR – 19.8t (+1%); Japan – 19.1t (+2.8%); and the US – 18.2t (+6.8%), while South Korea fell by 6.3t (-1.1%).

Other industrial and dentistry

Global demand for gold in other industrial and decorative applications fell by 4% y/y in Q4. This was chiefly due to losses in Italy and East Asia as slow sales of branded accessories and de-stocking by retailers was reported. In contrast, demand in India grew by 5% as high gold prices impacted the affordability of fine gold items and prompted greater demand for gold-plated articles and jewellery. Use of gold in the dental sector continued to decline with a 6% y/y drop in Q4.

24. IBM | What is a solid-state drive?
25. WSTS | Global Semiconductor Market Poised for Strong Growth in 2024 and 2025, 3 Dec 2024.
26. Business Korea | Samsung Completes Development of Groundbreaking 400-layer NAND Technology, 9 Dec 2024.

Supply

Total gold supply in 2024 increased 1% y/y as mine supply and recycling both posted growth

- Annual mine production grew fractionally y/y to a new record high
- The global hedge book decreased significantly in 2024 to 182t
- Full-year recycled gold supply rose 11% although remained 16% below the all-time high seen in 2012.

Tonnes	2023	2024	Year-on-year % change	
Total supply	4,945.9	4,974.5	1	▲
Mine production	3,644.1	3,661.2	0	▲
Net producer hedging	67.4	-56.8	-	▼
Recycled gold	1,234.4	1,370.0	11	▲

Total gold supply in 2024 increased 1% y/y to 4,974 tonnes, the highest in our 30-year data series, driven by higher mine production and recycling supply. Although initial estimates suggest that 2024 mine production reached an all-time high of 3,661t, this data is subject to revisions, which make it difficult to state with certainty that the previous record high has been broken.

Early estimates also suggest that net producer hedging fell significantly during the year as producers delivered into maturing contracts and bought back some longer-dated hedges.

Mine production

Current estimates suggest that mine production posted another gain in 2024, up 1% to 3,661t, just surpassing the 3,656t record set in 2018. But the prospects of revisions to production volumes make us cautious about calling 2024 a record year for mine output just yet. As usual, our estimates for Q4'24 have been made ahead of most companies' quarterly reports, so the final numbers will differ from our current estimates. Such revisions reduced initial estimates of mine production in 2024, both in Q2 and Q3, and there is a possibility this may happen again.

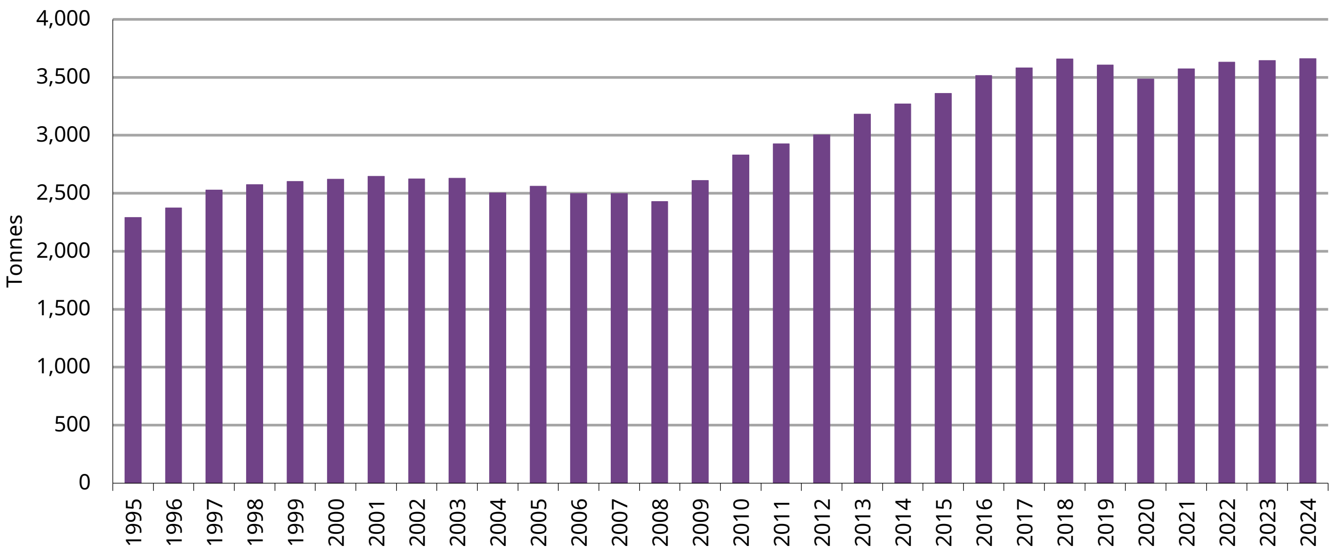
Quarterly data also suggests that recent industry growth trends may be coming to an end. We estimate that Q4'24 mine production of 954t was marginally lower than the 955t reported for Q4'23.

Higher annual output was seen from Mexico (+14t or +11% y/y) following a recovery from industrial action in 2023; Canada (+14t or +7%) as large new mines such as IAMGOLD's Côté and Equinox Gold's Greenstone contributed to output; Peru (+7t, +5%) and Guinea (+4t, +6%).

Lower yearly production was seen in the US (-16t or -9% y/y) due to lower grades and production volumes at Barrick's Carlin and Cortez mines; Australia (-10t or -3% y/y); Bolivia (-7t or -14% y/y) and DR Congo (-4t or -8% y/y).

Chart 11: Estimates suggest gold mine production reached a new record in 2024

Annual gold mine production, tonnes*



*Data as of 31 December 2024.
Source: Metals Focus, Refinitiv GFMS, World Gold Council

In the final quarter of 2024 mine production from four countries drove the small y/y decline in global output:

- Production in the **US** fell by 18% with reduced volumes from a number of operations, including Cortez and Carlin, due to lower ore grades
- **Burkina Faso** saw a 13% y/y fall in mine production, with lower head grades at the Essakane mine due to pit sequencing and the use of low-grade stockpiles
- Production from **Indonesia** fell 12% y/y due to lower head grades at Grasberg and mine sequencing affecting output at Batu Hijau
- In **South Africa** mine production fell by 6% y/y after lower mill throughput was reported at several mines, including Beatrix and South Deep.

Increases from mines in four countries just failed to offset the declines described above:

- **Mali** saw production increase by 11% y/y due to higher output at Allien Gold's Sadiola operation after earlier access was gained to high grade ore at the Korali-Sud orebody
- In **Canada** production was boosted by 10% y/y as the Côté and Greenstone mines continued to ramp up, while increased output was reported from Brucejack mine
- In **Uzbekistan** volumes increased 8% y/y due to higher throughput at Almalyk Mining and Navoi Mining
- In **Russia** estimated mine production volumes increased 5% y/y with improved recovery rates from Polyus' Olimpiada operation and higher production from operations in the Magdan and Yakutia regions.

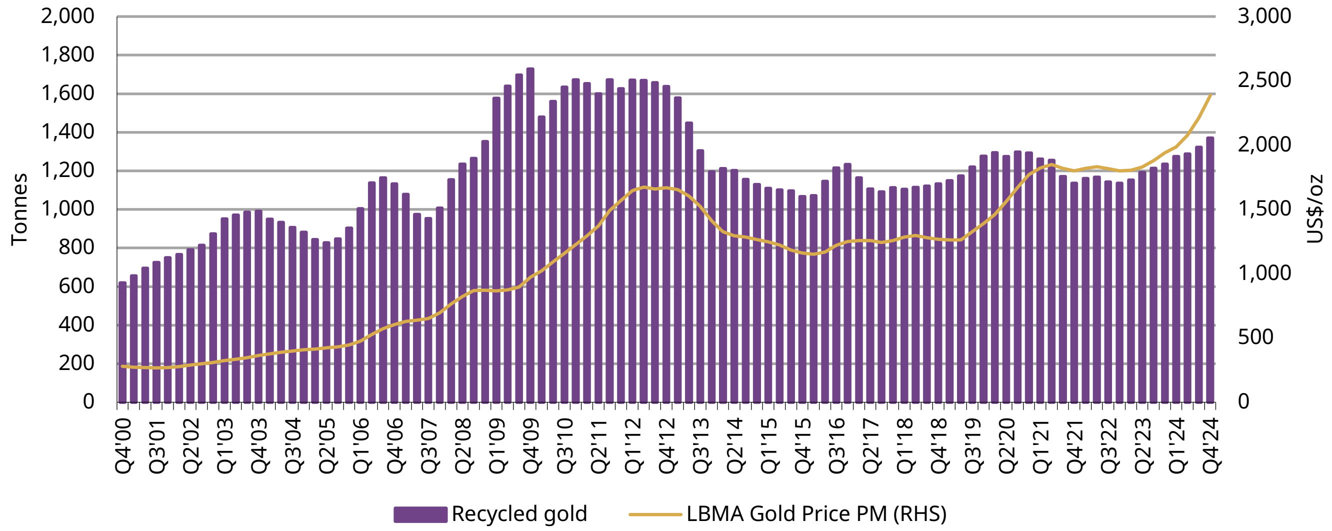
Regional trends in mine production show that only the CIS and Oceana regions saw higher output in Q4'24; up 6t and 4t respectively. All other regions saw lower production, with two regions – Central and South America, and North America – reporting the largest declines, each of 3t y/y.

Four mine start-ups (a combination of new and re-started operations), with a combined annual capacity of about 10t, have recently begun production. Namdini, a new mine in Ghana, anticipates average annual output of about 9t; Paulsen's Gold in Australia is projected to produce about 1t annually; output of about 0.1t annually is expected at the Kasensell project in Zambia; and Nalunaq Gold in Greenland restarted production late in 2024 but has yet to indicate planned production rates.

Gold mining costs continued to increase in Q3'24 (the latest quarter for which data is available). The average All-In Sustaining Cost (AISC) hit US$1,456/oz in Q3, another record high: up 9% y/y and 4% q/q. The major contributors to higher costs during this quarter were royalty payments (boosted by higher gold prices), input cost inflation, especially labour and power costs, and higher sustaining capital expenditure. Several major gold producers saw volumes lowered by planned plant maintenance during the quarter, which also boosted unit AISC.

Chart 12: Record gold prices fuelled an increase in recycling activity in 2024

Rolling four-quarter recycling total, tonnes, and rolling four-quarter average price, US$*



*Data as of 31 December 2024.
Source: ICE Benchmark Administration, Metals Focus, Refinitiv GFMS, World Gold Council

Net producer hedging

The industry aggregate producer hedge book is estimated to have fallen in 2024 by 23t to 182t, with declines occurring in each quarter of the year. Merger and acquisition (M&A) activity is partly behind this reduction: often, acquiring companies restructure or close-out the hedge books of acquired firms, and we've seen that happen on a few occasions in 2024.[27] Also, with some hedge books now deeply out of the money, some companies have restructured or even eliminated forward books in their entirety. At the same time there have been no major announcements of new hedging positions, suggesting that the trend of reductions in the industry hedge book is set to continue.

Recycling

Higher gold prices tend to lead to increased recycling supply, so with record gold prices around the world it is no surprise that the fourth quarter saw both a q/q and a y/y increase in this category. Q4'24 saw 359t of recycled supply, up 15% y/y and 10% q/q. This represents the highest single quarter of recycled supply since Q3'20, a time when the gold price had jumped due to the impact of the COVID pandemic.

All regions saw y/y increases in recycling supply and, with the exception of the Middle East, all regions saw a q/q increase too. Given the increase in the average US$/oz gold price (+35% y/y and +8% q/q), the surprise is that recycling supply didn't increase further.

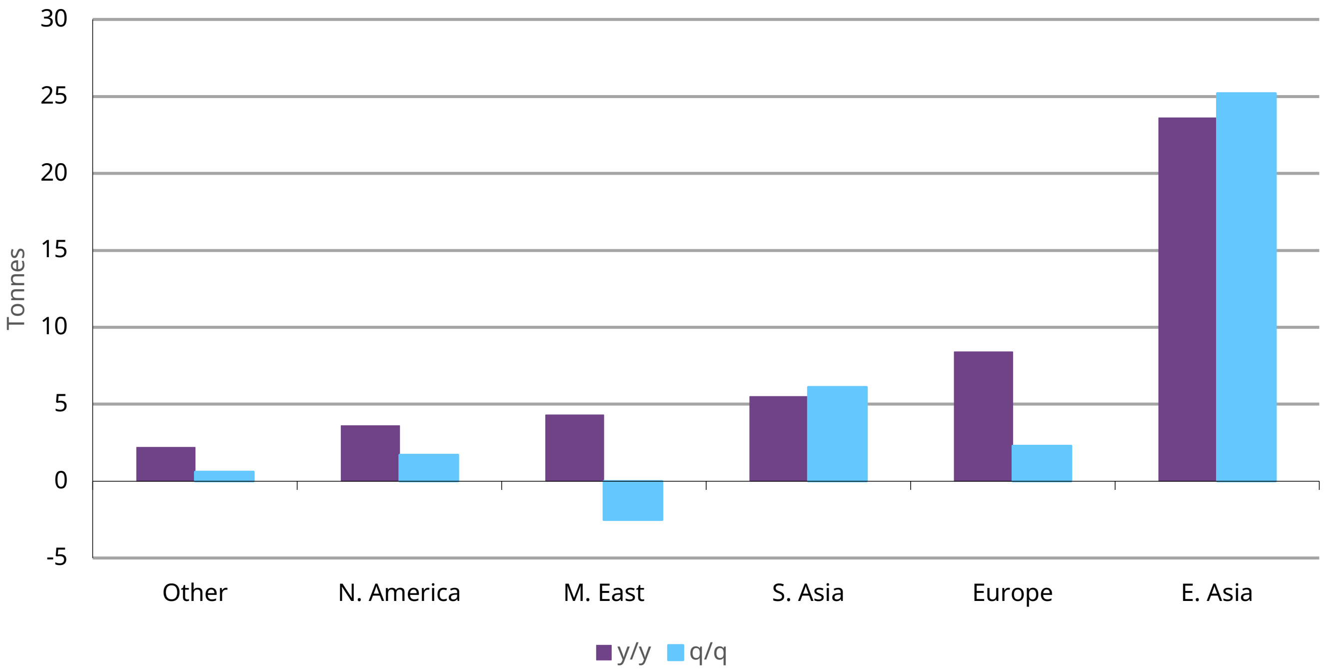
Looking more closely at the regional performance it becomes clear that East Asia drove most of the y/y and q/q increase, with most of the volume from China. Aside from the gold price, the weak domestic economy appears to be driving recycling volumes. A handful of jewellery retailers went out of business during the fourth quarter, prompting inventory liquidation, while some others who remained in business were quick to scrap slow-moving product lines. Gold price expectations may have played a role too, with some apparently expecting a fall in the gold price following the decisive victory by Trump and the Republican Party in the US election.

The relatively muted response in other regions may be due to a lack of near-market stocks of jewellery to recycle. The steady increase in gold prices over the past few years has already drawn out decent volumes of old and unwanted jewellery, so the response to still-higher prices has been relatively subdued. But we heard one notable anecdote about the effect of record gold prices concerning a large volume of gold-plated items sent for recycling. With such low gold content – less than 1% by mass – this sort of material very rarely taken back for recycling as the gold weight and value are simply not worth it.

A still-high gold price is likely to keep recycling volumes strong into 2025, albeit below levels that might be expected considering gold prices around the world. For more details on the prospects this year for recycling, and supply more broadly, please see the Outlook section.

Chart 13: East Asia drove increases in Q4 recycling volumes

Y/y and q/q change in recycled gold volumes, tonnes*



*Data as of 31 December 2024.
Source: Metals Focus, World Gold Council

27. miningweekly.com | Alamos eliminates most of Argonaut's gold hedge book | 16 July 2024.

World Gold Council

We are a membership organisation that champions the role gold plays as a strategic asset, shaping the future of a responsible and accessible gold supply chain. Our team of experts builds understanding of the use case and possibilities of gold through trusted research, analysis, commentary and insights.

We drive industry progress, shaping policy and setting the standards for a perpetual and sustainable gold market.

Research

Jeremy De Pessemier, CFA
Asset Allocation Strategist

Johan Palmberg
Senior Quantitative Analyst

Kavita Chacko
Research Head, India

Krishan Gopaul
Senior Analyst, EMEA

Louise Street
Senior Markets Analyst

Marissa Salim
Senior Research Lead, APAC

Ray Jia
Research Head, China

Taylor Burnette
Research Lead, Americas

Juan Carlos Artigas
Global Head of Research

Market Strategy

John Reade
Senior Market Strategist,
Europe and Asia

Joseph Cavatoni
Senior Market Strategist,
Americas

Further information:

Data sets and methodology visit:
www.gold.org/goldhub

Contact:
research@gold.org