

Gold Demand Trends J3 2023

Highlights

The LBMA (PM) gold price averaged US\$1,928.5/oz during Q3. Although 2% below the record high seen in Q2, this was 12% higher y/y. Several countries saw higher local gold prices due to currency weakness against the US dollar, including Japan, China and Turkey.

Y-t-d, central bank net buying of gold is 14% ahead of 2022. Central banks have bought a net 800t of gold so far this year, the highest on record for that nine-month period. While there is a nucleus of committed regular buyers, the range of countries whose central banks have added to their reserves over recent guarters is broad-based.

Investment demand is mixed y-t-d.

Bar and coin investment is broadly in line with Q1-Q3 last year, thanks to H1 strength in the Middle East, Turkey and China. Gold ETFs, in contrast, have seen outflows of 189t so far this year, and have now registered six successive quarters of negative demand.

After a record Q3, mine production also reached a new y-t-d high of

2,744t. This puts a new annual record within reach for 2023. The y-t-d supply of recycled gold is also higher at 924t (+9%). Although this element of supply has been supported by elevated gold prices, it has been capped by economic resilience in the US and a strong investment motive in the Middle East.

1 In our data model 'OTC & other' captures demand in the OTC market, for which data is not readily available. It also captures changes to inventories on commodity exchanges, unobserved changes to fabrication inventories and any statistical residual.

For more information please contact: research@gold.org

Q3 gold demand firmly above longer-term average

Central banks gold buying maintained a historic pace but fell short of the Q3'22 record. Jewellery demand softened slightly in the face of high gold prices, while the investment picture was mixed.

Gold demand (excluding OTC) in Q3 was 8% ahead of its five-year average, but 6% weaker y/y at 1,147t. Inclusive of OTC and stock flows, total demand was up 6% y/y at 1,267t.1

Net central bank buying of 337t was the third strongest quarter in our data series, although failed to match the exceptional 459t from Q3'22. Yet, demand from central banks y-t-d is 14% ahead of the same period last year at a record 800t.

Q3 investment demand of 157t, although 56% higher y/y, was weak relative to its five-year average of 315t. Global gold ETFs lost 139t in Q3 - a far smaller outflow than Q3'22 (-244t).

Bar and coin investment declined 14% y/y to 296t, although remained firmly above the fiveyear quarterly average of 267t. The y/y decline is largely the product of sharp falls in Europe.

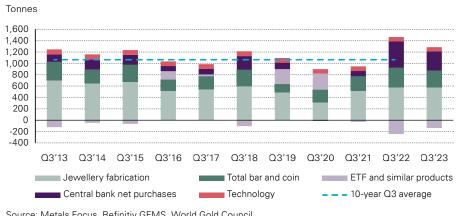
OTC investment totalled 120t in Q3. This opaque source of demand was again evident as the gold price found firm support for much of Q3, despite ETF outflows and falling COMEX futures net longs.

Jewellery consumption softened slightly, down 2% y/y at 516t amid continued gold price strength. Jewellery fabrication was marginally more resilient, down 1% to 578t due to inventory build-up.

Fragile consumer electronics demand continued to undermine volumes of gold used in technology, which fell 3% y/y to 75t.

Mine production reached a record 971t in Q3, helping to lift total gold supply to 1,267t (+6% y/y). Recycling was also higher y/y, up 8% to 289t.

Gold demand in Q3: weaker y/y but healthy compared with its 10-year average



Source: Metals Focus, Refinitiv GFMS, World Gold Council

Outlook

Central bank net buying was back with force this quarter alongside solid bar and coin demand, helping gold prices defy surging bond yields and a strong US dollar. The reluctance of ETF investors and speculative buyers to actively join the fray so far this year represents an increasing opportunity for price strength in Q4, given the solid underlying case and troughing sentiment.

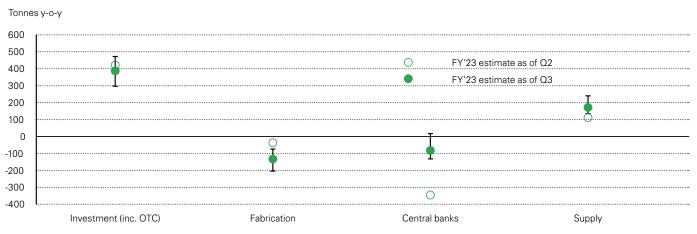
We expect...

- Total investment including OTC to be up y/y with a skew to further upside
- Central bank demand to approach last year's level with an outside chance of exceeding the 2022 total
- Fabrication demand to be lower than we envisaged and down y/y, as prices likely stay rangebound at current levels
- Supply to be higher than we anticipated on record mine production and an unchanged estimate for recycling.

Investment

Our expectation that flows into gold ETFs and more speculative futures would pick up in 2023, filling in for lower bar and coin demand, has not materialised. ETF and futures investors have shown little appetite for gold while bar and coin demand has remained unexpectedly healthy.

Although rising bond yields now offer an alternative source of real income for many investors, particularly in Europe, we attribute most of this year's ETF outflows to 'weak hands'. Underlying support for gold remains, in our view, and is bolstered by escalating geopolitical tension and troughing sentiment as reflected in COMEX futures. This presents an opportunity for these segments to return to net inflows in Q4.



Expected change in annual demand, 2023 vs 2022*

*Data to 30 September 2023. Fabrication combines global jewellery and technology demand. Investment includes ETFs, bar and coin and OTC demand. Supply includes mine production and recycling. We have omitted hedging and assume it to be unchanged. Source: World Gold Council

Outlook

The somewhat surprising strength in bar and coin demand in China and India is likely to continue, but with different drivers. Economic and geopolitical uncertainty appears to be spurring safe-haven demand in China, while economic strength in India is yielding wealth-driven buying. These two factors are not at odds as they help form the basis of gold's long-term performance. European demand has yet to be revived, although in the US price strength appears to have garnered interest early in Q4. There may be a chance that this will translate to better demand in Europe too. We remain cautious on the outlook but retain some upside.

There's mixed evidence for the sources of Q3 OTC demand, with weakness in CME warehouse and LBMA vaults data offset by HNW purchases in Turkey and stock builds elsewhere. Buoyant prices keep our estimate for Q4 in line with what we have seen in Q3 and help the overall investment figure stay strong for 2023 as a whole.

In summary, investment including OTC remains solidly positive for the year. We see the potential for small inflows into ETFs in Q4, helped by increased speculative interest in futures. Bar and coin demand is expected to remain strong.

Fabrication

We slightly underestimated the strength of jewellery demand in Q3: India surprised to the upside and we expect the country's solid economy growth to underpin the market. Even though a strong rise in local prices at the start of Q4 might curtail some growth, we have revised our Indian estimate up marginally for the final quarter of the year. Elsewhere, economic uncertainty and high prices will likely continue to dent demand. China is typical: like much of the global jewellery landscape, it has been impacted by both of these factors. And in particular, the country was beset by competition from other sources of spending. We view these factors as a continuing headwind for demand in Q4.

Central banks

The most significant revision to our previous forecast is linked to official sector purchases. With central bank demand resuming its voracious pace after a slower Q2, we expect the annual total to approach last year's record, and there's an outside possibility it will exceed that figure. Our view is based on our <u>survey findings</u>, as well as the broad base of buying, which suggests that increasing gold allocations are becoming an accepted prudential strategy across the segment.

Supply

An all-time high in annual mine production is within reach on the heels of a record Q3. Despite rising costs, output from existing mines in North, Central and South America is likely to increase, according to Metals Focus. Hedging is also likely to be positive but only modestly so.

Our full-year estimate for recycling remains largely unchanged even though Q3 was a little lower than we had envisaged. A strong y-t-d total, high local gold prices and a weakening global economic outlook remain the primary drivers of a stronger outlook for recycling as we head towards year-end.

Jewellery

Jewellery demand softens slightly in Q3; holds steady y-t-d.

- Jewellery consumption in Q3 was slightly weaker y/y (-2%), although it held 4% above its five-year average²
- The environment of high gold prices and economic uncertainty was a key driver of the y/y decline, particularly in some of the more price-sensitive markets in Asia and the Middle East
- Y-t-d jewellery consumption is virtually flat on the same period of 2022, at 1,467t (vs 1,462t).

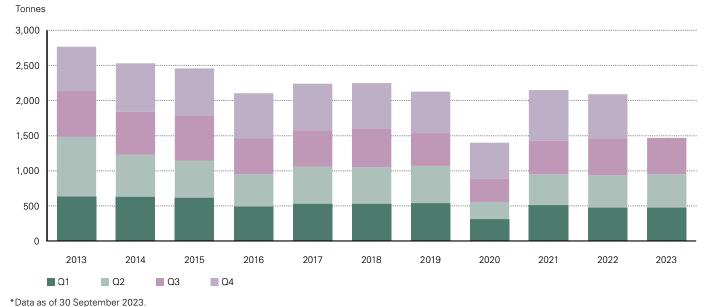
Tonnes	Q3′22	Q3′23	y/y change
World total	525.7	516.2	↓ -2%
India	146.2	155.7	^ 6%
China, P.R.: Mainland	163.2	153.7	↓ -6%

Global gold jewellery consumption saw the usual seasonal q/q uptick in Q3, gaining 8% over the previous quarter. But on a y/y basis demand was 2% lower, as gold prices remained very elevated –hitting new records in some markets due to currency moves.³ Global jewellery fabrication was marginally stronger than consumption, down just 1% y/y at 578.2t. Global inventories grew by 62t during the quarter as a result.

Growth in India was fully offset by y/y declines in China, which saw a disappointing Q3 as consumers were reluctant to buy in the face of the very high local price premium, which raised expectations of a price correction.

Jewellery demand has continued to hold up relatively well in spite of the very high price environment this year. But risks to this sector remain, given the precarious economic scenario in many markets and continued pressure on consumers from the cost of living crisis.

Source: Metals Focus, World Gold Council



Global jewellery demand y-t-d is on par with 2022*

Source: Metals Focus, Refinitiv GFMS, World Gold Council

2 'Five-year average' refers to the average of the preceding 20 quarters

3 The average Q3 LBMA PM price was US\$1,928.5/oz, 12% higher than the average in Q3'22 of US\$1,728.9/oz.

China

China's gold jewellery demand in Q3 was 6% lower y/y at 154t, but saw the usual seasonal rebound from Q2 (+16% q/q). Y-t-d demand is 8% higher at 481t, an impressive performance in the face of a soaring local gold price. And thanks to the record-level quarterly average local gold price, 2023 saw the highest Q3 demand in value terms, totalling RMB71bn, or US\$10bn.

The y/y decline in jewellery demand was chiefly due to Q3'22 being a relatively strong base and the RMB gold price being considerably higher y/y. Gifting demand around Chinese Valentine's Day in August and bridal jewellery purchases during the quarter – ahead of the peak October wedding season – were decent. In addition, gold's rising appeal as a safe-haven asset also buoyed gold jewellery sales (which greatly <u>outperformed other</u> jewellery categories).

However, many consumers were reluctant to buy into the strengthening local gold price in Q3, fearing a possible price correction. The higher price also translated into lower average weight of jewellery items purchased, as consumers tend to have a fixed budget. During our market visits retailers frequently cited the soaring RMB gold price as a key deterrent to their sales.

Competition from spending on tourism and entertainment, amid cautiousness on spending in general, also weighed on demand. Cinema box office revenues rose by 72% y/y during the first three quarters whilst H1 expenditure on local tourism saw a 96% surge, limiting budgets for gold jewellery.⁴ As the rising gold price constrained sales of big ticket items, retailers continued to adjust their offerings towards higher-margin products and away from gem-set, 18K and conventional 24K products in an effort to shore up profits. Hard pure gold jewellery continued to attract consumers with its lighter weights and better affordability. Stylish designs and constant innovation from the industry has been key to the ever-growing appeal of these products, although at the expense of 18K and 22K products. Antique-crafted gold remained robust; lighter heritage gold jewellery pieces with innovative designs were the most popular.

Looking forward we expect gold demand to remain relatively stable in Q4. The fourth quarter is usually the busiest season for weddings and is positive for gold demand due to the tradition of purchasing gold for betrothal gifts. Holidays and various shopping occasions, such as New Year's Day and 11 November online shopping carnivals, are likely to provide some support.

But challenges lie ahead. Q4 was off to a disappointing start – the Golden Week Holiday sales were weaker than expected thanks to the elevated local gold price and increased spending on tourism. Additionally, a late Chinese New Year (CNY) Festival is likely to delay the traditional gold sales boost to January 2024, eating into traditional Q4 demand.⁵

⁴ en.people.cn/n3/2023/0807/c90000-20055100.html; www.ceicdata.com.cn/en/china/movie-box-office-revenue

⁵ Chinese New Year's Day is on 10 February 2024.

Jewellery

India

Jewellery demand in India rose in Q3 – the first y/y improvement since Q3 last year. Demand was up 7% to 156t – 19% above its five-year average of 130t. However, the market remains weaker y-t-d compared with the same period last year (363t vs 381t in 2022), as record local gold prices deterred consumers.

During Q3 the correction in the local gold price from record highs, combined with the festive season in south India, were the two major drivers of growth. After a fairly soft start to the quarter – in part due to Adhik Maas, which is viewed as inauspicious for making new purchases – August and September witnessed a pick-up in activity thanks to festivals such as Onam and Varalakshmi.

Festive purchases helped south India outperform other regions. By contrast, north India was the weakest and saw a y/y decline, partly reflecting a weaker rural sector and a relative lack of major festivals during the quarter.

Lower-carat (18K and 14K) jewellery has gained popularity in the face of an elevated gold price and has benefited from retailers promoting these higher-margin products. On a relative basis, large retailers have continued to perform well, reaping rewards from their aggressive marketing campaigns. Jewellery fabrication jumped 9% y/y to 199t, the highest Q3 figure since 2015. Lower gold prices, continued retail network expansion, and the anticipation of a good wedding and festive season led to this jump, with retailers stocking up in preparation.

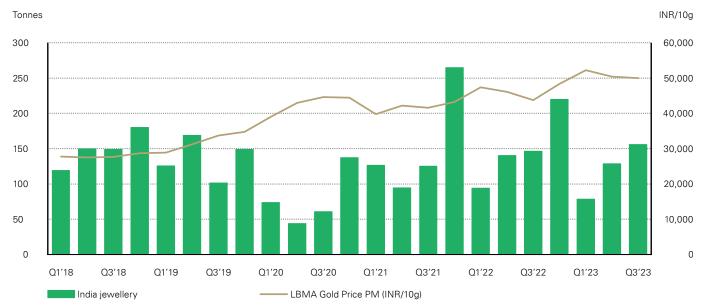
India's outlook for the remainder of the year is healthy, although with an element of caution. The seasonal boost in festive and wedding purchases should help release pentup demand, particularly after a relatively weak H1. But if the sharply higher prices of early Q4 persist demand may be constrained.

Middle East and Turkey

Investment motives continued to drive jewellery demand in Turkey; Q3 demand was 2% higher y/y at just over 11t. Jewellery demand has now posted six consecutive quarters of y/y increases. As a result, the Q1-Q3 total reached 31t – the highest since 2015.

Local gold prices hit a new record high in July. Although the persistent price strength presented a headwind, it was outweighed by the demand for gold as a hedge against unrelenting consumer inflation and a safe haven amid the continued challenging economic and political environment.

Indian jewellery demand strengthened in Q3 despite the elevated local gold price*



^{*}Data as of 30 September 2023.

Source: Bloomberg, ICE Benchmark Administration, Metals Focus, World Gold Council

Jewellery demand across the Middle East continued to ebb lower in Q3 as the 2022 post-COVID resurgence faded from view. Demand across the region was 12% lower y/y at just under 43t, although this was 5% higher than the 41t five-year average. The UAE saw a y/y decline of 15% to 9t, largely due to last year's high base. The y-t-d comparison exemplifies this: Q1-Q3 demand is down 19% on the same period of 2022 at 29t (vs 36t).

Egypt was the region's weakest performer, with Q3 demand 27% lower y/y as ongoing depreciation of the local pound saw the weight of purchases decline. The challenging local economic environment suggests demand weakness will continue. Egypt was the region's only market where demand slipped below its five-year average (-7% vs the 7t average).

Total y-t-d demand in the Middle East is now 9% lower y/y, at 131t.

US and Europe

US jewellery demand continued to subside from the relatively high levels of the last couple of years.

Q3 demand was 4% lower y/y at 29t, influenced by the continued shift in consumer behaviour – with an increasing focus on services/experiences rather than goods – as well as the higher gold price. A decline in the number of weddings was also thought to have an impact, as the post-COVID backlog is cleared.

Y-t-d jewellery demand in the US was below that of both 2022 and 2021, years boosted by Federal income support programmes and lockdown-enhanced savings. But demand remains firmly above pre-COVID norms: average Q1-Q3 demand for the five years preceding COVID was 77t, 13% lower than the 88t total for 2023 so far.

Jewellery consumption in Europe was affected by the deteriorating economic backdrop, falling 3% y/y to

13t. Italy and the UK drove the weakness. Y-t-d, the UK is wholly responsible for the region's -1% y/y decline to 40t.

ASEAN markets

Jewellery consumption in Thailand fell for the third consecutive quarter, albeit by a more modest 2%, to 2t. The decline reflected volatility in local prices, as well as a slowdown in high-value spending due to economic and political uncertainty and currency depreciation.

While demand has been slow there have been signs of a pickup in urban centres, boosted by improved tourism numbers. In contrast, rural demand has been impacted by a struggling agricultural sector.

Vietnamese jewellery demand fell for the third consecutive quarter, down 14% y/y to 3t. This is the lowest Q3 total since 2021 and takes y-t-d demand down to just over 11t, 17% lower y/y. High inflation and slower-than-expected economic growth have impacted consumer spending.

Jewellery demand in Indonesia fell 20% y/y to just under 6t. Stubbornly high domestic gold prices kept a lid on demand as the rupiah weakened sharply against the US dollar during the quarter. In particular, the high price made consumers more inclined to buy lower carat items. However, the domestic economy is showing healthy growth and the inflation rate is relatively well contained, factors that should provide support to consumer demand.⁶

Rest of Asia

Q3 saw a third consecutive improvement in Japanese jewellery demand: it climbed 5% y/y to a seven-quarter high of 5t. Quasi-investment gold kihei chains remain popular as the yen-denominated gold price continued to reach fresh record highs due to local currency weakness.

Jewellery demand in South Korea extended its longer term decline. Demand slid below 3t for the first time in our data series, 37% below the five-year average level. The won depreciated during the quarter, which kept gold prices elevated and deterred jewellery consumers.

Australia

Australian jewellery consumption remained subdued in the face of continued strength in the local gold price and the cost of living crisis. Demand dropped 12% y/y to 2t, taking the y-t-d total to just over 7t (-7% y/y).

6 www.adb.org/news/indonesia-economy-looking-robust-2023-and-2024-adb

Investment demand in Q3 was 157t – a significant improvement on the paltry Q3 2022 but weak in comparison with longer-term average levels.

- Global gold ETFs sustained a sixth consecutive quarter of outflows in Q3; holdings fell by 139t (-US\$8bn), although this was at least an improvement on the hefty 244t outflows of Q3'22
- Total bar and coin investment in Q3 was down 14% y/y at 296t, weighed down by European weakness; but Q1-Q3 demand from this segment is in step with that of 2022, which was the strongest year for almost a decade
- On a y-t-d basis total investment demand is 21% lower at 687t, almost exclusively driven by the prolonged period of ETF outflows, which have centred on funds listed in Western markets.

Tonnes	Q3′22	Q3′23	y/y	change
Investment	100.5	156.9	1	56%
Bar & Coin	344.2	296.2	Ψ	-14%
India	45.0	54.5	1	20%
China, P.R.: Mainland	70.1	81.6	1	16%
Gold-backed ETFs	-243.7	-139.3	_	_

Source: Metals Focus, World Gold Council

Investment demand for gold ETFs, bars and coins was anaemic in Q3. At 157t, investment was only half of its five-year quarterly average of 315t. Nevertheless, this translated to a 56% y/y increase from Q3'22, which was the weakest quarter for 18 years at just 100t. Over the first nine months of the year investment demand was down by 21%, with most of that weakness driven by ETFs.

The 'OTC and other' portion of investment demand was 120t in Q3. The Q2 figure was revised down to 222t (previously 332t), due to a combination of additional information regarding central bank buying and a downward revision to Q2 supply figures (which are always considered 'provisional' at the time Gold Demand Trends is published due to the reporting schedule of gold producers). OTC demand in Q3 seemed to be supported by continued High Net Worth (HNW) demand in Turkey and modest stock build in other markets. And while this positive demand again ran counter to the trend in COMEX net long futures positioning, it was reflected in the continued strength in the gold price, which found a solid floor around US\$1,900/ oz for much of the quarter, despite ETF outflows and weaker bar and coin buying.

ETFs

Q3 saw continued outflows from gold ETFs (-139t; -US\$8bn), particularly in the US and Europe, as investors increasingly took the view that major central banks – notably the US Fed – will keep rates 'higher for longer'. Y-t-d, holdings have declined by more than 5% (-189t), while total assets under management (AUM) are only 2% lower due to the mitigating effect of the higher gold price in 2023. This compares with a decline of just 20t over the same period of 2022.

North American-listed gold ETFs sustained the heaviest losses in Q3, with a decline of 96t

(-US\$5.8bn). The region's funds have registered outflows for four consecutive months, with investors discouraged by the combination of higher Treasury yields, stronger projections for US economic growth and a stronger dollar. The heaviest outflows occurred in August (-44t) and September (-35t).

The Q3 decline brings y-t-d outflows from North American funds to 76t (US\$4.3bn), with the largest and most liquid funds losing the most.

European ETFs have seen a similar pattern of outflows in recent months, resulting in a Q3 decline of 55t (-US\$3bn). Losses were heaviest in September (-28t, -US\$1.4bn) – a month in which the European Central Bank delivered its tenth consecutive rate hike and reiterated that rates will stay "at sufficiently restrictive levels for as long as necessary".⁷ And despite a pause in the Bank of England's rate tightening cycle, policymakers kept the possibility of further tightening on the table. Investor expectations for higher rates (and, therefore, a heavier opportunity cost for holding gold) likely drove the continued unwinding of gold ETF holdings across the region.

During the first nine months of 2023 outflows from European funds – mainly driven by the UK and Germany – totalled 124t (-US\$7.2bn).

In contrast, Asian funds saw inflows for the second successive quarter, adding 13t (+US\$860mn) in Q3. China (+10t) continued to drive the region's inflows amid increasing promotional efforts from fund providers, the surging local gold price and continued weakness in local assets. India and Japan also saw decent inflows: 2.5t and 1.2t respectively.

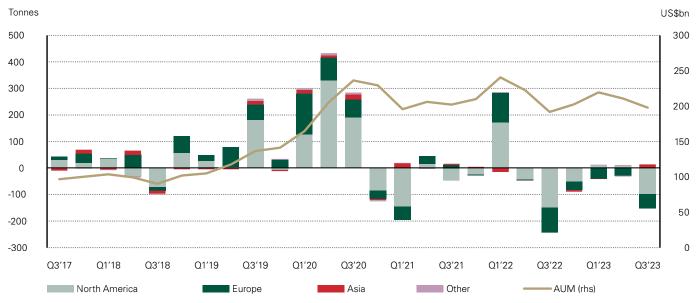
Y-t-d, Asia funds capped inflows of US907mn while their collective holdings increased by 14t (+12%); the bulk of these inflows were registered in Q3.

Gold ETFs listed in other regions registered 1.5t of outflows in Q3 (-US\$70mn). Between January and September the region's outflows amounted to US\$140mn (-2.8t), mainly driven by Australia and South Africa.

Since the end of Q3 – and at the time of writing – outflows have continued along much the same vein for the first half of October, with continued outflows from Western-listed funds contrasting with small consistent inflows into funds listed in Asia and other regions.

For a more detailed review of regional activity in global gold-backed ETFs see <u>our latest monthly Gold ETF commentary</u>.

US and European-listed funds continued to dominate outflows in Q3*



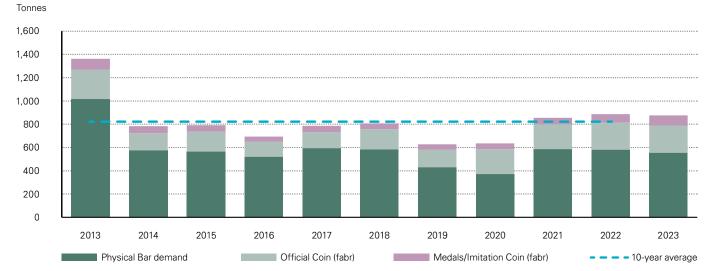
*Data as of 30 September 2023.

Source: Bloomberg, Company Filings, ICE Benchmark Administration, World Gold Council

7 Key ECB interest rates (europa.eu)

Bar and coin

After a strong H1, bar and coin investment in Q3 was 14% lower y/y at 296t. Demand was, however, up q/q and comfortably above the five-year quarterly average of 267t. Y-t-d, demand in this sector almost matches that of last year – 876t vs 886t in 2022 – as H1 strength outweighed Q3 weakness. The y/y decline in Q3 was due to certain pockets of lower demand, notably in Europe (Germany in particular), the US, Turkey, Australia and Iran.



Bar and coin demand so far in 2023 is on par with the last two years of healthy investment*

*Data as of 30 September 2023.

Source: Metals Focus, Refinitiv GFMS, World Gold Council

China

Quarterly demand for gold bars and coins in China, at 82t, was the strongest since Q1'21. Economic and geopolitical uncertainty, as well as disappointing performance from other assets, drove demand up 16% y/y and 66% q/q.

A surge in the local Shanghai gold price premium to a record high US\$121/oz during the quarter kept gold in the headlines and further contributed towards the positive sentiment, raising gold's appeal as a wealth-preserving store of value.⁸ Ongoing depreciation in the local currency kept the local gold price supported and a lack of attractive alternative investments worked to gold's advantage, given the relatively disappointing performance in the local stock market and the real estate sector. Continued buying by the People's Bank of China also likely cemented positive sentiment towards gold among the general populace.

During the first three quarters of 2023 Chinese households bought 197t of bars and coins, 25% ahead of the same period in 2022. The same supportive

factors have been in play throughout the year so far: namely, economic and geopolitical uncertainties, the attractive returns in the RMB-denominated gold price relative to other local assets, and the domestic central bank's gold purchasing spree.

Looking ahead, we expect local gold investment demand to remain robust in Q4. The fragility of the domestic economic recovery, along with intensifying global geopolitical risk, could continue to support Chinese investors' safe-haven demand for gold. And its appeal to bar and coin investors could be boosted further if the PBoC continues to report gold purchases. A caveat, however, is that the slightly later timing of the Lunar New Year in 2024 will likely push the usual Q4 sales boost ahead of the CNY holiday into Q1'24.⁹

India

Bar and coin investment in India reached 55t – the highest for a third quarter since 2015. Bar and coin investment in India reached 55t – the highest for a third quarter since 2015. Demand jumped 20% y/y and was 38% higher than its five-year quarterly average of 40t. Y-t-d, investment has inched ahead of the same period last year, reaching 118t (vs 117t in 2022).

Investors reacted to the downward correction in the gold price from its Q2 record high, adding to their holdings in the expectation of a price recovery in Q4 as the wedding and festive season gets underway.

The economic environment remains supportive, with most macro indicators pointing towards continued momentum in economic growth. And a good 2023 monsoon bodes well for farm incomes in Q4. That said, the recent jump in oil prices poses a challenge, given India's heavy reliance on oil imports. And the recent gold price volatility, spurred by heightened global geopolitical concerns, may also discourage some investors.

Middle East and Turkey

Y-t-d bar and coin demand in Turkey already exceeds the previous full-year record set in 2020. Demand remained very elevated in Q3 at 30t, 40% above its five-year average. Nevertheless, the y/y comparison showed a 16% contraction as Q3'22 was exceptionally strong.

Difficult local conditions continued to drive gold demand in Turkey; in particular the spiralling inflation rate and a perennially weak currency. Gold has also benefited from its strong performance in local currency terms, which has raised its appeal relative to other local investment assets.¹⁰

A continuation of HNW interest in gold was also observed during Q3. These demand flows fall within our 'OTC & other' segment of demand as they are directed towards larger format bars rather than the smaller (1kg and under) bars that typically constitute bar demand at the individual investor level.

9 The 2024 Chinese New Year falls between 9 and 15 February 2024.

10 +51% over the year to end-September based on the LBMA Gold price PM in Turkish Lira. Source: Bloomberg

⁸ On 14 September 2023 the premium of the Shanghai Benchmark Gold Price PM to the LBMA Gold Price AM rose to a record high of US\$121/oz.

Local gold price premiums spiked during the quarter after gold import quotas were re-introduced to combat high trade and current account deficits. Given the continued strength in gold demand, these are contributing to tight local conditions and suggest that high premiums are likely to persist at least until the end of the year.

Iran and Egypt drove a decline in regional Q3 bar and coin demand in the Middle East. Other markets across the region saw growth as investors bought into the price correction.

The 29% y/y decline in Iran's Q3 bar and coin investment was partly due to Q3'22's strength and partly due to local gold prices remaining broadly directionless during the quarter. Nevertheless, demand continues to draw support from persistently high inflation, and at 10t, was marginally above its five-year average.

Egyptian bar and coin demand saw a 4% y/y drop in Q3 to 6t. That said, investment demand remains at levels that are multiples of those typical just two years ago, and y-t-d demand is 87% above the same period of 2022. But the introduction of a sales tax on the labour charge for small gold bars (up to 100g) brought down local premiums and could also crimp demand at the margin in Q4.

The West

The pace of bar and coin investment in the US slowed in Q3, with considerable declines both q/q and y/y. Demand of just over 21t was nonetheless healthy in a longer-term context and y-t-d investment is 2% ahead of the same period last year (87t vs 85t).

The lacklustre atmosphere that had settled in the market towards the end of Q2 carried on throughout Q3; net demand remained subdued in the absence of any fresh positive news to stimulate investment. The relatively stable and high price environment through much of the quarter generated a pick-up in two-way activity. An increase in liquidations was noted, although these remain a little way below their longer-term average levels.

The sharp price recovery seen in October sparked a revival of investment demand early in Q4, but it remains to be seen whether full-year demand can exceed that of 2022.

Year-to-date weakness in European bar and coin demand has offset growth in Turkey and China

Y/y change (tonnes) 100 80 60 40 20 0 -20 -40 -60 -80 -100 -120 Turkey Mainland Egypt Japan Russian Austria Switzerland Australia Other Europe Germany China Federation

*Data as of 30 September 2023. Source: Metals Focus, World Gold Council

European bar and coin investment posted its weakest quarter since before the 2008 Global Financial Crisis.

Demand sank to just 30t and posted its third consecutive significant y/y decline, slumping by 59%. Y-t-d demand is 58% behind the same period last year. The low net demand figure was due to a combination of both relatively subdued levels of buying and higher volumes of profit-taking/selling back than have been seen in recent years.

Rising interest rates across the region have not only made savings accounts relatively attractive to investors, but have also made themselves felt through punitive rises in mortgage payments, which, along with the cost of living crisis, has reduced funds available to invest in gold.

As the largest market in the region, Germany was the biggest contributor to the region's weakness, with demand down 73% to 12t. The domestic economic downturn, and uncertainty surrounding the government's radical new green policies (which could force households to make costly upgrades to their heating systems), dented sentiment and made investors more cautious with investing. Other markets across the continent also saw sharp double-digit falls in Q3.

ASEAN markets

The ASEAN markets covered in GDT had mixed fortunes in Q3. Vietnam and Thailand witnessed y/y improvement, while demand in Indonesia weakened.

Demand in Vietnam was 4% higher y/y at 9t. Rising inflation and continued depreciation in the currency encouraged Vietnamese investors to seek refuge in gold, using the price correction during August as an entry point and with many anticipating further price strength. The premium on local gold bars jumped as a result.

Investment demand in Thailand rose 10% y/y to 11t. Local currency weakness and continued economic uncertainty helped to support demand. Thai investors used the price correction at the end of the quarter as an opportunity to buy at cheaper levels in anticipation of higher local prices over coming quarters.

Indonesia, in contrast, saw a 12% y/y fall in bar and coin investment to 7t. A relatively healthy domestic economic environment reduced safe-haven demand for gold. However, the end-September price drop saw a late revival of demand as investors bought into the dip.

Rest of Asia

Q3 saw Japan return to a very minor level of net disinvestment. But the overall net total was very small (-0.4t) and was indicative of modest levels of gross buying and limited liquidations. Stubbornly high domestic inflation, together with continued strength in the local gold price (due to the weak currency) has helped drive momentum in Japanese investment.

Demand is underpinned by the ongoing emergence of younger investors, who have shown a liking for regular saving using gold accumulation plans. This trend is partly due to the ease and convenience of these products and partly because these younger investors often lack the net worth to meet the minimum threshold inherent in physical purchases.

South Korean retail investors remained cautious in Q3. Demand of just over 3t was 16% lower y/y – the seventh consecutive y/y decline. Risk appetite remains low, despite local currency depreciation helping to support the local gold price during the quarter.

Australia

Australia saw a fourth consecutive decline in quarterly bar and coin demand. Q3 investment sank 58% to 3t, mirroring the weakness in European markets. Rising interest rates, continued cost of living pressures, and a relatively unexciting gold price during the quarter, all likely contributed to the subdued picture for gold investment.

Central banks

Robust central bank demand in Q3; hits year-to-date record.

- Central banks collectively bought 337t in Q3, the second highest third quarter on record
- Added to the record-breaking H1 total, y-t-d net purchases now stand at 800t
- Looking ahead, central bank demand is on course for another strong annual total.

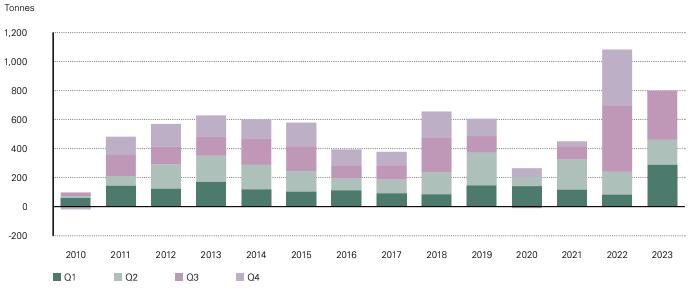
Tonnes	Q3′22	Q3′23	y∕y change
Central banks and other institutions	458.8	337.1	↓ -27%

Source: Metals Focus, World Gold Council

Central bank demand for gold saw no let-up in Q3, building on the record-breaking first half of the year. Global official gold reserves rose by 337t, 120% higher q/q and the second highest third quarter total following Q3 2022.¹¹ On a y-t-d basis, central banks have bought an astonishing net 800t, 14% higher than the same period last year. The quarter featured sizable purchases by a small number of banks and support by more modest buying from a range of others. And in stark contrast to the previous quarter, sales were minimal.¹²

The People's Bank of China (PBoC) regained the title of the largest buyer globally, increasing its gold reserves by 78t during the quarter. Since the start of the year, the PBoC has increased its gold holdings by 181t, to 2,192t (equivalent to 4% of total reserves).

The National Bank of Poland (NBP) continued its buying spree in Q3, adding a further 57t to the 48t it bought in Q2. This brings its y-t-d gold accumulation to 105t, in line with its previously stated aim of adding 100t to its gold reserves.¹³ But it may not stop there. In early October, NBP President Adam Glapiński stated: "This makes Poland a more credible country, we have a better standing in all ratings, we are a very serious partner and we will continue to buy gold. The dream is to reach 20 percent".¹⁴ For context, the NBP currently holds 334t of gold, equating to 11% of total reserves.



Central bank demand has gone from strength to strength*

*Data to 30 September 2023.

Source: Metals Focus, Refinitiv GFMS, World Gold Council

11 Our quarterly demand series begins in 2000. Q2 central bank demand was revised higher to include the 30t purchase by Libya in June.

12 Country-level gross sales and purchases are taken from the most recent IMF IFS, or data reported directly by individual central banks where relevant and available. These may not match the net central bank demand figures published in Gold Demand Trends, as Metals Focus uses additional sources of information to obtain its estimates.

13 biznes.interia.pl/gospodarka/news-adam-glapinski-prezes-nbp-bede-namawiac-rpp-do-kolejnej-podw,nld,5823037

¹⁴ i.pl/szef-nbp-adam-glapinski-marzeniem-jest-zeby-zloto-w-rezerwach-nbp-osiagnelo-poziom-20-proc/ar/c1-17954959

Central banks

Turkey's gold reserves recovered to 668t following purchases of 39t in Q3 as the central bank switched back to net buying following its heavy net sales in Q2.¹⁵ And while gold import quotas were reinstated in early August, so far there has been no repeat of sales into the local market to meet elevated demand.¹⁶ However, its gold reserves are still 12% lower than at the start of the year.

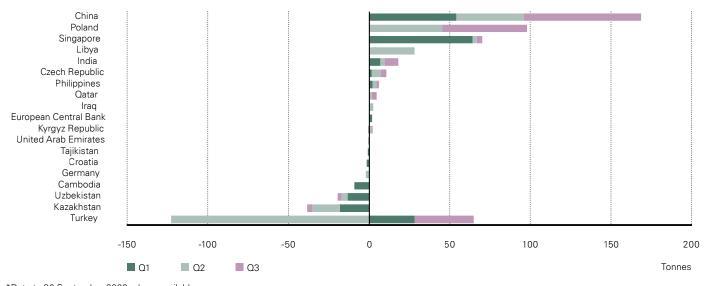
Beyond these large-scale buyers, eight more banks made purchases of at least a tonne during the quarter, highlighting the breadth of demand: India (9t), Uzbekistan (7t), the Czech Republic (6t), Singapore (4t), Qatar (3t), Russia (3t), the Philippines (2t) and the Kyrgyz Republic (1t). In early August, it was reported that Russia would recommence the buying of foreign currency and gold but no further information has been forthcoming on the size or timing of any future gold purchases.¹⁷

By comparison, sales were trivial. Kazakhstan (4t) was the only seller of note. As we have discussed in the past, it is not uncommon for central banks that purchase gold from domestic sources to be sellers of gold depending on market conditions.

Also during the quarter, a Bloomberg report highlighted claims that the Central Bank of Bolivia had "monetised" 17t of its gold reserves between May and August.

If verified, the move would represent a 40% decline in its gold reserves, which stood at 43t at the end of April, the latest data available. But there is ambiguity as to the meaning of "monetise"; this blanket term could, for example, refer to outright sales or alternatively swap agreements. Separately, it was also reported that the central bank plans to buy 5t of local gold production in H2 2023, although this too requires confirmation.¹⁸ By way of context, new legislation was passed in May enabling the central bank to utilise its gold reserves to "optimise liquidity and/or performance of [the country's] foreign reserves". The law also included a provision for the central bank to buy gold locally.

Taking stock and looking ahead, it now seems all but certain that central banks are on course for another <u>colossal</u> year of buying. The strength of buying has, to some degree, exceeded our expectations. While we were confident that central banks would remain net purchasers in 2022, we thought it unlikely that it would match last year's record buying volume. Should buying continue to be strong in Q4, the full year total could get closer than we anticipated. Nevertheless, the historically high level of buying in Q4 2022 may be difficult to top. For more, please see our Outlook section.



Reported purchases in 2023 dominated by China, Poland and Singapore*

*Data to 30 September 2023 where available. Source: IMF IFS, respective central banks, World Gold Council

15 Turkey official sector gold reserves are the sum of central bank owned gold and Treasury gold holdings. This is equivalent to gross gold reserves less all gold held at the central bank in relation to commercial sector gold policies, such as the Reserve Option Mechanism (ROM), collateral, deposits and swaps. Please follow this link for information on this methodology: www.gold.org/download/file/16208/Central-bank-stats-methodology-technical-adjustments.pdf

16 www.reuters.com/world/middle-east/turkey-plans-gold-import-quota-cut-ca-deficit-source-2023-08-07/

17 www.bloomberg.com/news/articles/2023-08-03/russia-to-restart-buying-currency-gold-as-energy-income-revives

18 www.telesurenglish.net/news/Bolivian-Central-Bank-To-Buy-Gold-From-Local-Producers-20230424-0013.html

Technology

Q3 saw some recovery from the weak first half, but demand remained restrained compared with previous years.

- Gold used in technology during Q3 fell by 3% y/y to 75t
- The electronics sector, which dominates technology demand, fell by 4% y/y to 61t
- Other industrial applications recorded a 4% y/y increase to 12t.

Tonnes	Q3′22	Q3′23	y/y char	ige
Technology	77.3	75.3	↓ -:	3%
Electronics	63.5	61.1	↓	4%
Other Industrial	11.3	11.8	^	4%
Dentistry	2.5	2.3	↓ -(6%

Source: Metals Focus, World Gold Council

The third quarter is generally the strongest of the year for electronics demand as many major companies bring new products and devices to the market. And while this bolstered demand during Q3 this year, we expect this momentum to fade in the face of continued headwinds, chiefly ongoing weakness in consumer demand.

Electronics

Demand in the electronics industry remained relatively weak, although some sectors showed signs of recovery. New product launches and pockets of inventory building provided support during the traditionally strong Q3. But the sector faces continued challenges: Apple launched its iPhone 15 to reports of delays due to supply chain issues.¹⁹ And, as we reported last quarter, the overall outlook for device shipments is relatively weak for the remainder of the year, with some analysts suggesting that the full year shipments for smartphones may be the lowest in a decade.²⁰ Additionally, chip manufacturers continue to combat falling profits by adjusting facility utilisation rates to bring inventories back down to more normal levels. This adds further complexity to an already challenging landscape this quarter.

Gold demand in the Printed Circuit Board (PCB) sector improved q/q, but fell again y/y during Q3. Having fallen as low as 60-65% last quarter, PCB fabrication utilisation rates recovered somewhat in Q3 to around 70-75%, thanks to strong demand for artificial intelligence (AI) servers and automotive chips. The complexity of AI requires significant numbers of PCBs and the AI boom is likely to drive continued growth into 2024. The outlook for auto demand is less certain, as vehicle manufacturers move towards flexible and lightweight substrates, which may undermine the volume of gold used in certain applications.

Smartphone launches in Q3 lifted gold usage in the wireless sector. Demand increased both q/q and y/y, but much of this can explained by the extremely low base recorded during Q3'22 when fabrication utilisation rates were reportedly at 50%. Demand for wireless chips was strong, thanks to smartphone device launches, high performance computing and military/defence applications. However, we expect this demand to lose momentum given the weak smartphone forecast in 2023.

¹⁹ www.forbes.com/sites/gordonkelly/2023/09/07/apple-iphone-15-pro-max-release-date-new-iphone-launch-delay/?sh=3f6402086ddf

²⁰ www.cnbc.com/2023/08/17/global-smartphone-market-to-hit-decade-low-apple-could-take-top-spot.html

Gold used in Light Emitting Diodes (LEDs) fell

y/y during Q3, but rose slightly q/q. New product launches in the smartphone sector drove this quarterly improvement, together with continued growth in sensor demand in the automotive market. But the longer-term outlook for gold demand in this segment is fairly weak, as competing technologies that use little or no gold begin to increase their market share. Mini-LED penetration rates are still relatively low, largely due to their prohibitive cost, but some larger devices are seeing increased adoption: mini-LED backlight TV shipments, for example, are rumoured to increase by around a quarter in 2023.

Demand for gold in the memory sector faced continued challenges, with production volumes responding to excess inventory levels. Q3 saw

considerable levels of flux in this segment. Continued production cuts by memory chip manufacturers brought inventory levels down to around 10 weeks by the end of Q3, approaching a more typical level of 8 weeks. The world's biggest memory chip manufacturer, Samsung, announced that it will continue to cut chip production as it tries to stem recent falls in profit.²¹ H1 production cuts of 20% for DRAM chips and 30% for NAND flash chips will reportedly increase in H2 to 30% and 40%, respectively.²² Utilisation rates in the sector remain complicated, with Chinese fabricators operating at relatively high levels in response to the ongoing tensions with the US, while utilisation rates at Korean foundries have slumped to 40-50%.

At the aggregate level, two of the major electronics fabrication hubs around the world recorded a y/y fall in gold demand during Q2: Japan (-9%) and South Korea (-19%); while Mainland China and Hong Kong SAR (6%) and the USA (2%) both registered small increases.

Other industrial and dentistry

Volumes of gold used in other industrial applications – typically in decorative applications, such as plated luxury items, costume jewellery, and gold thread used in Indian saris – was the only area of the technology sector to record growth in Q3. Demand was 4% higher y/y at 12t, in line with the five-year quarterly average. The continued post-COVID normalisation in China contributed to the strength, as did modest growth in Italy, where high-end plating demand has improved, and India. Dental demand, meanwhile, continued its long-term decline with a 6% y/y decline to 2t.

²¹ www.cnbc.com/2023/04/07/samsung-electronics-says-first-quarter-profit-likely-plunged-96percent-as-chip-glut-slashes-prices.html

²² en.yna.co.kr/view/AEN20230926005200320

Supply

Total Q3 gold supply rose 6% y/y; mine production reached a quarterly record.

- Total gold supply increased by 6% y/y in Q3, driven by growth in mine production and recycling
- Mine production hit a record 971t in Q3; recycled gold rose y/y to 289t
- Higher mine production and recycling contributed to a y-t-d total supply of 3,692t.

Tonnes	Q3′22	Q3′23	y/y change
Total supply	1,190.6	1,267.1	^ 6%
Mine production	949.1	971.1	^ 2%
Net producer hedging	-26.8	7.2	
Recycled gold	268.3	288.8	^ 8%

Source: Metals Focus, World Gold Council

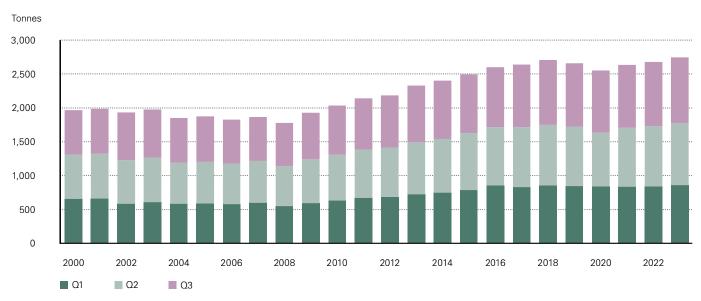
Q3 saw strength across all components of supply. Mine production reached 971t – an all-time third quarter high in our records back to 2000 – and recycling increased 8% y/y to 289t.

Preliminary estimates also suggest the net producer hedge book increased again in Q3, although the timing of this publication makes net producer hedging estimates subject to potential revisions once the majority of mining companies have released their quarterly reports.

Mine production

Mine production continued its strong run in Q3: up 2% y/y to hit another record. Y-t-d mine production of 2,744t is also a record: up 1% over the previous Q1-Q3 record of 2,706t achieved in 2018.

On a q/q basis, production increased by 6%, due primarily to normal seasonal fluctuations. Global gold production shows modest seasonality: in the ten years to 2022 firsthalf mine production averaged 48% of the annual total. H1 mine production is affected by Christmas and Easter holidays in many producing countries, along with very cold temperatures at some operations, which restrict alluvial and some other surface operations.



Mine production hit an all-time third quarter high in 2023*

*Data as of 30 September 2023. Quarterly data available from Q1 2000. Sources: Metals Focus, Refinitiv GFMS, World Gold Council

Supply

In Q3 mine production from four countries drove the increase in global output:

- Mine production increased by 14% y/y in **Canada**. Output was boosted by a ramp-up to full production at Eléonore after its temporary June closure due to wildfires in Quebec, and by higher forecast grades at Musselwhite
- The **United States** saw a 13% y/y uplift due to increased production at Nevada Gold Mines. Improved mining efficiencies at the Cortez and Carlin operations, together with higher production from the third shaft at Turquoise Ridge, drove this jump in output
- In Ghana, the ongoing ramp-up at Bibiani, together with higher grade ore availability at Ahafo, saw mine production up 7% y/y
- Australian mine production increased 3% y/y due to higher output from KGCM – as expansion continues – and from the ongoing ramp-up of the Cowal underground.

Operations in some countries were hit by a mix of lower grades, production suspension and, in the case of Sudan, ongoing conflict:

- Mexico saw a 15% y/y decline in mine production largely attributable to the temporary suspension of Peñasquito due to a labour strike. Media reports suggest that a wage agreement in early October has now ended the strike
- In **Tanzania** output was 14% lower y/y due to expected lower production from Geita and North Mara due to sequencing
- In Sudan, mine production fell by an estimated 10% y/y due to disruption to artisanal and small-scale (ASM) mining from the ongoing conflict
- **Russian** mine production fell by 4% y/y due to lower output at Polyus' Olimpiada, the country's largest gold mine. This appears to be a consequence of mine sequencing rather than any impact of Western sanctions against Russia. These sanctions do not appear to be materially affecting gold mine volumes, although costs have risen rapidly and there have been delays to new projects under development.

Regionally, North America had the most significant increase, up 8t y/y. Gold production increased an estimated 7t y/y in the Asia region and by 4t in Oceania due to higher production from China, Australia and Papua New Guinea.

Despite higher production, mining costs have increased in 2023. In Q2'23 – the latest quarter for which we have data – AISC increased by 6% y/y to reach a record quarterly high of US\$1,315/oz. Rising industry costs since 2020 have been driven by inflationary pressure on all aspects of miners' input costs; most notably labour, fuel and electricity.

As 2023 progresses – and based on information from Metals Focus – it is increasingly likely that mine production will hit a new all-time high, surpassing the prior record of 3,656t set in 2018.

Net producer hedging

Initial estimates suggest that net hedging continued in the second quarter although possibly at a modest rate. We have pencilled in a 7t contribution to total supply from new net hedging in Q3'23, although we will likely adjust this following the completion of company reporting.

By the same token, Q2 net hedging has been adjusted sharply lower following the release of company results. The global delta-adjusted producer hedge book fell by 20t in Q2'23, to 188t, compared with the provisional estimate of a 9t increase. Despite higher local currency gold prices and steeper gold forward curves, there has been no evidence (yet) of a material increase in mining companies locking in attractive forward gold prices.

Recycled gold

Third quarter gold recycling increased to 289t, up 8% y/y but down 11% q/q. This y/y increase is a little deceptive, as the third quarter of 2022 was particularly weak owing to a lower gold price. Y-t-d, recycled gold volumes increased by 9% y/y to 924t, the highest over this period since 2020.

Recycling supply in the third quarter paints a contrasting picture with recycling from developed markets and the **Middle East** subdued, against average demand from **South Asia** and stronger **East Asian** supply.

Recycling volumes in western markets were below longterm averages, suggesting that near-market stocks are quite depleted and there is little evidence of widespread consumer distress. Still-low unemployment rates in the **United States** are helping to keep recycled supply subdued in spite of the strong performance of the US dollar gold price, which was up 12% y/y in Q3'23. In contrast, the shorter-term decline in gold prices played a role, especially in **Europe**, where recycling sales slowed after the eurodenominated gold price fell sharply in September.

In the **Middle East** weak domestic currencies saw high prices in **Turkey** and **Egypt**, but concerns about further economic and currency weakness, together with a lack of investment alternatives, resulted in sluggish recycling supply, demonstrating gold's attraction in the face of economic and <u>political</u> turmoil. In **India** recycling volumes fell sharply q/q due to a modest decline in the rupee-denominated gold price, although volumes were still higher y/y in line with the higher local currency gold price over the period. A higher share of jewellery sales facilitated by the exchange of old gold also depressed recycled volumes.

China also saw lower recycling volumes q/q after a surge in Q2'23. Jewellery demand improved in the quarter and retailers had less reason to liquidate stock. Following the significant amount of recycling by retailers in Q2, they adopted a more conservative approach. But recycled supply increased y/y compared to COVID-affected Q3'22. It's interesting to note that COVID impacts on demand and supply in China will cause repercussions until at least Q1'24, as the first quarter of this year saw a surge in activity when 2022's strict restrictions were lifted.

Overall, we were somewhat surprised by weak recycling supply in many markets in Q3'23, as we had expected slowing Western economies to trigger more distress selling. But a resilient US economy and lower gold prices in euro terms tempered recycling supply in these markets. Higher gold prices in October, following turmoil in the Middle East, may tempt some sellers in Q4'23, but larger increases will probably materialise if economies slow further or faster.

Strong East Asian recycling supply offset by stable activity in RoW*

20 15 10 5 0 -5 -10 -15 -20 -25 Europe Middle Fast North America Other South Asia Fast Asia y/y a/q

*Data as of 30 September 2023.

Tonnage change

Sources: Metals Focus, World Gold Council

Notes and definitions

Notes

Revisions to data

All data is subject to revision in the light of new information.

Historical data series

Demand and supply data from Q1 2014 are provided by Metals Focus. Data between Q1 2010 and Q4 2013 is a synthesis of Metals Focus and GFMS, Thomson Reuters data, which was created using relatively simple statistical techniques. For more information on this process, please see *Creating a consistent data series* by Dr James Abdey.

Definitions

Bars

Net investment (i.e. gross purchases less gross sales) in small gold bars (1kg and below) sold at the retail level. Where identifiable, this also includes gold bought and stored via online vendors.

Central banks

Net purchases (i.e. gross purchases less gross sales) by central banks and other official sector institutions, including supra national entities such as the IMF. Swaps and the effects of delta hedging are excluded.

Comex net long positioning

The Commodity Futures Trading Commission (CFTC) publishes a weekly <u>Commitment of Traders (COT)</u> report that provides information on the positioning of speculative investors in the U.S. futures markets. The report gives the aggregate positions held by traders from the previous Tuesday, including the number of long contracts (that stand to benefit if prices rise) and short contracts (that benefit if they fall). The report is often used as an indicator of market sentiment regarding the price of gold: short positioning reflects bearish sentiment while long positioning reflects bullish sentiment in the gold futures' markets.

Consumer demand

The sum of jewellery consumption and total bar and coin investment occurring within a country i.e. the amount (in fine weight) of gold purchased directly by individuals. Technology demand is not included at the individual country level, as it is measured at the point of fabrication rather than at the point of consumption.

Electronics

The volume of gold bullion or grain fabricated into components used in the production of electronics, including – but not limited to – semiconductors and bonding wire.

Dentistry

The volume of gold bullion or grain fabricated into products destined for dental applications such as dental alloys.

Gold-backed Exchange-Traded Funds (ETFs) and similar

The volume of gold held in physical form by open-ended Exchange Traded Funds (ETFs) and other products such as close-end funds, and mutual funds. Most funds included in this list are fully backed by physical gold. While several funds allow other holdings such as cash, derivatives or other precious metals, we monitor only those funds investing at least 90% in physical gold and appropriately adjust their reported assets to estimate physical holdings only. For funds that include physical holdings of multiple precious metals, the total AUM depicted for such funds is lower than their actual total AUM. Over time, the data set will adapt to most accurately represent the universe of active funds. For a comprehensive list of the funds we track or to subscribe to our monthly update on gold-backed ETF holdings, visit www.gold.org/goldhub/data/globalgold-backed-etf-holdings-and-flows

Fabrication

Fabrication is the first transformation of gold bullion into a semi-finished or finished product.

Gold bullion

Gold, in bar form, refined to a purity of at least 99.5%.

Gold demand

The total of jewellery fabrication, technology fabrication, investment and net purchases by central banks.

Jewellery consumption

End-user (consumer) demand for all newly-made carat jewellery sold at the retail level, by volume of fine gold. Measured on a gross basis (i.e. includes recycled gold). Excludes: purchases funded by the trading-in of existing carat gold jewellery (gold-for-gold exchange); and purchases of second-hand jewellery, other metals plated with gold, and coins and bars used as jewellery. At the global level, it is measured as jewellery fabrication adjusted for changes in inventories held by the trade. At the country level, it is jewellery fabrication adjusted for changes in trade stocks plus imports, less exports.

Jewellery fabrication

Jewellery fabrication is the first transformation of gold bullion into semi-finished or finished jewellery. This differs from jewellery consumption as it excludes stock building/ de-stocking by manufacturers and distributors. At the individual country level, it also excludes imports or exports.

Jewellery inventory

Changes to the level of jewellery stocks along the jewellery distribution chain, this is the difference between gold fabrication and gold consumption. A negative figure represents a draw-down of stocks when consumption exceeds fabrication. A positive figure represents a build-up of stocks.

LBMA Gold price PM

Unless otherwise specified, gold price values from 20 March 2015 are based on the LBMA Gold price PM administered by ICE Benchmark Administration (IBA), with prior values being based on the London PM Fix. For more information, see <u>www.gold.org/goldhub/research/marketprimer/gold-prices</u>

Medals/imitation coins

Fabrication of gold coins without a face value, produced by both private and official/national mints. India dominates this category with, on average, around 75% of the total. 'Medallion' is the name given to unofficial coins in India. Medals of at least 99% purity are also included.

Mine production

The volume (in fine weight) of gold mined globally. This includes an estimate for gold produced by artisanal and small-scale gold mining (ASGM), which is largely informal. For more information, refer to: www.gold.org/goldhub/ research/market-primer/mine-production

Net producer hedging

The net impact in the physical market of mining companies' gold forward sales, loans and options positions. Hedging transactions – which release gold to the market from existing above-ground stocks – accelerates the sale of gold. De-hedging – the process of closing out hedged positions – has the opposite impact and will reduce the amount of gold available to the market in any given quarter. Over time, hedging activity does not generate a net change in the supply of gold. For more information, refer to: www.gold.org/goldhub/research/ market-primer/mine-production

Official coins

Net investment in gold bullion coins (i.e. gross purchases less gross sales) at the retail level. It is equal to the volume of fine gold in coins fabricated by official/national mints which are, or have been, legal tender in the country of issue. It is measured at the country of consumption rather than at the country of origin (for example, the Perth Mint in Australia, sells most of the coins it produces through its global distribution network). In practice it includes the initial sale of many coins destined ultimately to be considered as numismatic rather than bullion.

OTC and other

This number captures demand in the OTC market (for which data is not readily available), changes to inventories on commodity exchanges, any unobserved changes in fabrication inventories and any statistical residual. It is the difference between total supply and gold demand.

Other industrial

Gold used in the production of compounds, such as Gold Potassium Cyanide, for electro-plating in industrial applications as well as in the production of gold-plated jewellery and other decorative items such as gold thread. India accounts for the bulk of demand in this category.

Over-the-counter (OTC)

Over-the-counter (OTC) transactions (also referred to as 'off exchange' trading) take place directly between two parties, unlike exchange trading which is conducted via an exchange.

Recycled gold

Gold recovered from fabricated products, including unused trade stocks, which is refined back into bullion. This specifically refers to gold sold for cash. It does not include gold traded-in for other gold products (for example, by consumers at jewellery stores) or process scrap (scrap generated during manufacturing, which never becomes part of a fabricated product but instead returns as scrap to a refiner). For more information, refer to www.gold.org/goldhub/research/market-primer/recycling

Technology

This captures all gold used in the fabrication of electronics, dental, medical, decorative and other technological applications, with electronics representing the largest component of this category. It includes gold destined for plating jewellery.

Notes and definitions

Tonne (Metric)

1,000 kg or 32,151 troy oz of fine gold.

Total bar and coin

Total net investment in gold bars, coins and medals/ imitation coins.

Total supply

The total of mine production, net producer hedging and recycling.

Year-to-date (y-t-d)

In Gold Demand Trends, year-to-date refers to the period to the end of the quarter being reviewed (i.e. for Gold Demand Trends Q2 2017, 'year-to-date' referred to the period from 31/12/2016 to 30/06/2017).

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 research, analysis, commentary and insights.

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

World Gold Council

7th Floor, 15 Fetter Lane London EC4A 1BW United Kingdom

T +44 20 7826 4700 **F** +44 20 7826 4799 **W** www.gold.org

Research

Louise Street louise.street@gold.org

Kavita Chacko kavita.chacko@gold.org

Krishan Gopaul krishan.gopaul@gold.org

Ray Jia ray.jia@gold.org

Jeremy De Pessemier, CFA jeremy.depessemier@gold.org

Johan Palmberg johan.palmberg@gold.org

Juan Carlos Artigas Global Head of Research juancarlos.artigas@gold.org

Further information

For data sets and methodology visit: www.gold.org/goldhub/data/gold-supply-anddemand-statistics

Or contact: research@gold.org

Market Strategy

Joseph Cavatoni Market Strategist, North America joseph.cavatoni@gold.org

John Reade Market Strategist, Europe and Asia john.reade@gold.org

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