

# Gold Demand Trends

## Full year 2011

February 2012

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### Overview

2011 was another impressive year for global gold demand; volume grew 0.4% to 4,067.1 tonnes, worth an estimated US\$205.5bn. Investment was the main driver of growth, although jewellery and technology were resilient in the face of higher gold prices. Record mine production was offset by lower recycling activity and significant central bank purchases. [Read more...](#)

### Contents

Overview	02
Global gold market – themes of 2011	04
Fourth quarter and full year 2011 review	12
Jewellery	13
Technology	16
Investment	17
Supply	20
Gold demand statistics	22
Historical data for gold demand	28
Appendix	29

### Global gold market – themes of 2011

We consider a year of contrasts within the gold market and analyse a number of themes that emerged during the year. We show how these themes highlight the depth and diversity of the factors determining the demand for and supply of gold. [Read more...](#)

### Fourth quarter and full year 2011 review

Global fourth quarter gold demand was 1,017.0 tonnes, slightly below Q4 2010 as growth in demand for ETFs and gold coins was offset by declines in jewellery and technology demand in response to record gold prices and elevated price volatility. [Read more...](#)

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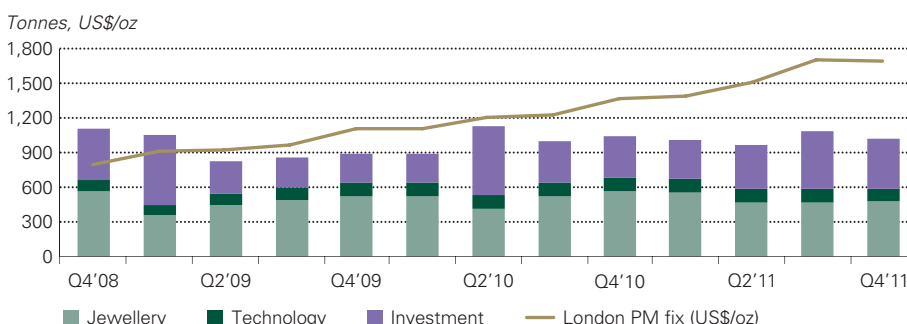
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### Gold demand by category in tonnes and the gold price (US\$/oz)



Source: LBMA, Thomson Reuters GFMS, World Gold Council

# Overview

2011 marked another impressive year for global gold demand, with investment demand showing strong growth and both jewellery and technology sectors remaining resilient. Mine production increased slightly, to a record annual level, but this was counterbalanced by a small decline in recycling and considerable net purchases by central banks. Annual demand totalled 4,067.1 tonnes (+0.4% year-on-year) worth an estimated US\$205.5bn. Demand for gold bars and coins accelerated, reflecting a blend of positive influences including concern over the financial health and future viability of the euro area; high inflation in some countries; positive price expectations; and the relatively poor performance of a range of alternative investments.

Jewellery and technology demand for gold weakened slightly in 2011, although both sectors could be considered relatively robust in the context of high double-digit increases in annual average gold prices in almost all currencies of the markets that we monitor.

As a new year begins to unfold, a number of supportive factors that underpinned gold demand during 2011 are seen generating growth over the coming quarters.

During 2012, the investment sector should continue to draw strength from, on the one hand, continued very low (and in many cases negative) real interest rates and, on the other hand, inflationary pressures, whether real or perceived. Widespread very low or negative real interest rates provide a continued pillar of support to gold demand around the globe, particularly in the wake of the US Federal Reserve's recent statement that rates could be expected to remain 'exceptionally low' through to at least late 2014.

Meanwhile, gold's role as an inflation hedge should bolster its appeal, particularly in countries such as India, China and Vietnam that continue to be afflicted by high inflation. Furthermore, the fear of future inflation gives added impetus to investment demand, notably in a number of Western markets where some investors are concerned that the widespread expansionary monetary policies of the last few years are providing fuel for latent rapid inflation growth.

Europe is a key area of focus in the investment sector in 2012, the region having undergone something of a sea-change in recent years. Ongoing difficulties in the region are deepening uncertainty over the future of the euro area and, with no end currently in sight to the woes of Greece and Italy, will further stimulate investment demand. While regional investment demand may not sustain the levels of the last two to three years, it has certainly established a significantly higher range than pre-2008.

Finally, gold demand is likely to benefit from a further entrenchment of the recent commitment shown by central banks towards bolstering their gold holdings. Gold reserves held by central banks have increased by more than 500 tonnes over the last two years, as a number of banks, mostly in the developing world, have made significant purchases while sales dwindled to trivial levels. The factors that motivated these purchases over recent quarters remain relevant for the coming year: continued growth in already sizeable foreign reserves; the wish to diversify such reserves, protecting against a reliance on one or two foreign currencies; a restoration of the prior balance in the composition of reserves (between gold and foreign currency); and finally to capitalise on gold's role as a means of preserving national wealth and promoting financial market stability.

China and India will continue to generate a significant proportion of consumer demand, with both countries maintaining their strong cultural link with the metal. However, signs of economic slowdown in China, and the increasing maturity of the market, are likely to result in a deceleration of recent growth rates, evidence of which was already coming through last quarter. In India, meanwhile, a lower number of auspicious days in the 2012 Hindu calendar relative to recent years is likely to temper gold demand to some degree.

# Global gold market – themes of 2011

The phrase “a year of two halves”, despite being often too liberally applied, serves as a befitting summary of the gold market in 2011. Gold, along with many other asset classes, faced a variety of challenges during 2011 from exogenous factors. It was a year characterised by dichotomous trends, manifest in price stability during the first half followed by higher than average volatility during the second. It was also a year of intense scrutiny but despite a strong headwind from commentators calling the top of the market, gold continued its 11-year bull run driven by a diverse set of factors.

In terms of supply and demand, a number of themes were prominent, with divergent paths for Indian and Chinese demand; growing mine production and falling recycled gold supply; strong central bank net buying yet the resumption of producer hedging as a small source of supply; and within investment: bar and coin strength amidst slowing ETF growth and OTC investment weakness. The breadth of these themes points once again to the depth and diversity of this market.

## **The gold price**

2011 will likely be remembered as a year in which the decade-long gold bull market was tested, as a strong rally into September with gold up around 30% for the year, was followed by a price decline which reduced the year’s gain to high single digit figures.<sup>1</sup> Following a decade of uninterrupted annual gains, many commentators were calling a long-term peak in nominal prices. Reasons cited for this prediction ranged from supposed diminishing sensitivity by European investors

to the growing sovereign debt problem, stalling emerging market growth, to increased correlation between gold and risk assets. As the price reached an intra-year peak in September, historical volatility climbed and stayed elevated for the remainder of the year with gold falling from the September high of US\$1,895.00/oz to close the year at US\$1,531.00/oz. Volatility levels for gold for a large part of H2 were almost twice its long-term average (Chart 1), yet relative to other asset classes such as US equities, they remained muted. The year may have been characterised by periods of price turbulence, but the average price in 2011 of US\$1,571.52/oz was more than 28% higher than its 2010 equivalent. Furthermore, as we write this, gold has recovered strongly from its Q4 lows amid solid demand from several sectors. An in-depth discussion of gold prices in 2011 was published in January and is available on our website.<sup>2</sup>

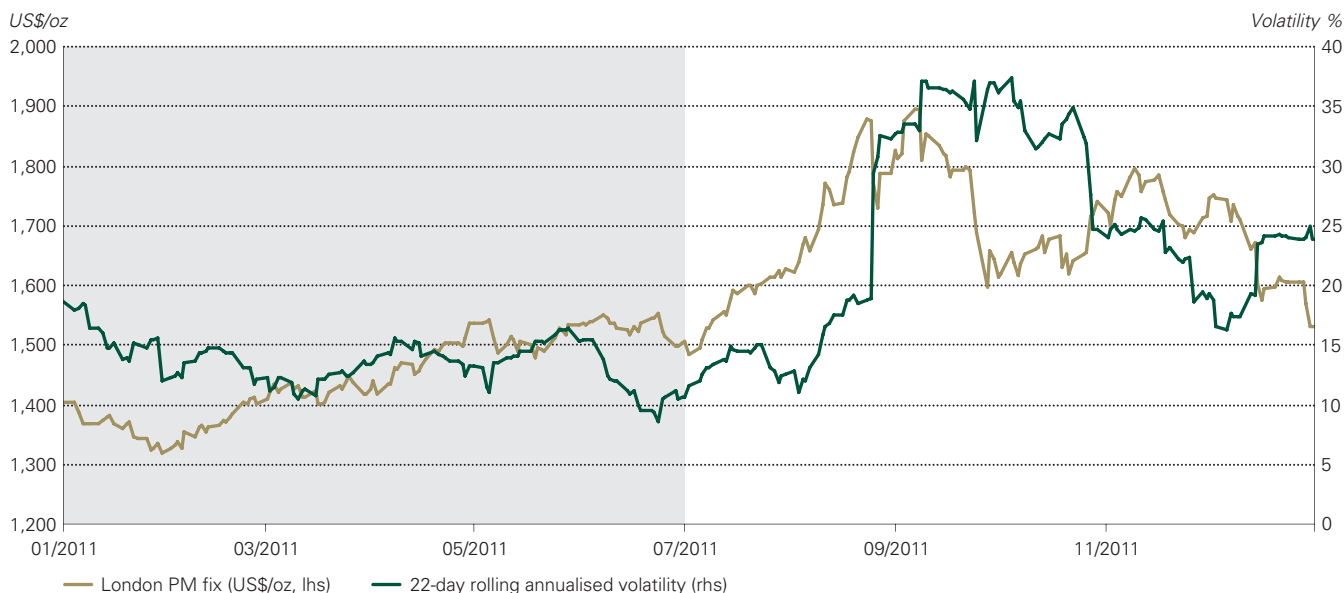
<sup>1</sup> All prices and price movements use the London PM fix in US\$/oz, unless otherwise stated.

<sup>2</sup> [http://www.gold.org/investment/research/investment\\_statistics\\_commentary](http://www.gold.org/investment/research/investment_statistics_commentary)

The question of gold's correlation to risk assets such as equities and commodities often arises. Many assume that the most effective diversifiers have strong inverse correlations with risk assets regardless of whether risk asset prices are in a rising or falling environment. One of gold's enduring strengths is that its low correlation with risk assets is due to a strong negative correlation when they are falling, but a slightly positive one when they rise.<sup>3</sup> Gold's positive performance for much of the last decade occurred in tandem with gains in equities and commodities. There were, however, also instances of positive correlations when risk assets were falling, clearly evident in 2008/09. Three years later in 2011, a sell-off under similar circumstances by investors was induced partly as a result of

liquidity needs from margin calls and fund redemptions, but also by profit-taking following a stellar year-to-date performance. In a year in which gold had returned just shy of 30% by 1 September compared to US equities (-3%), emerging market equities (-8%), European equities (-5%) and commodities (+3%) respectively,<sup>4</sup> some investors and asset managers would have felt compelled to sell the best performing asset in the hope that other positions could recoup losses or extend meagre gains before these were marked to market. Given gold's market depth, abundant liquidity ensures that slippage<sup>5</sup> is low even during market distress.

**Chart 1: Gold price and rolling volatility**



Source: Bloomberg, World Gold Council

3 World Gold Council, *Gold: alternative investment, foundation asset*, October 2011. This research paper is available at [www.gold.org/investment/research](http://www.gold.org/investment/research)

4 MSCI US Total Return Index, MSCI Emerging Markets Total Return Index, MSCI Europe Total Return Index, S&P GSCI Total Return Index. All index returns in US dollar terms.

5 Slippage is the difference between the actual price received for a security vs that which was expected. It can result from low liquidity during periods of financial duress, higher transaction costs accepted on forced sales and other.

## India and China

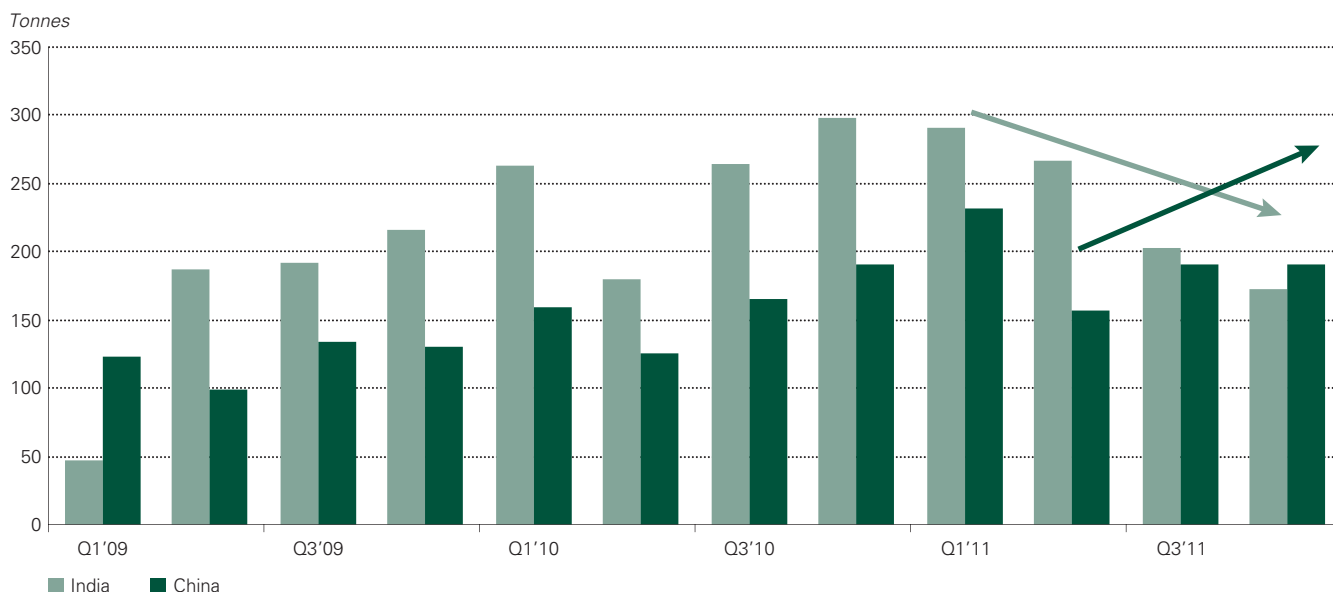
Perhaps the most pronounced example of dichotomous trends was the development of demand in India and China during the year. Both countries are often assumed to be congruent drivers of gold demand and price, regularly grouped together under some regional nomenclature. However, India and China are two different economies driven by different sets of factors. Last year's macroeconomic backdrop painted two contrasting landscapes in these countries, which combined accounted for more than half of total global demand,<sup>6</sup> and subsequently led to a strong divergence in overall demand trends.

For both countries, inflation spurred on by rising food prices, presented particular difficulties in the first half of the year. However, the monetary tightening that followed had severe consequences for India as the domestic currency, following an initial rapid rise, fell precipitously in the second half of the year, on foreign capital outflows. The rapid rise and fall in the rupee, and resulting domestic gold price swings had a strong impact on gold buying with both jewellery and investment demand in H2 lower by around 33% (Chart 2). Full year jewellery and investment demand totalled 933.4 tonnes, a drop of 7% year-on-year.

Meanwhile, in China, jewellery and investment demand reached 769.8 tonnes for the full year representing 82%<sup>7</sup> of India's level of demand. This figure has only recently risen above the 50% mark, reflecting the strength of China's presence in the gold market.

Both countries face separate headwinds in 2012, but China, with its large reserve base, adjustable exchange rate and political decisiveness may be better positioned to tackle a slowdown posed by falling exports and the policy tightening pursued during most of 2011. India's importance in the gold market will not diminish, even if demand growth softens. Not only is India a key player in the global gold market, but the domestic drivers of gold demand are largely independent of outside forces, firmly supporting gold's diversified demand base.<sup>8</sup> These factors will promote continued growth in demand over the long term, even as the short-term outlook for both countries is for a modest slowdown.

**Chart 2: China and India: jewellery and investment demand**



Source: Thomson Reuters GFMS, World Gold Council

6 Excludes technology demand, for which numbers have yet to be released.

7 Including technology, which historically is considerably higher in China than in India, this number will be a good deal higher.

8 World Gold Council, *India: heart of gold. Revival*, November 2010. This research paper is available at [www.gold.org/investment/research](http://www.gold.org/investment/research)

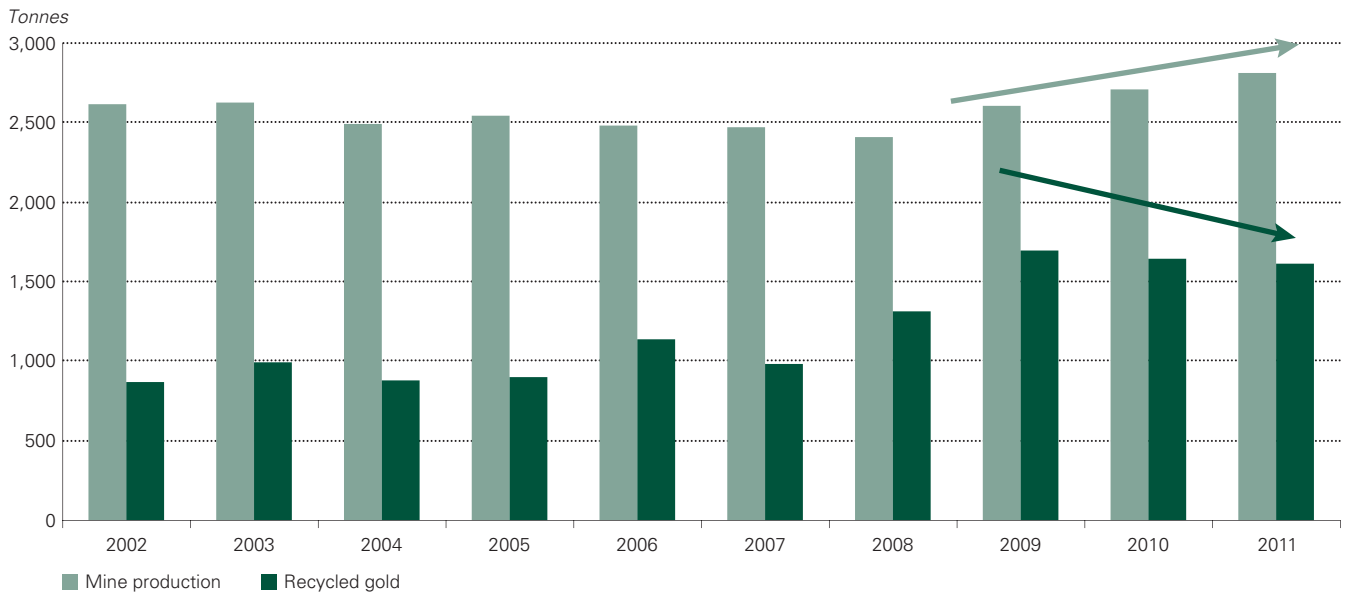
### Mine production and recycled gold

The two primary components of supply: mine production and recycled gold, experienced divergent rates of change (Chart 3). While they tend to respond to price differently, the continued decrease in recycled gold supply in the face of continuously rising prices is a bullish development.

Mine production edged up 4% to reach an all-time high, as the rising price over the last decade has brought a strong pipeline of projects to fruition. In 2011, both formal and artisanal mining contributed to the growth in output, largely from Africa, according to Thomson Reuters GFMS. While the year-on-year change was lower in relative terms than that of the two preceding years, it was still well above the 10-year average. As we have noted previously,<sup>9</sup> many of the increases in production from the formal mining sector are from existing projects being ramped up, as new finds continue to be elusive and rising input costs are pushing up costs for less established operations.

Recycled gold, on the other hand, edged down 2%. This was the second consecutive year-on-year fall in recycled gold from the peak of 1,694.7 tonnes in 2009. Despite the rise in prices, recycling activity was constrained by a combination of expectations for higher prices, acclimatisation to a higher current price level, economic growth and exhaustion of near-market supply. However, this was not regionally consistent. Falls in recycled gold were restricted primarily to developing markets such as China, India and Turkey that are active recycling markets with established infrastructure for selling back gold. Developed markets, particularly Europe, the US and Japan saw large increases in their supply of recycled gold where such infrastructure has only recently begun significantly to develop.

**Chart 3: Mine production and recycled gold**



Source: Thomson Reuters GFMS, World Gold Council

<sup>9</sup> World Gold Council, *Gold Demand Trends, Third quarter*, November 2011. This report is available to download at [www.gold.org/download/pub\\_archive/pdf/GDT\\_Q3\\_2011.pdf](http://www.gold.org/download/pub_archive/pdf/GDT_Q3_2011.pdf)

### Central banks and producer hedging

There are few who predicted that 2011 would see net official sector buying to the tune of 439.7 tonnes. This figure, the highest since 1964, is largely the result of emerging market central banks seeking to diversify their foreign exchange holdings, and a lack of selling by Central Bank Gold Agreement (CBGA) signatories. The net buying trend which started in Q2 2009 has proliferated, as emerging market central banks have continued to add gold on increasing concerns about the creditworthiness and low yields of their existing reserve assets. Both the euro area sovereign crisis and the sovereign debt downgrade in the US during the summer of 2011 have compounded these worries (Chart 4). In addition, diminishing CBGA selling has been insufficient to offset these resultant purchases. With the two dominant reserve currencies beset with issues,<sup>10</sup> interest in gold as the one currency free from the impact of government policy and intervention, has been spurred. The trend in central bank buying is expected to continue given the lack of decisive action in dealing with the underlying issues both in Europe and the US, as well as low relative allocations to gold among emerging markets.

The producer hedge book increased for the first time in a decade. The 18.0 tonnes<sup>11</sup> of hedging added to an estimated outstanding global hedge book of 158.0 tonnes, was the first increase in a decade, but far from the levels associated with the previous two decades. In fact, half of the additional hedged tonnage was conducted by base metals miner Boliden, in an effort to manage revenue risk.<sup>12</sup> While the net reduction in supply from de-hedging has come to an end following aggressive removals of forward hedges by major gold miners over a decade or more, hedging as a source of supply is expected to stay muted as the practice of wholesale industry-wide hedging activity has proved damaging to the industry in the long run.

**Chart 4: Official sector net buying, US dollar and euro indices**



Source: Bloomberg, Thomson Reuters GFMS, World Gold Council

10 World Gold Council, *Liquidity in the global gold market*, April 2011. This research paper is available at [www.gold.org/government\\_affairs/research](http://www.gold.org/government_affairs/research)

11 Encompasses forwards and delta-adjusted option positions.

12 Thomson Reuters GFMS, *Gold Survey 2011 Update 2*, January 2012.



### Bars and coins, ETFs and OTC investment

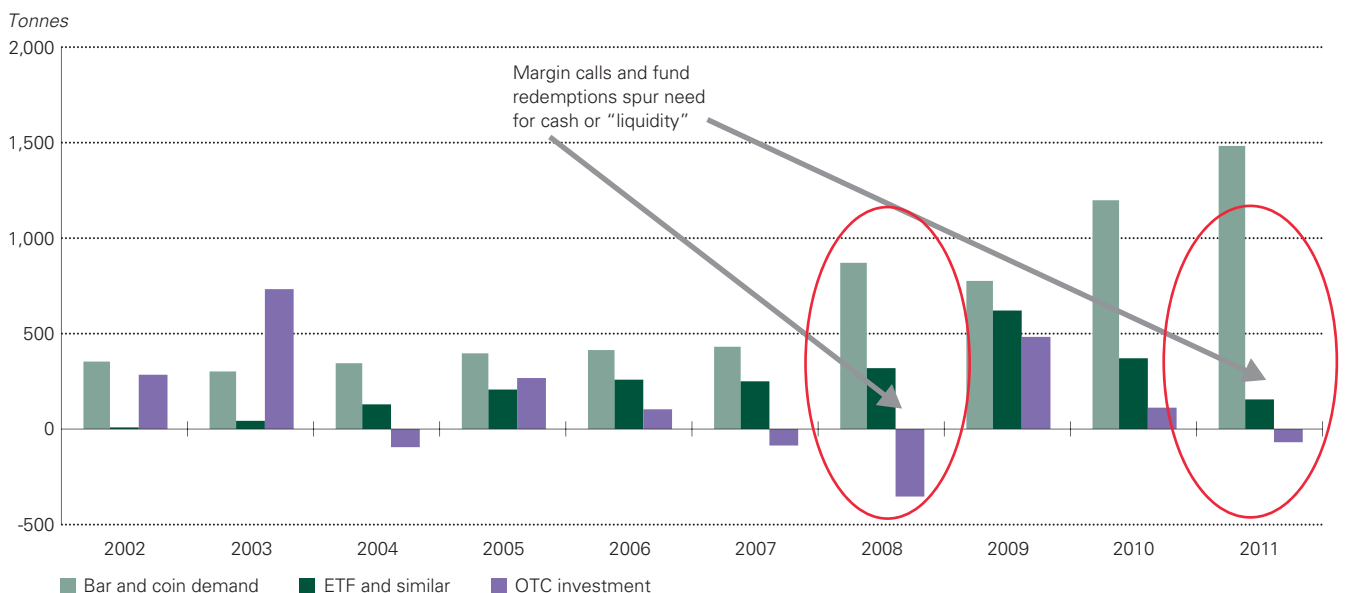
Divergent growth rates were also visible within investment. Bar and coin demand, often but not always reflecting the 'individual' end of the market, continued growing at an impressive rate. OTC investment,<sup>13</sup> encompassing the more 'institutional' spectrum, fell for the first time since 2008. ETF demand, representing a cross section of investors, saw growth slow year-on-year, but picked up towards the latter quarters. Over the past few years, these three access channels have diverged in relative terms: While bar and coin demand has grown on a year-on-year basis, ETF demand has slowed and OTC investment has fallen. Chart 5 suggests that ETF and OTC investors have not been accumulating gold at rates that some commentators maintain. Moreover, activity in the derivatives market which is typically considered the more speculative type of investment demand, as evidenced by the net positioning data provided on the gold futures market, has fallen quite sharply in the last few quarters.

Gold's market depth and diverse demand and supply base make it possible for investors to sell on a large scale without commensurate price damage, as we saw both in 2008/09 and 2011. Private investors have been steadily increasing their purchases of gold. Some of this increase can undoubtedly be attributed to the increasing ease with which consumers both in developed markets and developing markets can access gold products.

The bar and coin story is one which has traversed borders led by China, India and Europe, but other markets have also participated in terms of relative growth rates. Store of wealth demand, diversification, negative real deposit rates, the threat of inflation in developing markets, deflation in developed markets and currency debasement have all contributed to driving up demand over the last few years. Gains in tonnage from OTC investment stalled both in 2008 and in 2011 as the need for cash among investors has usurped the tactical or strategic benefits of holding gold. With respect to ETFs, investors also slowed down their purchases in 2011. This was in part due to rebalancing and profit-taking, but also because a large number of investors had gained exposure to gold through ETFs earlier (notably in 2009) than those accessing gold through gold bars and coins. If 2008/09 is a guide, then it is possible that both ETF and OTC demand growth will resume again in the next few quarters. In fact, ETF demand in the latter half of 2011 made strong year-on-year gains, signalling keen opportunistic buying at lower prices.

These divergent moves are a good example of what makes the gold market so unique. They are another sign that the gold market is driven by a diverse set of factors and that the price is determined by their interaction and that investment demand is not concentrated on one particular type of investor but rather a well balanced and robust set which includes many long-term holders.

**Chart 5: Bar and coin, ETF and OTC investment**



Source: Thomson Reuters GFMS, World Gold Council

13 OTC investment contains elements from the supply and demand balance which are not investment, but representative of stock movements and residuals.

## What does the future hold for demand?

### Technology

Technology demand is likely to face challenges as some developed markets flirt with double-dip recessions and export and policy-led slowdowns affect emerging markets. Yet demand for electronics has been formidably resilient over the last few years despite uncertainty over industrial output. Gold is a key component in the manufacture of semiconductors due to its beneficial material properties. Semiconductor sales, as reported by the Semiconductor Industry Association (SIA), reached a new record in 2011,<sup>14</sup> supporting electronics demand during an uncertain year for industrial activity.

### Jewellery

At some point normal economic growth will resume in the worst affected economies, and as it does, the decline in jewellery demand on a global basis may also wane. While the jewellery market is likely to face continued difficulties should prices rise in the foreseeable future, there are tentative signs of at least a bottoming out of the decline seen over the past decade. Data on global jewellery demand is often masked by India's prominence, with the country accounting for an average of almost one third of global demand over the last five years. Excluding India, which has seen a temporary slowdown in demand over the past year, global demand has grown for the last five consecutive quarters on a rolling 4-quarter basis. These gains follow a period of strong declines. In addition the 10-year decline in the US market, currently the fourth largest by tonnage, also looks to be moderating with 2011 showing a year-on-year decline of 9%, the lowest since 2005 despite steadily rising prices (Chart 6).

### Investment

A number of commentators had cited anecdotal evidence of slowing of investment demand in the latter half of 2011, amid continuing concerns about the macroeconomic environment, as a sign of medium- to long-term demand exhaustion. We believe that investment demand has yet to reach its full potential and that this argument is inaccurate. During 2011, net investment demand was the result of a mixture of liquidity-driven selling and store-of-wealth based buying and speculation on either side of the equation. The primary macroeconomic drivers for investment demand have been the threat of inflation from food prices and low real deposit rates in emerging markets, with deflation threats in Western markets stemming from lingering effects of the credit crunch and the current sovereign debt crisis. In other words, the inflation threat globally has been, at best, mixed.

India and China, as the two biggest gold markets, are facing pressures from a slowing global economy. While authorities in these two economies dealt a blow to domestic inflation in 2011, they have the means and the incentive to tolerate higher inflation through accommodative policy to avoid succumbing to the global malaise, going forward.

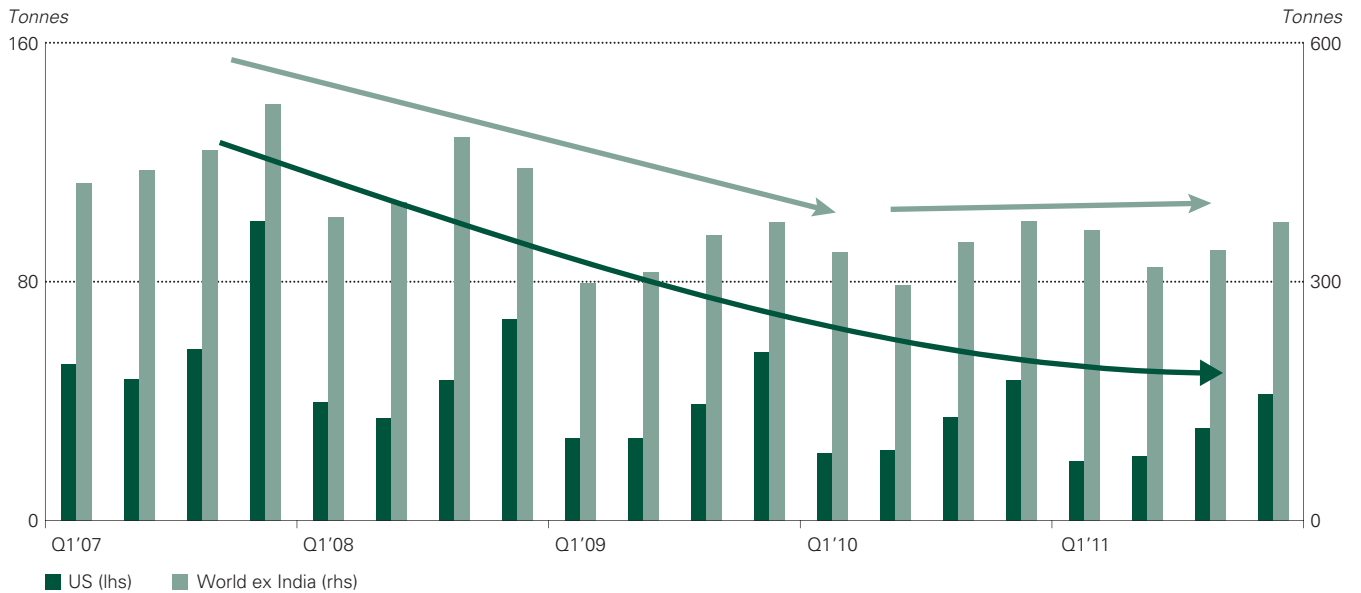
14 <http://www.sia-online.org/news>

The threat of future inflation is a concern beyond the current high-growth emerging markets. Many developed economies have experienced recessions in the last few years and face continued risks of double-dips as deleveraging across public and private sectors act as a natural break to growth. High levels of debt and anaemic growth mean that higher inflation can also be tolerated in these economies without the accompanying dangers, should it begin to manifest itself. The reluctance to deal with inflation would also stem from the perils of a rapid withdrawal of the stimulus which has been so pervasive over the last few years. Central banks have an incentive to react slowly and cautiously, so as not to derail a recovery.

On a global basis, a number of additional factors are likely to push inflation higher in the coming years including smaller output gaps on the back of lower potential growth, wage pressures in emerging markets, central banks tolerance and potential desire for higher inflation, commercial bank capital currently parked with developed market central banks – waiting to be released to the global economy and continuing pressure on commodity prices as supply tightness offsets demand weakness.

An outlook involving higher inflation in concert with growth in developed as well as developing markets is very likely to trigger a surge in gold buying without the liquidity drag that the current environment imposes, given gold’s proven inflation-hedging properties.

**Chart 6: US and World ex India jewellery demand**



Source: Thomson Reuters GFMS, World Gold Council

# Global gold market – fourth quarter and full year 2011 review

Global fourth quarter gold demand of 1,017.0 tonnes resulted in full-year gold demand of 4,067.1 tonnes for 2011. Although close to record levels, annual gold demand was only marginally ahead of 2010 as burgeoning investment demand was counterbalanced by declines in the jewellery and technology sectors. In value terms, fourth quarter demand increased by 21% year-on-year to US\$55.2bn. This generated a record annual value for gold demand of US\$205.5bn – a hefty 29% above the 2010 value.

Average gold prices of US\$1,688.01/oz for the fourth quarter were 24% above year-earlier levels, although marginally below average prices for the third quarter as gold initially consolidated following the sharp correction that occurred in late September. The closing weeks of the year saw volatility in the gold price pick up slightly, as it extended the third quarter correction, back to early-summer levels. The annual average price generated its tenth consecutive gain, increasing by 28% to US\$1,571.52/oz.

Global jewellery demand, although below year-earlier levels, was nonetheless staunch in the face of gold prices rising to record highs and difficult economic conditions in a number of, primarily Western, markets. Fourth quarter demand amounted to 476.5 tonnes, 15% weaker year-on-year. The full-year picture was comparatively robust; demand of 1,962.9 tonnes was 3% below 2010's annual total. The value measure of jewellery demand posted new records for both the quarter and the full year, at US\$25.9bn and US\$99.2bn respectively.

2011 was a year of two halves for jewellery. The first half compared positively with H1 2010, reflecting a period of relatively steadily rising prices which allowed consumers to gradually acclimatise to higher prices, before heightened volatility in the second half put the brakes on demand.

A 19% year-on-year increase in fourth quarter investment demand translated to a 5% annual growth rate. Demand of 428.2 tonnes in Q4 pushed full-year demand to a record 1,640.7 tonnes, worth US\$82.9bn.

An almost fourfold year-on-year increase in ETF<sup>15</sup> demand was largely responsible for the rise in fourth quarter investment. Inflows into gold ETFs reached 86.8 tonnes in Q4, compared with just 22.3 tonnes in Q4 2010, a period that witnessed a sharp bout of profit-taking among ETF holders as the gold price reached record levels. The annual comparison of ETF demand

was considerably weaker; inflows of 154 tonnes in 2011 were less than half the 367.7 tonnes recorded in 2010. However, it should be pointed out that the second quarter of 2010 was exceptional – the second highest quarter on record at 291.6 tonnes.

Demand for gold bars and coins remains healthy and growth in gold coins in particular was responsible for much of the year-on-year increase in Q4 investment. Bar demand was unable to sustain the elevated levels of Q4 2010, but nevertheless remained well above the 240.3-tonne average of the previous 8 quarters. On an annual basis, 2011 bar and coin demand surged 24% to 1,486.7 tonnes, largely due to growth in demand for gold bars. Growth in bar and coin demand was geographically widespread, with healthy gains noted in countries from all regions. Indeed, only a few countries registered a decline in investment from 2010, notably the US, Japan and Egypt.

Demand for gold used in technology declined modestly in the fourth quarter, 3% lower at 112.3 tonnes. Demand from the electronics segment was broadly steady, while gold in the dentistry and other industrial sectors declined. The pattern was similar for annual demand, which declined by a marginal 0.6% to 463.5 tonnes. The value of annual demand increased 28% to a record US\$23.4bn.

The total supply of gold in the fourth quarter was 8% below year-earlier levels at 1,033.3 tonnes. The decline was primarily due to a decreased contribution from the Official Sector, which was a net purchaser of 92.7 tonnes in Q4 compared with sales of 17.6 tonnes in the fourth quarter of 2010. Lower levels of recycling also contributed to the slowdown in supply. On the other hand, mine production and producer hedging generated a combined 60.3 tonnes of additional supply compared with Q4 2010, a year-on-year increase of 9%. The annual story was much the same, with increased supply from mine production and producer hedging being outweighed by the combination of increased official sector purchases and lower levels of recycling. 2011 was noteworthy for being the first year of net producer hedging since 1999. However, absolute levels of hedging remain insignificant and are likely to fluctuate around zero over the year ahead.

15 All references to ETFs encompass ETFs and similar products, as per Tables 1-3.

## Jewellery

Global jewellery demand totalled 476.5 tonnes in the fourth quarter of 2011, a 15% year-on-year decline. In value terms, demand was 5% higher at US\$25.9bn, a new quarterly record.

On a full-year basis, tonnage demand of 1,962.9 was 3% below 2010, showing resilience given a 28% increase in the average annual price. The value of annual demand grew by 25% to a new record of US\$99.2bn.

Jewellery demand in 2011 is perhaps best considered in half-yearly terms. 2011 experienced a strong first half, 9% up on H1 2010, largely due to healthy demand in the two largest markets – India and China. Demand in both countries was aided during this time by one or two opportune dips in the gold price. Gold followed an otherwise steadily rising trend during much of the period, which further fuelled demand by fostering positive price expectations among consumers and allowing them to gradually acclimatise to higher prices. Chinese New Year, the Indian Akshaya Tritaya festival and an auspicious Indian wedding season provided added impetus.

However, second half demand of 941.2 tonnes compares negatively with the same period of 2010, down 13%. Record gold prices reached during the third quarter, combined with an increase in price volatility, deterred consumers in a few key markets – particularly as local gold prices were often increased further as a result of currency weakness. Furthermore, the price highs encouraged some substitution of demand away from jewellery and towards investment products.

Jewellery demand in India tailed off sharply in the fourth quarter, dropping 44% year-on-year to 103.0 tonnes. Annual demand of 567.4 tonnes was 14% below 2010. In value terms, Q4 demand of Rs283.6bn (-22% year-on-year) took full-year demand to a record Rs1,340.4bn – 13% above 2010's previous record. In the context of the local price environment, these figures serve to highlight the importance that Indians place on purchases of gold jewellery.

The Diwali festival in October (a key gold-buying occasion) failed to lift fourth quarter Indian gold jewellery demand; rupee weakness played a major part in the subdued quarterly activity as average local prices increased sharply over the period. Gold price volatility was an added factor, as Indian consumers traditionally prefer to wait until gold prices stabilise. The combination of high and volatile prices led consumers

increasingly to demand lighter weight gold jewellery and forced the trade to react with jewellery items at lower price points.

Anecdotal reports suggest that only necessary basic purchases were being made, with consumers largely holding onto their cash as they wait for more opportune buying conditions.

The steep price correction in US dollar terms over the last few months of the quarter, combined with movements in the Indian rupee exchange rate that saw local prices rise to new record levels during November, posed a challenge to the trade in regards to managing adequate stock levels. The fourth quarter witnessed a degree of stock-depletion among retailers, after inventories had been built up over the first three quarters of the year.

A significant development in the domestic market occurred during the quarter; Cabinet approval of a bill making hallmarking of gold mandatory. Some industry participants have predicted that this move will underpin demand for gold jewellery by reducing consumer concerns over quality assurance. The first few weeks of 2012 also heralded an increase in the import tax on gold, from a flat rate of Rs300/10g to 2%. Although the absolute numbers involved are minimal, there has been some uncertainty over the move which may lead to a hesitant start to 2012 in India. This is not expected to overhang the market for long, however, and trade and consumers should soon adapt.

Chinese fourth quarter jewellery demand was measured at 131.4 tonnes, slightly above year-earlier levels. The net result for annual demand was a 13% increase to 510.9 tonnes, equal to RMB166.7bn. The subdued fourth quarter year-on-year comparison was chiefly due to the price volatility witnessed during the period, following on from the sharp drop in the price in late September. Demand was subdued by the volatility until the latter part of December when it was reinvigorated by substantially lower prices, which likely in part reflected stock-building by the trade in preparation for the anticipated surge in demand ahead of the Chinese New Year. Chinese consumers continue to focus their attention on pure gold jewellery, given the quasi-investment purposes of jewellery purchases among some Chinese consumers.

The fourth quarter saw jewellery demand in Hong Kong strengthen by 37% year-on-year, coming in at a very healthy 7.1 tonnes. Full year demand jumped 33.5% to reach its highest level for 13 years at 27.5 tonnes. The strong quarterly numbers are reflective of record inflows of tourists from mainland China, who continue to take advantage of the lower taxes levied on gold in Hong Kong. Mainland consumers are also tempted by the differing jewellery designs on offer. Domestic consumers, although discouraged by the high and volatile prices, were encouraged into the market during periods of price weakness, particularly in the wedding jewellery segment.

Gold jewellery demand in Taiwan extended its long term declining trend, posting double-digit year-on-year declines in both Q4 and 2011, to 1.9 tonnes and 6.8 tonnes respectively. Although this translates to decent gains in the value measures of demand, demand has suffered as a result of high prices and poor economic conditions in many of Taiwan's export markets. While the auspicious 2012 Year of the Dragon may provide some respite, gold jewellery faces an uphill struggle in this market.

A continuation of the trend established in Japan in Q3, of giving gifts of gold jewellery as a way of expressing the importance of familial bonds and friends, helped boost fourth quarter demand to 8.0 tonnes – the highest quarterly number for five years. This translated to annual jewellery demand of 20.8 tonnes, 2.3% below 2010 as the effects of the tsunami and earthquake suppressed first half demand. The value of Q4 demand reached a quarterly record of ¥33.6bn, taking the annual value up 14% to ¥83.5bn. The strong quarterly result was also partly due to a release of pent up demand in the high-end, luxury sector of the Japanese gold jewellery market, which had been constrained following the natural disasters earlier in the year.

The VIST<sup>16</sup> markets of South East Asia all experienced similar double-digit declines in gold jewellery demand during the fourth quarter as local gold prices escalated and volatility increased. Despite the correction in the international gold price during the quarter, the strength of the US dollar meant that local prices in these markets did not follow suit. For 2011 as a whole, jewellery demand across the region was considerably weaker than in 2010, with the worst of the declines suffered in Thailand (-34% year-on-year), where demand has been revised slightly lower in light of improved information sources. The Thai market for gold jewellery has been undermined by a degree of switching out of jewellery and towards investment products, a function of the rise in the gold price over the year.

Vietnam, the most resilient of the group for 2011 as a whole, experienced a 21% decline in fourth quarter demand (2.5 tonnes), which equated to an annual drop of 9%. Here, there was an increasing tendency towards lower caratage, with 14- and 10-carat pieces encroaching on the market share of 18- and 24-carat jewellery. Although reports indicate an increase in the number of jewellery pieces consumed, the trend towards much lighter-weight, more affordable items worked to the detriment of overall tonnage.

Fourth quarter gold jewellery demand in Indonesia and South Korea weakened by 16% and 19%, to 5.3 tonnes and 3.5 tonnes respectively, falling victim to the well-documented movements in the gold price. In South Korea, more affordable sterling silver jewellery was seen making inroads into gold's market share.

At 7.5 tonnes, gold jewellery demand in Turkey remained weak in the fourth quarter. Although this resulted in a year-on-year increase of 15%, the comparison is being made with the weakest quarter on record (demand in Q4 2010 was just 6.5 tonnes). On an annual basis, demand was down 10% at 63.8 tonnes. On a value basis, Q4 demand in local currency terms was 78% higher at TL746mn, resulting in a full year value of TL5.4bn, just shy of the 2008 record.

<sup>16</sup> This term was introduced in *Gold Demand Trends, Second quarter, August 2011*, as an acronym for the South East Asian markets of Vietnam, Indonesia, South Korea and Thailand.

Relative stability in the local price of gold during the fourth quarter provided some support to Turkish demand. However, investment products were the main beneficiary of gold demand in Turkey, at the expense of jewellery, as consumers focused on the investment benefits of gold.

Among the markets in the Middle East region, jewellery demand failed to respond to the drop in the gold price during the fourth quarter. Higher prices throughout the year and increased volatility in the fourth quarter were responsible for widespread double-digit declines in tonnage demand. Regional fourth quarter demand amounted to 30.7 tonnes, 17% below Q4 2010 with the largest decline seen in Egypt (-31% year-on-year at 7.7 tonnes). Full year demand in Egypt was 32.8 tonnes, the market having more than halved in just three years (2008 demand was 74.3 tonnes).

Saudi Arabia suffered considerable fourth quarter losses, 13% weaker year-on-year at 8.1 tonnes. The pace of decline was slower than in the preceding three quarters however; full-year demand of 55.8 tonnes was down 17%. The UAE and Other Gulf group of countries were relatively resilient, although Q4 demand in both was around 10% weaker. The yearly decline in the UAE was a relatively modest -6% with the result that annual demand of 57.7 tonnes overtook Saudi Arabia, a market that only a decade ago was roughly twice the size.

The effect of the gold price was manifested in increasing demand for lighter weight jewellery items and falling demand for 21- and 22-carat jewellery. The events of the 'Arab Spring' were an added factor in the weakness of regional demand throughout Q4 and full-year 2011, as the political upheaval deterred domestic consumers and tourists alike.

Gold jewellery demand in the US remained on its long term downward path; the fourth quarter total of 42.7 tonnes was 9% below year-earlier levels while full year demand slipped 11% to 115.1 tonnes. However, the value measure of demand reveals an increased US dollar allocation to gold jewellery demand, with a rise of 12% year-on-year to US\$2.3bn in Q4 and growth of 15% in 2011 to US\$5.8bn – close to the 2006 peak.

The main influences directing gold jewellery demand in the US were: historically high – and volatile – gold prices; hesitant consumer demand, which has been held back by a fragile labour market, depressed real estate prices and volatile stock market undermining consumer confidence; and increased substitution to alternative metals among jewellery retailers. The independent, smaller jewellery stores have now begun to adopt the shift to silver jewellery that began among the major retailers in late 2010-early 2011.

Demand for gold jewellery in Russia strengthened further in 2011. Demand in Q4 increased by 21% year-on-year to 21.9 tonnes, while annual demand was up 14% at 75.1 tonnes. Consequently, Russia was the fourth largest jewellery market globally during both periods. The market witnessed a continuation of previous trends, with increasing demand for lighter-weight pieces, in response to the high gold price, and greater emphasis being placed on jewellery design quality.

Italian gold jewellery demand continues to wane as consumers contend with economic despondency and affordability restrictions. Demand in the fourth quarter sank to 14.8 tonnes, a year-on-year drop of 17%. In value terms, demand managed a 3% increase to €592.9mn. Full year gold jewellery demand declined by 17% year-on-year to a low of 28.8 tonnes, equal in value terms to €1.0bn just ahead of 2010.

Price remains the major hindrance to Italian gold demand, with increasing substitution to silver and other metals in the lower price ranges. The market has not witnessed the shift to lower carat gold jewellery seen in many other countries as consumers appear to be more prepared to buy plated or silver jewellery rather than accept lower carat gold.

The story for UK gold jewellery demand was very similar to that in Italy. Q4 demand fell 19% year-on-year to 11.2 tonnes, worth £386.7mn. On an annual basis, demand volume of 22.6 tonnes was 17% below 2010. The 2011 demand value of £712.3mn was 2.2% up on the previous year.

## Technology

Gold demand in the technology sector declined 3% year-on-year in the fourth quarter of 2011 to 112.3 tonnes, the lowest quarterly figure since the third quarter of 2009. In value terms, this translated to a 19% year-on-year increase to US\$6.1bn. Annual demand was measured at a broadly steady 463.5 tonnes, comfortably above the 456.3-tonne average of the preceding five year period. The value of 2011 demand surged 28% and reached a record US\$23.4bn.

Demand for gold used in electronics was little changed in Q4, just 0.4% lower year-on-year at 80.9 tonnes. On an annual basis, demand in this segment increased slightly (+1.1%) to 330.4 tonnes worth a record US\$16.7bn. The areas generating the strongest increases in semiconductor demand were automotive electronics, industrial electronics and wireless equipment segments. Conversely, the strongest negative influence on semiconductor demand came from the memory sector. In particular, DRAM, SRAM, and NOR flash memory (along with digital signal processors) continued to drag the market lower and this sector is expected to add further pressure in 2012.

The severe flooding in Thailand in the fourth quarter also contributed to the fourth quarter market weakness, especially as hard disk drive (HDD) shipments were heavily affected by the natural disaster. Limitations in personal computer production were experienced in December and are expected to have a greater impact in the first quarter of 2012. Further pressure came from Europe, where the ongoing crisis has had an impact on demand. Nevertheless, the semiconductor market showed notable resilience in the face of adverse events; according to the latest data released by Semiconductor Industry Association (SIA), sales of semiconductors were a record US\$299.5bn for 2011, 0.4% above 2010.

Another factor having an impact on gold demand in this segment is the rate of migration to non-precious metal bonding wire. In particular, there has been significant growth in the use of bare copper bonded wires in the electronics industry (in particular palladium coated copper). Copper was initially introduced for low-end applications (providing a significant cost saving) but recently its role has been extended to service a wider range of applications.

Looking briefly to individual markets, Japan and the United States dominated growth for the period, rising a few percent, with China also delivering a modest rise. Elsewhere, declines in bonding production generated a hefty fall in South Korean demand, whilst weaker economic conditions across the eurozone contributed to the notable fall recorded in Germany.

Gold demand in the other industrial and decorative segment registered a sizeable reduction in Q4 2011, declining by 9% year-on-year. The full year result was a modest decline (-1.8%) to 89.3 tonnes. Although Chinese demand for plating salts (chiefly gold potassium cyanide, or GPC) rose by 5% in the period, as fabrication of electroplated giftware picked up ahead of the spring festival, this outcome was easily offset by weakness in other markets. The largest fall was registered in India (which slumped more than 40% year-on-year) as high and volatile gold prices on the back of a weaker rupee against the US dollar undermined demand for *jari* (gold thread used in saris). Elsewhere, European countries also felt the effect of weaker demand for electroformed jewellery, whose starting point is GPC.

Finally, demand for gold used in dental applications suffered another double digit decline to the lowest level on record. At 10.4 tonnes, fourth quarter demand in this segment was down 10% year-on-year. A decline of a similar magnitude in full year demand generated a total of 43.8 tonnes, equivalent to a record US\$2.2bn in value terms. This result was driven by the elevated gold price and weak economic conditions which continued to encourage substitution both in favour of palladium and non-precious options, mainly cobalt-chrome and ceramic materials. Significant falls were recorded across most markets in the quarter, with German and US declines being of particular note.



## Investment

The investment sector was the driving force behind gold demand in the fourth quarter and throughout 2011 as a whole. Fourth quarter investment grew 19% year-on-year to 428.2 tonnes, equivalent to US\$23.2bn in value terms. On an annual basis, demand reached a record 1,640.7 tonnes, 5% up on the previous record set in 2010 and with a value of US\$82.9bn.

Total fourth quarter investment demand (inclusive of OTC Investment and stock flows) was broadly stable at 489.3 tonnes, equating to full year demand of 1,567.6 tonnes (-7% year-on-year). In value terms, annual total investment reached a record of US\$79.2bn.

The momentum of demand for gold bars and coins slowed during the final quarter of 2011, after seven consecutive quarters of outstanding growth. Demand of 341.3 tonnes was broadly flat year-on-year as an increase in official coin demand was offset by declines in demand for gold bars and medals/imitation coins. In a reflection of the strength of the first nine months of the year, total 2011 demand for bars and coins reached a record of 1,486.7 tonnes, 24% higher than 2010. The value measure of demand in this sector grew by 59% to US\$75.1bn.

ETFs witnessed positive inflows in the fourth quarter, as demand surged 290% from the relatively subdued levels of Q4 2010. For 2011 as a whole, ETF demand of 154.0 tonnes was less than half the size of demand in 2010, due largely to the strength of demand in Q2 2010.

2011 was a year of two clearly identifiable halves with respect to ETF demand. The first half of 2011 generated a marked slowdown in demand, given the combined impact of a very weak Q1 2011 (when a sharp bout of price-related profit taking resulted in net redemptions) and an exceptionally strong Q2 2010 (the second highest quarterly value for ETF demand, instigated by the outbreak of the European debt crisis). During the second half of 2011, however, net inflows into ETFs more than doubled from H2 2010, largely in response to the ongoing European debt crisis.

Demand in the OTC investment and stock flows element of demand amounted to 61.2 tonnes in the fourth quarter, slightly less than half the year-earlier levels. Demand in the sector was the subject of conflicting influences throughout the quarter. A number of countries, notably Turkey and German-speaking European markets, saw an upsurge in demand for allocated metal accounts, largely on the back of concerns relating to European financial stability. In contrast, notably in the first half of Q4, the sector saw sizeable liquidations, which were the result of profit-taking, stop-loss selling and, as has previously been well documented, a growing need to raise liquidity at times of tight credit availability.

Investment demand in India suffered a sizeable 38% year-on-year decline during the fourth quarter, dropping to 70.0 tonnes. Demand in value terms was Rs192.7bn, down by 14%. The annual picture was considerably more positive however; demand for gold bars and coins grew by 5% to a record 366.0 tonnes, equivalent in value to Rs864.6bn. India was by far the largest single investment market in 2011 and accounted for 25% of total bar and coin demand.

Fourth quarter demand appears weak when considered in relation to the fourth quarter of 2010. However, this is largely indicative of the strength of investment demand in the year-earlier period; when considered on a historical basis, Q4 2011 is roughly in line with the average of the preceding 12 quarters (Q4 2008 – Q3 2011) of 72.3 tonnes. Rupee weakness drove the local price of gold up during the fourth quarter and this encouraged a degree of profit-taking among Indian investors, while others preferred to remain on the sidelines, deferring their investment purchases until prices stabilised. Although the underlying sentiment behind Indian investment demand remains positive, with bullish price expectations supporting demand, there are signs that inflation should moderate this year, which may curb investment demand somewhat.

Chinese investors also took a back seat in Q4, as evidenced by a 3% year-on-year decline in investment to 59.5 tonnes. Nevertheless, annual demand of 258.9 tonnes eclipsed 2010 levels as the first nine months of the year were dominated by rising gold prices, which in turn fuelled positive price expectations, high inflation, poor performance of alternative assets and an increased availability of gold retail investment products. The value of annual demand jumped 69% to RMB84.5bn.

The decline in the price of gold during the fourth quarter however, discouraged investment to a certain extent as Chinese investors prefer to buy into an established rising trend. Anecdotal evidence suggests that the decline in investment was simply a reflection of uncertainty over prices, rather than being indicative of any significant profit-taking. Indications of the first few weeks of 2012 are positive, suggesting that the re-emergence of higher prices have tempted Chinese investors back into the market.

Levels of investment demand in Taiwan remained elevated on a historical basis at 1.4 tonnes for the fourth quarter and 5.4 tonnes for the year. In value terms, growth rates in demand were impressive; fourth quarter demand more than doubled year-on-year to US\$76.0mn, while the full year total of US\$270.3mn compared with net profit-taking of US\$70.9mn in 2010. Hong Kong remains a marginal market for gold investment; although year-on-year growth rates were well above global levels, absolute tonnage remains insignificant. Fourth quarter demand of 0.4 tonnes (+60% year-on-year) equated to an annual total of 1.8 tonnes (+68% year-on-year).

In Japan, profit-taking outweighed fresh investment purchases of gold for the twelfth successive quarter. 10.4 tonnes of negative investment was broadly in line with Q4 2010. Full year data show net profit-taking of 45.2 tonnes in 2011, a slight increase on the 40.0 tonnes of negative investment in 2010.

Disinvestment in Japan during the fourth quarter, and indeed during the second half of 2011, was in large part a reaction to an announced change to tax laws, to be introduced in January 2012, requiring payment records to be submitted for sales of gold in excess of ¥2mn. Gold prices holding well above the key ¥4,000/g level for much of the quarter further reinforced the trend for profit-taking.

Elsewhere across the south East Asian region, Thailand experienced a surge in demand for investment products, with fourth quarter demand more than doubling to 19.2 tonnes. Improved data sources here have resulted in a considerable upward revision to the investment data series for 2011, with the result that full year investment demand reached 104.8 tonnes, equal to US\$5.3bn. Substitution from jewellery to investment products accounted for a small proportion of this increase, but for the most part the strength of demand for bars and coins is indicative of positive price expectations.

Vietnamese investors increased their fourth quarter demand for gold bars and coins to 25.3 tonnes (+18% year-on-year), pushing annual demand up 30% to 87.3 tonnes. Investment demand in Vietnam was fuelled by persistent high inflation, the poor performance of the domestic property and stock markets and the continued devaluation of the local currency against the US dollar. Despite local currency prices of gold surging to record highs, and the strength of demand generating considerable premiums on the domestic price of gold bars, investors continued to clamour for gold bars. The Q4 total of 25.3 tonnes is almost 50% higher than the average of 17.0 tonnes for the period Q4 2008 – Q3 2011.

Investment demand in the smaller south east Asian markets, Indonesia and South Korea, had a generally positive tone during the periods under consideration. The fourth quarter was significant in South Korea, marking as it did a switch from net profit-taking in Q4 2010 to 0.9 tonnes of positive investment demand in Q4 2011, although absolute levels of demand remain slight. 2011 full year demand totalled 3.1 tonnes, well above the average of the last ten years, and the highest in value terms since 1997 (US\$154mn). Indonesia's fourth quarter demand of 5.2 tonnes was somewhat weaker, down 5% year-on-year. On an annual basis however, demand jumped 45% to 21.8 tonnes, the highest value we have on our records and worth a record US\$1.1bn.

Demand for gold bars and coins in Turkey flourished in the fourth quarter, the sixth consecutive quarter of significant year-on-year growth. Demand for the quarter jumped 142% year-on-year to 19.3 tonnes, taking the full year total to a record high of 80.4 tonnes. The value of fourth quarter demand increased by almost four times to TL1.9bn, while the annual value almost trebled to TL6.9bn.

The motivation behind the clamour for gold bars and coins, as well as other investment products, was linked to a number of factors. The rise in the local gold price during the year (which outstripped the rise in the US dollar price as the Turkish lira weakened) fostered expectations of further price rises among Turkish investors, who have increasingly chosen gold bars as their investment vehicle of choice. Although coins still account for the majority of the retail investment market (and Turkey once again resumed its position as the world's largest minter of coins in 2011), small investment bars are gaining market share. Additionally, Turkish investors appear to be increasingly troubled by the ongoing crisis in the euro area, and these burgeoning fears are driving increasing purchases of gold for its insurance properties.

Alongside the rise in demand for bars and coins, the Turkish market has witnessed a surge in demand for gold accounts and mutual funds as the persistent European sovereign debt crisis sent tremors through the market. The strength of conviction behind investment demand is further highlighted by the fact that selling back has been relatively limited.

Total investment demand for the Middle East region grew 30% to 9.6 tonnes in the fourth quarter, resulting in the highest level of yearly demand since 1997. For 2011 demand was 34.0 tonnes, 15% above 2010. Most of the growth was generated by Saudi Arabia and the UAE, both of which generated the strongest levels of annual bar and coin demand for 14 years, of 16.4 tonnes and 12.5 tonnes respectively.

Egypt again underperformed its regional peers; Q4 demand was flat at 0.7 tonnes while annual demand slipped 9% to 2.2 tonnes. The 'Other Gulf' group of countries generated strong growth rates, but demand remains insignificant in a global context at 3.0 tonnes for the year.

Turning to the US, the momentum in investment demand waned throughout 2011 with the result that fourth quarter demand was a considerable 43% below year-earlier levels at 18.3 tonnes. The year-on-year decline in value terms was 29%, to just under US\$1.0bn. Full year demand of 79.9 tonnes was 25% weaker, although it is worth bearing in mind that 2010 was a near-record year.

Shifting patterns of investment demand were responsible for the decline in investment demand throughout 2011. At higher gold prices, the lower premiums charged on gold bars (when compared with gold coins) were increasingly attractive to investors and consequently a pattern emerged of investors shifting from coins to bars. While this would not necessarily result in a decline in gold investment *per se*, the higher gold prices also prompted smaller investors to transfer their purchases to more affordable silver coins, thereby eroding total gold retail investment.

Investment demand in the European region registered its seventh consecutive annual gain, surging to a staggering 374.8 tonnes in 2011, a new record high. Deeper field research in the region has unearthed considerable additional demand, primarily in the 'Other Europe' group of countries, which has necessitated some upward revision to our historical data series. Demand from the region accounted for 25% of total retail investment in 2011 compared with a share of just 8% in 2007; growth that is all the more remarkable for the fact that 2011 global bar and coin demand was more than three times larger than it was four years previously.

Germany continues to account for the largest proportion of the investment in the region, generating demand of 39.7 tonnes in the fourth quarter (+15% year-on-year) worth €1.6bn. For 2011 as a whole, demand reached a record 159.3 tonnes, 26% above 2010. This translated to a 53% increase in value, to €5.8bn.

Although demand eased back in the fourth quarter from the exceptional levels seen in the third quarter (a time during which the media devoted considerable attention to gold), demand was nevertheless robust, sustained by the ongoing sovereign debt crisis in the euro area and high gold price.

France registered its third consecutive year of positive net investment, with 2011 demand of 8.4 tonnes dwarfing the previous year's 1.3 tonnes. The fourth quarter witnessed net demand for gold bars and coins of 3.3 tonnes, an almost seven-fold increase year-on-year.

Demand during October rose to startling levels, at or near the highest monthly demand figure on record for France as the EU summit dominated headlines and a concurrent dip in the gold price provided an opportune entry point. Demand from new entrants to the market focussed on small bars, at the expense of gold coins which have been the more traditional vehicle in this market.

Growth of 17% year-on-year generated 30.7 tonnes of demand for gold bars and coins in Switzerland in Q4. This was well above the global growth rate and equivalent to a 35% increase in value to CHF1.5bn. Annual demand reached 116.2 tonnes (+25% year-on-year), worth a record CHF5.2bn. Investment in gold bars and coins in Switzerland was driven by the same ongoing motives; primarily high gold prices and the European debt crisis.

The 'Other Europe' category of demand, at 23.4 tonnes for Q4 and 90.8 tonnes for 2011, now accounts for a considerable proportion of investment in the region. A substantial amount of this new demand has been generated by countries with previously no or very little interest in gold investment, including the UK and a number of Eastern European countries. In value terms, annual demand from the markets grouped within this category amounted to €3.3bn.

## Supply

At 1,033.3 tonnes, total gold supply in the fourth quarter of 2011 was 8% weaker than the fourth quarter of 2010. The annual data also reveal slightly lower levels of supply, 4% below 2010 at 3,994.0 tonnes.

The largest contribution to the 8% year-on-year decline in Q4 supply came from the official sector, where the rate of net purchasing gathered pace, with a further contraction coming from lower levels of recycling activity. This was partly offset by a modest year-on-year increase in mine production, while hedging activity also generated a 48 tonne increase in supply over Q4 2010.

The rate of increase in gold mine production slowed slightly in the fourth quarter; 717 tonnes equated to growth of just 2% year-on-year. For 2011 as a whole, production reached a new annual record of 2,809.5 tonnes, 4% up on the previous year.

The growth in fourth quarter production was the result of moderate increases from a number of projects spread across a wide geographical range of markets. Among the countries leading the charge were China, the US, Russia and a number of smaller African markets (notably Eritrea, Sudan and Burkina Faso).

Indonesia provided the largest constraint to supply growth in Q4, a 36% year-on-year decline there resulting from the combination of planned mine sequencing and a disruptive series of strikes at Grasberg. Production also declined in Australia, following a strong year of growth in 2010, and South Africa, where labour, energy and infrastructure issues continue to hamper production.

The fourth quarter witnessed minor levels of de-hedging among gold producers, contrary to the trend seen during the preceding three quarters of modest net new hedging activity. The net result for 2011 was 12 tonnes of hedging over the course of the year (compared with 108 tonnes of de-hedging in 2010). While this is notable for the fact that it was the first positive annual net hedging number for 12 years, the absolute levels involved were trifling and cannot be interpreted as being indicative of a new era of significant hedging activity. New hedging activity remains largely project-related and the global hedge book was estimated to be somewhere in the region of 160 tonnes at the end of 2011.

Net purchases among central banks and official institutions amounted to 93 tonnes during the fourth quarter of 2011. This compares with a fourth quarter of 2010 which saw minor sales among central banks and official institutions, amounting to 18 tonnes. Annual purchase for 2011 as a whole stood at an impressive 440 tonnes, compared with 77 tonnes of net purchases the previous year.

While the Q4 2011/Q4 2010 comparison is somewhat flattered by the rolling-off of the IMF's limited sales programme, which was completed in December 2010, central bank purchases were nonetheless very strong last quarter. This activity reflected a continued desire among central banks to diversify their sizeable reserves in light of credit downgrades which have brought into question the safety of holding massive amounts of US dollar and euro-denominated reserves. Meanwhile, sales among signatories to the third Central Bank Gold Agreement all but dried up, with a 5-tonne sale by Germany dominating disposals during the quarter.

Key buyers in the fourth quarter were the central banks of South Korea, which added 15 tonnes to reserves, and Russia, which purchased around 33 tonnes. For 2011 as a whole, Mexico was the largest net buyer adding almost 100 tonnes to its gold reserves, followed closely by Russia at around 95 tonnes. Thailand, South Korea, Bolivia and Venezuela also conducted notable purchases during the course of the year, while Kazakhstan and Tajikistan were among the countries making smaller additions.

Not included in the numbers for net official sector purchases are the 63 tonnes of gold that were added to Turkey's balance sheet during the fourth quarter. This addition was the result of a policy change under which the central bank will now accept gold in reserve requirements from commercial banks to help the banks utilize their gold in managing their liquidity. More information on this policy action can be found on the Turkish central bank's website at <http://www.tcmb.gov.tr/yeni/announce/2011/ANO2011-50.htm>

The supply of gold generated by recycling activity in the fourth quarter was 9% lower year-on-year at 415 tonnes. For 2011 as a whole, recycling was 2% down on 2010. Put in the context of the 28% rise in average prices over the year, this indicates the conviction with which gold consumers sustained their bullish price expectations, looking for higher prices at which to dispose of their existing holdings.

In a continuation of the recent trend, Q4 was characterised by an East-West divide in the supply of recycled gold. Europe and the US continue to increase their contributions to the global recycling number, while in the Middle East, India and much of East Asia, the supply of gold from recycling dwindled. Consequently, industrialised nations now account for around 50% of the supply of recycled gold. This dwarfs the proportion that these countries would have contributed even as recently as 2008, indicating the tremendous improvements in the awareness of, and infrastructure behind, the recycling of gold.

As has been the case for some time now, the fact that the supply of recycled gold remains relatively constrained, at least among the more traditional gold markets, is a function of the lack of near-market supplies (i.e. much of the old gold that is readily available to be sold has already been flushed out), increasing acceptance of/adjustment to higher gold prices and widespread expectations of yet higher prices.

# Gold demand statistics

**Table 1: Gold demand<sup>1</sup> (tonnes)**

	2010	2011 <sup>2</sup>	Q1'10	Q2'10	Q3'10	Q4'10	Q1'11	Q2'11	Q3'11	Q4'11 <sup>2</sup>	Q4'11 vs Q4'10 % chg	4-quarter % chg <sup>3</sup>
<b>Jewellery</b>	2,016.8	1,962.9	520.5	416.1	518.2	562.0	552.5	469.1	464.7	476.5	-15	-3
<b>Technology</b>	466.4	463.5	114.3	116.1	120.0	116.1	114.5	116.9	119.8	112.3	-3	-1
Electronics	326.8	330.4	79.0	80.4	86.1	81.3	79.9	82.9	86.7	80.9	0	1
Other industrial	90.9	89.3	22.4	23.3	22.0	23.2	22.8	23.1	22.4	21.0	-9	-2
Dentistry	48.7	43.8	12.8	12.4	11.8	11.6	11.8	10.9	10.7	10.4	-10	-10
<b>Investment</b>	1,567.5	1,640.7	254.5	593.0	358.9	361.0	335.8	383.0	493.7	428.2	19	5
Total bar and coin demand	1,199.8	1,486.7	249.8	301.4	309.8	338.8	397.9	331.3	416.1	341.3	1	24
Physical bar demand	898.9	1,159.1	182.0	216.7	228.9	271.4	312.7	256.1	321.4	269.0	-1	29
Official coin	212.5	239.7	45.3	68.8	56.6	41.9	60.5	50.2	74.6	54.3	30	13
Medals/imitation coin	88.3	87.8	22.5	16.0	24.3	25.5	24.7	25.0	20.0	18.1	-29	-1
ETFs and similar products <sup>4</sup>	367.7	154.0	4.7	291.6	49.1	22.3	-62.1	51.7	77.6	86.8	290	-58
<b>Gold demand</b>	4,050.7	4,067.1	889.3	1,125.2	997.0	1,039.1	1,002.9	969.0	1,078.2	1,017.0	-2	0
<b>London PM fix (US\$/oz)</b>	1,224.5	1,571.5	1,109.1	1,196.7	1,226.8	1,366.8	1,386.3	1,506.1	1,702.1	1,688.0	24	28

1 Gold demand excluding central banks.

2 Provisional.

3 Percentage change, 12 months ended December 2011 vs 12 months ended December 2010.

4 Exchange Traded Funds and similar products including: Gold Bullion Securities (London), Gold Bullion Securities (Australia), SPDR® Gold Shares (formerly streetTRACKS Gold Shares), NewGold Gold Debentures, iShares Comex Gold Trust, ZKB Gold ETF, GOLDIST, ETF Securities Physical Gold, ETF Securities (Tokyo), ETF Securities (NYSE), XETRA-GOLD, Julius Baer Physical Gold, Central Fund of Canada and Central Gold Trust, Swiss Gold, Claymore Gold Bullion ETF, Sprott Physical Gold Trust, ETF Securities Glitter, Mitsubishi Physical Gold ETF, Credit Suisse Xmthc and Dubai Gold Securities.

Source: LBMA, Thomson Reuters GFMS, World Gold Council

**Table 2: Gold demand<sup>1</sup> (value, US\$mn)**

	2010	2011 <sup>2</sup>	Q1'10	Q2'10	Q3'10	Q4'10	Q1'11	Q2'11	Q3'11	Q4'11 <sup>2</sup>	Q4'11 vs Q4'10 % chg	4-quarter % chg <sup>3</sup>
<b>Jewellery</b>	79,399	99,175	18,561	16,010	20,437	24,695	24,626	22,717	25,430	25,860	5	24
<b>Technology</b>	18,363	23,419	4,075	4,466	4,732	5,102	5,102	5,659	6,558	6,096	19	27
Electronics	12,867	16,696	2,818	3,094	3,397	3,572	3,562	4,013	4,747	4,392	23	30
Other industrial	3,579	4,513	799	896	869	1,020	1,014	1,119	1,228	1,140	12	26
Dentistry	1,916	2,211	458	477	467	510	526	528	583	564	11	15
<b>Investment</b>	61,710	82,897	9,077	22,817	14,155	15,865	14,968	18,547	27,015	23,237	46	35
Total bar and coin demand	47,234	75,114	8,907	11,598	12,218	14,886	17,735	16,045	22,768	18,524	24	58
Physical bar demand	35,390	58,567	6,490	8,337	9,026	11,925	13,936	12,400	17,590	14,598	22	64
Official coin	8,367	12,112	1,614	2,646	2,233	1,842	2,698	2,433	4,085	2,947	60	46
Medals/imitation coin	3,477	4,436	804	615	959	1,120	1,102	1,212	1,094	980	-13	25
ETFs and similar products <sup>4</sup>	14,476	7,783	169	11,219	1,937	978	-2,767	2,502	4,247	4,712	382	-39
<b>Gold demand</b>	159,472	205,491	31,713	43,294	39,324	45,661	44,697	46,923	59,004	55,193	21	29

1 Gold demand excluding central banks.

2 Provisional.

3 Percentage change, 12 months ended December 2011 vs 12 months ended December 2010.

4 Exchange Traded Funds and similar products including: Gold Bullion Securities (London), Gold Bullion Securities (Australia), SPDR® Gold Shares (formerly streetTRACKS Gold Shares), NewGold Gold Debentures, iShares Comex Gold Trust, ZKB Gold ETF, GOLDIST, ETF Securities Physical Gold, ETF Securities (Tokyo), ETF Securities (NYSE), XETRA-GOLD, Julius Baer Physical Gold, Central Fund of Canada and Central Gold Trust, Swiss Gold, Claymore Gold Bullion ETF, Sprott Physical Gold Trust, ETF Securities Glitter, Mitsubishi Physical Gold ETF, Credit Suisse Xmthc and Dubai Gold Securities.

Source: LBMA, Thomson Reuters GFMS, World Gold Council

**Table 3: Total investment demand<sup>1</sup> (tonnes except where specified)**

	2010	2011 <sup>2</sup>	Q1'10	Q2'10	Q3'10	Q4'10	Q1'11	Q2'11	Q3'11	Q4'11 <sup>2</sup>	Q4'11 vs Q4'10 % chg	4-quarter % chg <sup>3</sup>
<b>Investment</b>	1,567.5	1,640.7	254.5	593.0	358.9	361.0	335.8	383.0	493.7	428.2	19	5
Total bar and coin demand	1,199.8	1,486.7	249.8	301.4	309.8	338.8	397.9	331.3	416.1	341.3	1	24
Physical bar demand	898.9	1,159.1	182.0	216.7	228.9	271.4	312.7	256.1	321.4	269.0	-1	29
Official coin	212.5	239.7	45.3	68.8	56.6	41.9	60.5	50.2	74.6	54.3	30	13
Medals/imitation coin	88.3	87.8	22.5	16.0	24.3	25.5	24.7	25.0	20.0	18.1	-29	-1
ETFs and similar products <sup>4</sup>	367.7	154.0	4.7	291.6	49.1	22.3	-62.1	51.7	77.6	86.8	290	-58
OTC investment and stock flows <sup>5</sup>	113.2	-73.1	2.5	-19.5	-2.6	132.8	-140.2	56.2	-50.3	61.2	-54	-
<b>Total investment</b>	<b>1,680.7</b>	<b>1,567.6</b>	<b>257.0</b>	<b>573.5</b>	<b>356.3</b>	<b>493.9</b>	<b>195.6</b>	<b>439.3</b>	<b>443.4</b>	<b>489.3</b>	<b>-1</b>	<b>-7</b>
<b>Total investment US\$m</b>	<b>66,168</b>	<b>79,211</b>	<b>9,165</b>	<b>22,066</b>	<b>14,053</b>	<b>21,702</b>	<b>8,719</b>	<b>21,271</b>	<b>24,264</b>	<b>26,564</b>	<b>22</b>	<b>21</b>

1 Total investment demand excluding central banks.

2 Provisional.

3 Percentage change, 12 months ended December 2011 vs 12 months ended December 2010.

4 Exchange Traded Funds and similar products including: Gold Bullion Securities (London), Gold Bullion Securities (Australia), SPDR® Gold Shares (formerly streetTRACKS Gold Shares), NewGold Gold Debentures, iShares Comex Gold Trust, ZKB Gold ETF, GOLDIST, ETF Securities Physical Gold, ETF Securities (Tokyo), ETF Securities (NYSE), XETRA-GOLD, Julius Baer Physical Gold, Central Fund of Canada and Central Gold Trust, Swiss Gold, Claymore Gold Bullion ETF, Sprott Physical Gold Trust, ETF Securities Glitter, Mitsubishi Physical Gold ETF, Credit Suisse Xmtch and Dubai Gold Securities.

5 This includes institutional investment (other than ETFs and similar), stock movements and other elements as well as any residual error.

Source: LBMA, Thomson Reuters GFMS, World Gold Council

**Table 4: Gold supply and demand World Gold Council presentation**

	2010	2011 <sup>2</sup>	Q1'10	Q2'10	Q3'10	Q4'10	Q1'11	Q2'11	Q3'11	Q4'11 <sup>1</sup>	Q4'11 vs Q4'10 % chg	4-quarter % chg <sup>2</sup>
<b>Supply</b>												
Mine production	2,708.6	2,809.5	624.8	662.1	716.8	704.9	655.8	701.0	735.5	717.1	2	4
Net producer hedging	-108.4	12.2	-18.7	18.8	-54.4	-54.1	10.2	6.1	1.9	-6.0	-	-
Total mine supply	2,600.2	2,821.7	606.1	680.9	662.5	650.8	666.1	707.1	737.4	711.1	9	9
Official sector sales <sup>3</sup>	-77.0	-439.7	-58.4	-13.6	-22.6	17.6	-134.8	-70.1	-142.0	-92.7	-	-
Recycled gold	1,640.7	1,611.9	369.6	440.2	377.3	453.5	346.1	410.7	440.3	414.9	-9	-2
<b>Total supply</b>	<b>4,163.9</b>	<b>3,994.0</b>	<b>917.2</b>	<b>1,107.5</b>	<b>1,017.2</b>	<b>1,121.9</b>	<b>877.4</b>	<b>1,047.6</b>	<b>1,035.7</b>	<b>1,033.3</b>	<b>-8</b>	<b>-4</b>
<b>Demand</b>												
Fabrication												
Jewellery	2,016.8	1,962.9	545.9	417.9	540.9	512.0	567.3	491.5	472.5	431.6	-16	-3
Technology	466.4	463.5	114.3	116.1	120.0	116.1	114.5	116.9	119.8	112.3	-3	-1
Sub-total above fabrication	2,483.2	2,426.4	660.2	534.0	660.9	628.1	681.8	608.4	592.3	543.9	-13	-2
Total bar and coin demand <sup>4</sup>	1,199.8	1,486.7	249.8	301.4	309.8	338.8	397.9	331.3	416.1	341.3	1	24
ETFs and similar	367.7	154.0	4.7	291.6	49.1	22.3	-62.1	51.7	77.6	86.8	290	-58
Gold demand	4,050.7	4,067.1	914.7	1,127.0	1,019.8	989.1	1,017.6	991.4	1,086.0	972.1	-2	0
OTC investment and stock flows <sup>5</sup>	113.2	-73.1	2.5	-19.5	-2.6	132.8	-140.2	56.2	-50.3	61.2	-54	-
<b>Total demand</b>	<b>4,163.9</b>	<b>3,994.0</b>	<b>917.2</b>	<b>1,107.5</b>	<b>1,017.2</b>	<b>1,121.9</b>	<b>877.4</b>	<b>1,047.6</b>	<b>1,035.7</b>	<b>1,033.3</b>	<b>-8</b>	<b>-4</b>
London PM fix (US\$/oz)	1,224.5	1,571.5	1,109.1	1,196.7	1,226.8	1,366.8	1,386.3	1,506.1	1,702.1	1,688.0	24	28

1 Provisional.

2 Percentage change, 12 months ended December 2011 vs 12 months ended December 2010.

3 Excluding any delta hedging of central bank options.

4 Total bar and coin demand combines the investment categories previously identified as relating to 'retail' demand.

5 This includes institutional investment (other than ETFs and similar), stock movements and other elements as well as any residual error.

Source: LBMA, Thomson Reuters GFMS, World Gold Council. Data in this table are consistent with those published by GFMS in their Gold Survey but adapted to the World Gold Council's presentation and take account of the additional demand data now available. The "OTC investment and stock flows" figure differs from the "implied net (dis)investment" figure in GFMS' supply and demand table as it excludes "ETFs and similar". 'Total bar and coin demand' is equal to GFMS' 'Physical bar investment' plus the 'Official coin' and 'Medals/imitation coin' categories. Note that jewellery data refer to fabrication and quarterly data differ from those for consumption in Tables 1 and 2.

**Table 5: Consumer demand<sup>1</sup> in selected countries: Q4 2011 (tonnes)**

	Q4'10			Q4'11*			Q4'11* vs Q4'10, % chg		
	Jewellery	Total bar and coin invest	Total	Jewellery	Total bar and coin invest	Total	Jewellery	Total bar and coin invest	Total
India	185.5	113.1	298.6	103.0	70.0	173.0	-44	-38	-42
Greater China	136.2	62.5	198.6	140.4	61.3	201.6	3	-2	2
China	128.9	61.4	190.3	131.4	59.5	190.9	2	-3	0
Hong Kong	5.2	0.3	5.4	7.1	0.4	7.5	37	60	38
Taiwan	2.1	0.8	2.9	1.9	1.4	3.3	-10	75	14
Japan	7.3	-10.8	-3.6	8.0	-10.4	-2.4	10	-	-
Indonesia	6.3	5.5	11.8	5.3	5.2	10.5	-16	-5	-11
South Korea	4.3	-0.5	3.8	3.5	0.9	4.3	-19	-	15
Thailand	1.0	8.0	9.0	0.8	19.2	20.0	-21	139	122
Vietnam	3.2	21.4	24.6	2.5	25.3	27.8	-21	18	13
Middle East	37.0	7.4	44.4	30.7	9.6	40.3	-17	30	-9
Saudi Arabia	9.3	3.9	13.2	8.1	5.0	13.1	-13	28	-1
Egypt	11.1	0.7	11.8	7.7	0.7	8.4	-31	0	-29
UAE	12.1	2.3	14.4	10.8	3.2	14.0	-11	39	-3
Other Gulf	4.5	0.5	5.0	4.1	0.7	4.8	-10	49	-5
Turkey	6.5	8.0	14.5	7.5	19.3	26.8	15	142	85
Russia	18.1	-	18.1	21.9	-	21.9	21	-	21
USA	47.0	32.0	79.0	42.7	18.3	61.1	-9	-43	-23
Italy	17.8	-	17.8	14.8	-	14.8	-17	-	-17
UK	13.8	-	13.8	11.2	-	11.2	-19	-	-19
Europe ex CIS	-	79.0	79.0	-	97.1	97.1	-	23	23
France	-	0.5	0.5	-	3.3	3.3	-	-	-
Germany	-	34.6	34.6	-	39.7	39.7	-	15	15
Switzerland	-	26.2	26.2	-	30.7	30.7	-	17	17
Other Europe	-	17.7	17.7	-	23.4	23.4	-	32	32
Total above	483.8	325.4	809	392.1	315.7	708	-19	-3	-13
Other	78.2	13.3	92	84.4	25.6	110	8	92	20
World total	562.0	338.8	901	476.5	341.3	818	-15	1	-9

\*Provisional.

Source: Thomson Reuters GFMS, World Gold Council



**Table 6: Indian supply estimates (tonnes)**

Figures in tonnes	Q4'10	Q1'11	Q2'11	Q3'11	Q4'11 <sup>1</sup>	2011 <sup>1</sup>
Supply						
Net imports, available for domestic consumption	281	306	301	205	157	969
Domestic supply from recycled gold	25	10	10	15	22	57
Domestic supply from other sources <sup>2</sup>	2	3	3	2	3	11
Equals total supply <sup>3</sup>	308	319	314	222	182	1037

1 Provisional.

2 Domestic supply from local mine production, recovery from imported copper concentrates and disinvestment.

3 This supply can be consumed across the three sectors – jewellery, investment and technology. Consequently, the total supply figure in the table will not add to jewellery plus investment demand for India.

Source: Thomson Reuters GFMS

**Table 7: Consumer demand in selected countries: Q4 2011 (value, US\$m)**

	Q4'10			Q4'11*			Q4'11* vs Q4'10, % chg		
	Jewellery	Total bar and coin invest	Total	Jewellery	Total bar and coin invest	Total	Jewellery	Total bar and coin invest	Total
India	8,151	4,970	13,121	5,590	3,799	9,389	-31	-24	-28
Greater China	5,983	2,744	8,727	7,617	3,324	10,941	27	21	25
China	5,664	2,698	8,362	7,131	3,226	10,358	26	20	24
Hong Kong	226	11	237	383	22	404	69	98	70
Taiwan	92	35	127	103	76	179	12	116	41
Japan	319	-476	-158	434	-564	-130	36	-	-
Indonesia	275	242	516	285	282	568	4	17	10
South Korea	187	-22	165	188	46	234	1	-	42
Thailand	44	353	397	43	1,044	1,087	-2	196	174
Vietnam	138	940	1,079	136	1,373	1,509	-2	46	40
Middle East	1,626	323	1,950	1,665	519	2,184	2	61	12
Saudi Arabia	409	171	580	440	271	711	8	58	23
Egypt	488	31	519	418	38	456	-14	24	-12
UAE	530	101	631	586	173	759	11	71	20
Other Gulf	200	20	219	221	37	258	11	85	18
Turkey	287	352	638	407	1,049	1,456	42	198	128
Russia	795	-	795	1,189	-	1,189	49	-	49
USA	2,064	1,405	3,469	2,319	995	3,314	12	-29	-4
Italy	782	-	782	800	-	800	2	-	2
UK	606	-	606	608	-	608	0	-	0
Europe ex CIS	-	3,469	3,469	-	5,267	5,267	-	52	52
France	-	20	20	-	179	179	-	-	-
Germany	-	1,520	1,520	-	2,155	2,155	-	42	42
Switzerland	-	1,151	1,151	-	1,666	1,666	-	45	45
Other Europe	-	778	778	-	1,268	1,268	-	63	63
Total above	21,258	14,301	35,558	21,281	17,135	38,416	0	20	8
Other	3,437	586	4,023	4,580	1,389	5,969	33	137	48
World total	24,695	14,886	39,581	25,860	18,524	44,385	5	24	12

\*Provisional.

Source: LBMA, Thomson Reuters GFMS, World Gold Council

**Table 8: Consumer demand in selected countries: four-quarter totals (tonnes)**

	12 months ended Q4'10			12 months ended Q4'11*			Year on Year % chg		
	Jewellery	Total bar and coin invest	Total	Jewellery	Total bar and coin invest	Total	Jewellery	Total bar and coin invest	Total
India	657.4	348.9	1,006.3	567.4	366.0	933.4	-14	5	-7
Greater China	480.1	186.7	666.8	545.2	266.0	811.2	14	43	22
China	451.8	187.4	639.2	510.9	258.9	769.8	13	38	20
Hong Kong	20.6	1.1	21.7	27.5	1.8	29.3	33	68	35
Taiwan	7.7	-1.8	5.9	6.8	5.4	12.1	-12	-	105
Japan	21.3	-40.0	-18.7	20.8	-45.2	-24.4	-2	-	-
Indonesia	32.8	15.0	47.8	29.5	21.8	51.3	-10	45	7
South Korea	15.9	0.6	16.5	13.7	3.1	16.7	-14	-	2
Thailand	6.3	63.2	69.4	4.1	104.8	108.9	-34	66	57
Vietnam	14.4	67.0	81.4	13.0	87.3	100.3	-9	30	23
Middle East	204.5	29.7	234.2	165.8	34.0	199.8	-19	15	-15
Saudi Arabia	67.6	14.5	82.1	55.8	16.4	72.2	-17	13	-12
Egypt	53.4	2.4	55.8	32.8	2.2	35.0	-39	-9	-37
UAE	61.6	10.5	72.1	57.7	12.5	70.2	-6	19	-3
Other Gulf	21.9	2.3	24.2	19.5	3.0	22.5	-11	29	-7
Turkey	70.6	40.5	111.1	63.8	80.4	144.2	-10	99	30
Russia	66.0	-	66.0	75.1	-	75.1	14	-	14
USA	128.6	106.5	235.1	115.1	79.9	194.9	-11	-25	-17
Italy	34.9	-	34.9	28.8	-	28.8	-17	-	-17
UK	27.3	-	27.3	22.6	-	22.6	-17	-	-17
Europe ex CIS	-	298.6	298.6	-	374.8	374.8	-	26	26
France	-	1.3	1.3	-	8.4	8.4	-	-	-
Germany	-	126.9	126.9	-	159.3	159.3	-	26	26
Switzerland	-	92.7	92.7	-	116.2	116.2	-	25	25
Other Europe	-	77.7	77.7	-	90.8	90.8	-	17	17
Total above	1,760.0	1,116.5	2,876	1,664.9	1,372.8	3,038	-5	23	6
Other	256.8	83.3	340	297.9	113.9	412	16	37	21
World total	2,016.8	1,199.8	3,217	1,962.9	1,486.7	3,450	-3	24	7

\*Provisional.

Source: Thomson Reuters GFMS, World Gold Council

**Table 9: Consumer demand in selected countries: four-quarter totals (value, US\$mn)**

	12 months ended Q4'10			12 months ended Q4'11*			Year on Year % chg		
	Jewellery	Total bar and coin invest	Total	Jewellery	Total bar and coin invest	Total	Jewellery	Total bar and coin invest	Total
India	25,952	13,911	39,864	28,144	18,227	46,371	8	31	16
Greater China	18,981	7,455	26,436	27,499	13,293	40,792	45	78	54
China	17,866	7,478	25,344	25,774	12,931	38,705	44	73	53
Hong Kong	810	42	852	1,385	91	1,476	71	116	73
Taiwan	305	-64	240	340	272	611	12	-	155
Japan	850	-1,575	-726	1,067	-2,354	-1,287	25	-	-
Indonesia	1,278	602	1,879	1,479	1,098	2,577	16	82	37
South Korea	623	19	641	680	151	831	9	-	30
Thailand	241	2,450	2,691	202	5,315	5,517	-16	117	105
Vietnam	558	2,674	3,232	637	4,534	5,170	14	70	60
Middle East	7,957	1,169	9,126	8,270	1,732	10,001	4	48	10
Saudi Arabia	2,621	574	3,195	2,783	839	3,622	6	46	13
Egypt	2,081	94	2,176	1,657	111	1,768	-20	18	-19
UAE	2,396	411	2,807	2,850	630	3,480	19	53	24
Other Gulf	859	90	949	980	151	1,131	14	68	19
Turkey	2,727	1,591	4,319	3,168	4,099	7,267	16	158	68
Russia	2,609	-	2,609	3,830	-	3,830	47	-	47
USA	5,174	4,249	9,423	5,941	4,034	9,975	15	-5	6
Italy	1,431	-	1,431	1,490	-	1,490	4	-	4
UK	1,121	-	1,121	1,172	-	1,172	4	-	4
Europe ex CIS	-	11,841	11,841	-	19,181	19,181	-	62	62
France	-	52	52	-	449	449	-	-	-
Germany	-	5,043	5,043	-	8,176	8,176	-	62	62
Switzerland	-	3,687	3,687	-	5,929	5,929	-	61	61
Other Europe	-	3,060	3,060	-	4,626	4,626	-	51	51
Total above	69,503	44,385	113,888	83,579	69,309	152,888	20	56	34
Other	10,200	3,224	13,425	15,054	5,764	20,818	48	79	55
World total	79,703	47,610	127,313	98,633	75,073	173,706	24	58	36

\*Provisional.

Source: LBMA, Thomson Reuters GFMS, World Gold Council

## Historical data for gold demand

Table 10: Historical data for gold demand<sup>1</sup>

	Tonnes					US\$bn				
	Jewellery	Total bar and coin invest	ETFs and similar	Technology	Total	Jewellery	Total bar and coin invest	ETFs and similar	Technology	Total
2002	2,662	352	-	358	3,374	26.5	3.5	-	3.6	33.6
2003	2,484	302	39	386	3,212	29.0	3.5	0.5	4.5	37.5
2004	2,616	347	133	419	3,514	34.4	4.6	1.7	5.5	46.2
2005	2,719	394	208	438	3,759	38.9	5.6	3.0	6.3	53.7
2006	2,300	414	260	468	3,442	44.6	8.0	5.1	9.1	66.8
2007	2,423	434	253	476	3,587	54.2	9.7	5.7	10.6	80.2
2008	2,304	868	321	461	3,954	64.6	24.3	9.0	12.9	110.9
2009	1,814	779	617	410	3,619	56.7	24.3	19.3	12.8	113.1
2010	2,017	1,200	368	466	4,051	79.4	47.2	14.5	18.4	159.5
2011 <sup>2</sup>	1,963	1,487	154	464	4,067	99.2	75.1	7.8	23.4	205.5
Q4'05	673	71	84	107	934	10.5	1.1	1.3	1.7	14.5
Q1'06	492	93	113	112	810	8.8	1.7	2.0	2.0	14.4
Q2'06	530	97	49	115	792	10.7	2.0	1.0	2.3	16.0
Q3'06	558	112	19	116	804	11.1	2.2	0.4	2.3	16.1
Q4'06	708	114	79	116	1,018	14.0	2.3	1.6	2.3	20.1
Q1'07	566	117	36	117	836	11.8	2.4	0.8	2.4	17.5
Q2'07	666	135	-3	119	918	14.3	2.9	-0.1	2.6	19.7
Q3'07	604	112	139	117	974	13.2	2.5	3.1	2.6	21.3
Q4'07	578	65	80	111	834	14.6	1.6	2.0	2.8	21.1
Q1'08	484	101	73	122	779	14.4	3.0	2.2	3.6	23.2
Q2'08	559	149	4	124	837	16.1	4.3	0.1	3.6	24.1
Q3'08	694	283	149	119	1,245	19.4	7.9	4.2	3.3	34.9
Q4'08	567	346	95	96	1,104	14.5	8.8	2.4	2.5	28.2
Q1'09	356	147	465	88	1,056	10.4	4.3	13.6	2.6	30.8
Q2'09	445	210	68	102	825	13.2	6.2	2.0	3.0	24.5
Q3'09	492	210	42	107	852	15.2	6.5	1.3	3.3	26.3
Q4'09	522	209	42	113	885	18.5	7.4	1.5	4.0	31.3
Q1'10	521	250	5	114	889	18.6	8.9	0.2	4.1	31.7
Q2'10	416	301	292	116	1,125	16.0	11.6	11.2	4.5	43.3
Q3'10	518	310	49	120	997	20.4	12.2	1.9	4.7	39.3
Q4'10	562	339	22	116	1,039	24.7	14.9	1.0	5.1	45.7
Q1'11	553	398	-62	114	1,003	24.6	17.7	-2.8	5.1	44.7
Q2'11	469	331	52	117	969	22.7	16.0	2.5	5.7	46.9
Q3'11	465	416	78	120	1,078	25.4	22.8	4.2	6.6	59.0
Q4'11 <sup>2</sup>	477	341	87	112	1,017	25.9	18.5	4.7	6.1	55.2

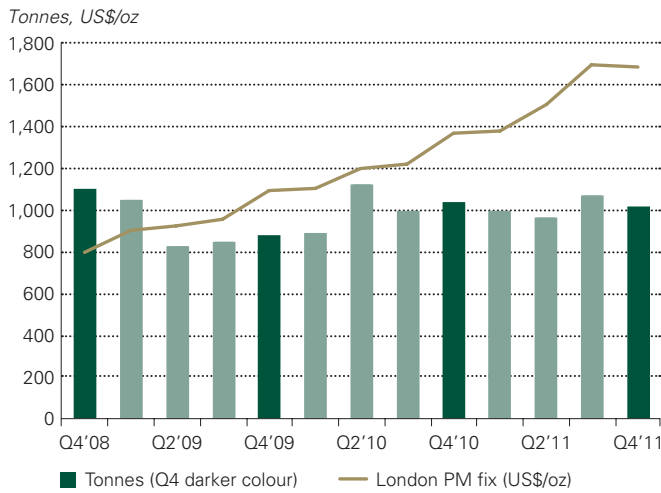
<sup>1</sup> See footnotes to Table 1 for definitions and notes.

<sup>2</sup> Provisional.

Source: LBMA, Thomson Reuters GFMS, World Gold Council

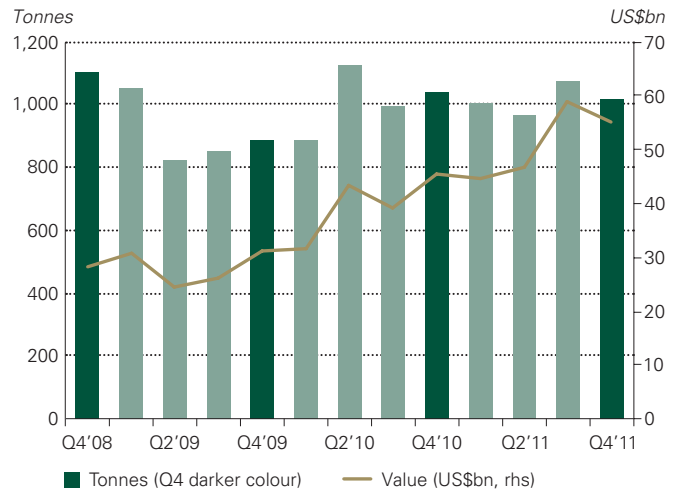
# Appendix

**Chart 7: Gold demand in tonnes and the gold price (US\$/oz)**



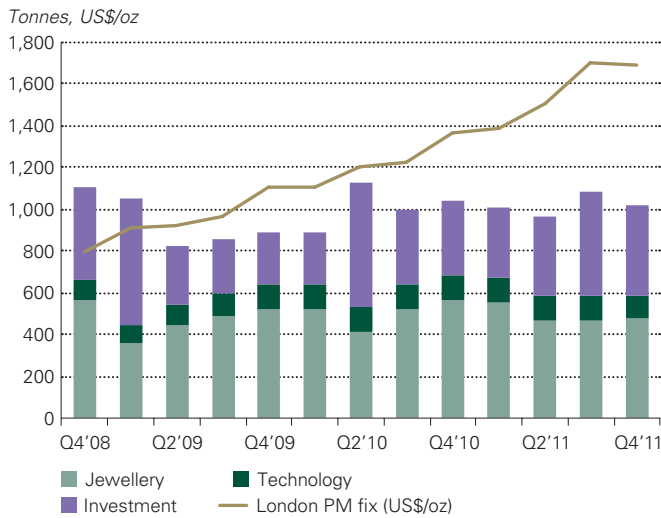
Source: LBMA, Thomson Reuters GFMS, World Gold Council

**Chart 8: Gold demand in tonnes and value (US\$bn)**



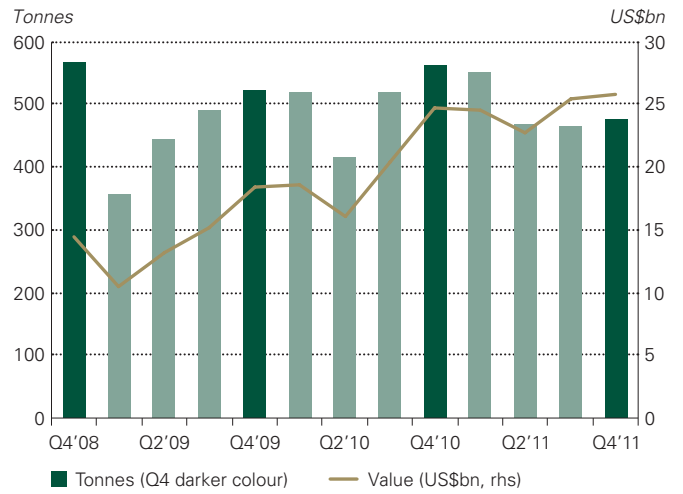
Source: LBMA, Thomson Reuters GFMS, World Gold Council

**Chart 9: Gold demand by category in tonnes and the gold price (US\$/oz)**



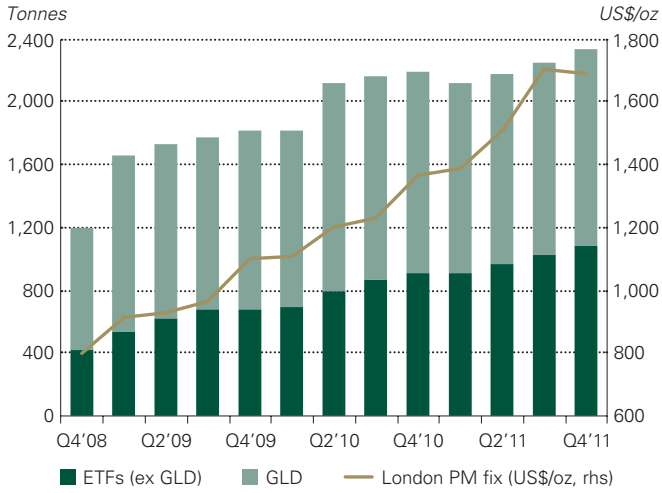
Source: LBMA, Thomson Reuters GFMS, World Gold Council

**Chart 10: Jewellery demand in tonnes and value (US\$bn)**



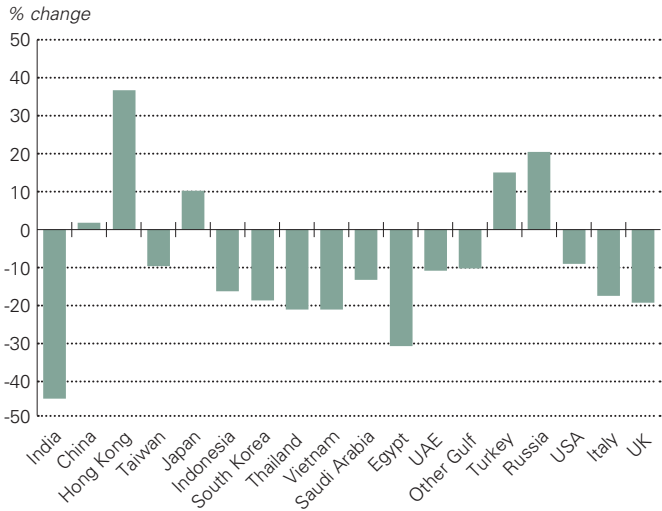
Source: LBMA, Thomson Reuters GFMS, World Gold Council

**Chart 11: Holdings in Exchange Traded Funds (tonnes) and the gold price (US\$/oz)**



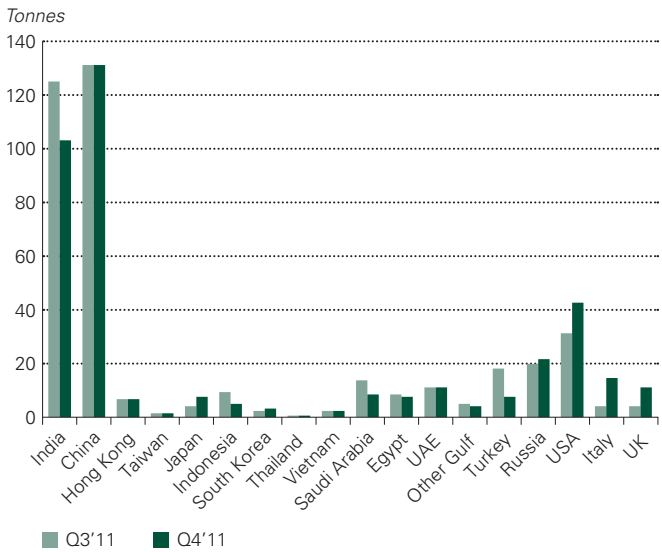
Source: LBMA, Respective ETF/ETC providers, Thomson Reuters GFMS, World Gold Council

**Chart 12: Jewellery demand by country, % change (Q4 2011 vs Q4 2010, tonnage basis)**



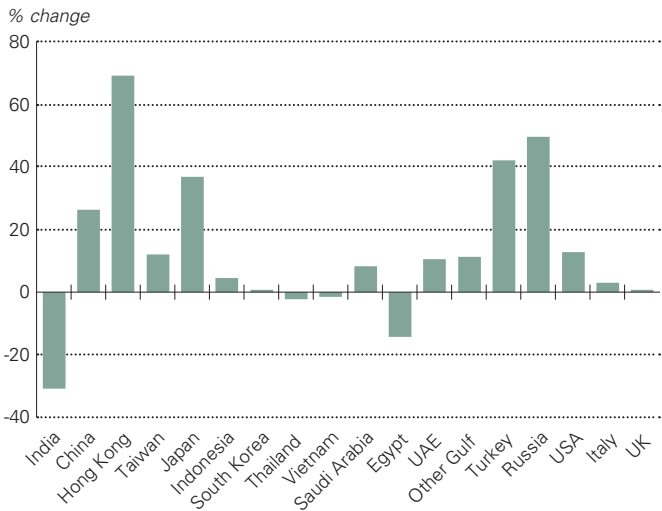
Source: Thomson Reuters GFMS, World Gold Council

**Chart 13: Jewellery demand in tonnes (Q4 2011 vs Q3 2011)**



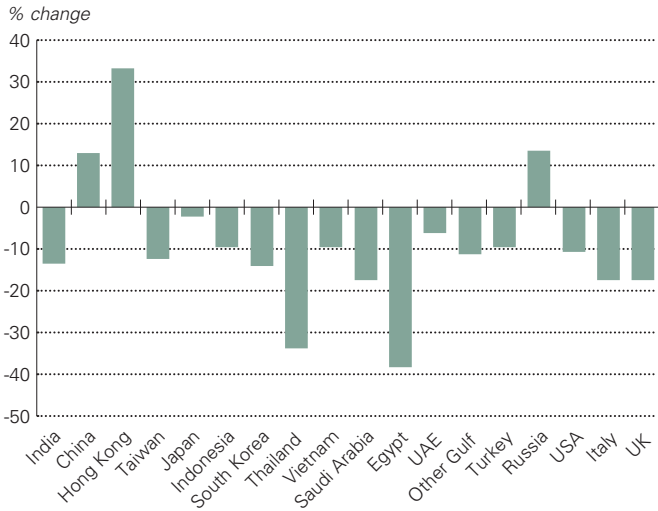
Source: Thomson Reuters GFMS, World Gold Council

**Chart 14: Jewellery demand by country, % change (Q4 2011 vs Q4 2010, US\$ basis)**



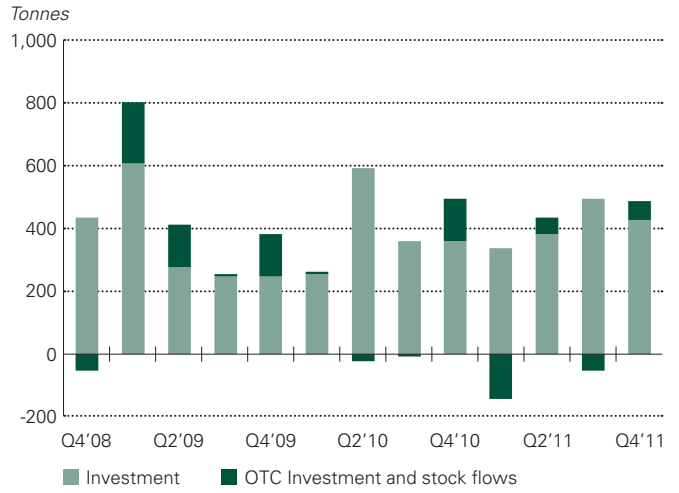
Source: Thomson Reuters GFMS, World Gold Council

**Chart 15: Jewellery demand by country, % change (4-quarter rolling total, tonnage basis)**



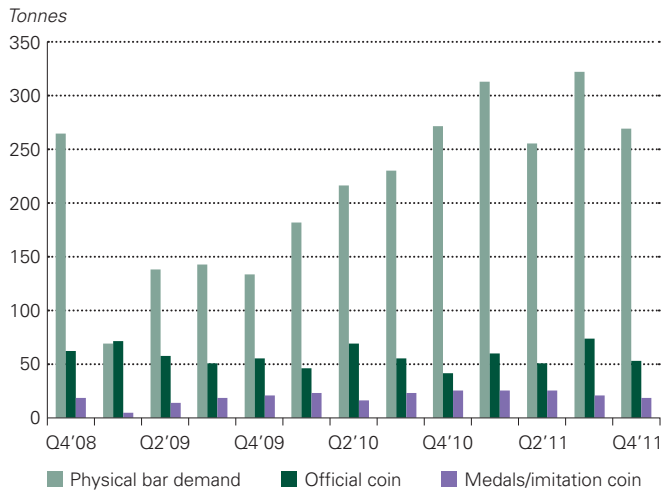
Source: Thomson Reuters GFMS, World Gold Council

**Chart 16: Total investment demand in tonnes**



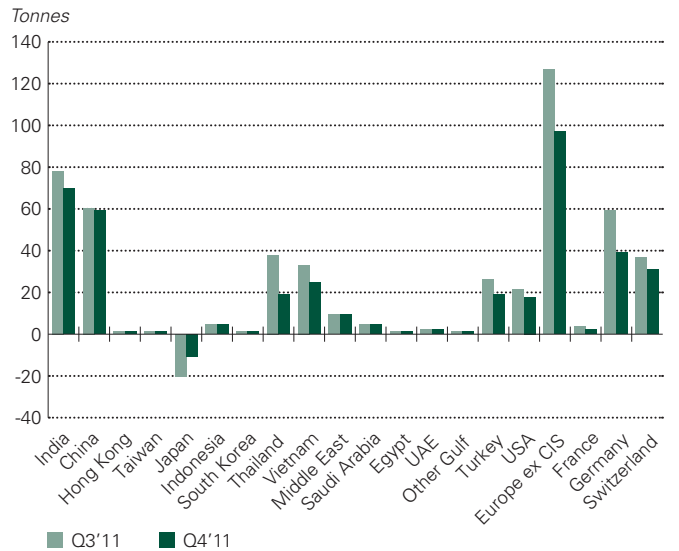
Source: Thomson Reuters GFMS, World Gold Council

**Chart 17: Total bar and coin demand by category in tonnes**



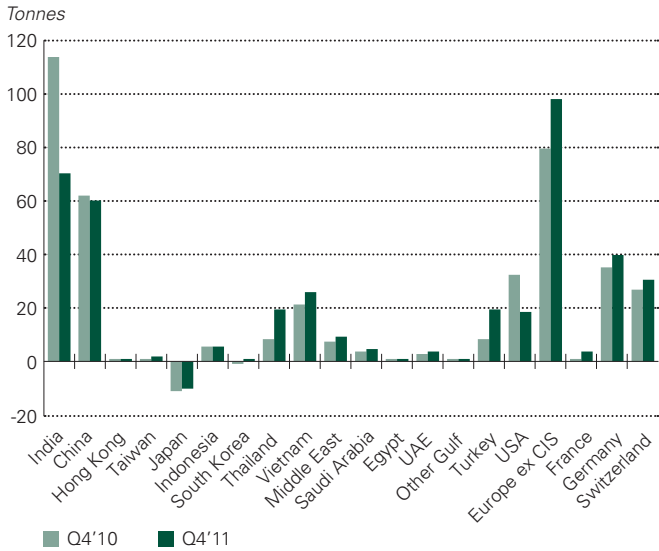
Source: Thomson Reuters GFMS, World Gold Council

**Chart 18: Total bar and coin demand in tonnes (Q4 2011 and Q3 2011)**



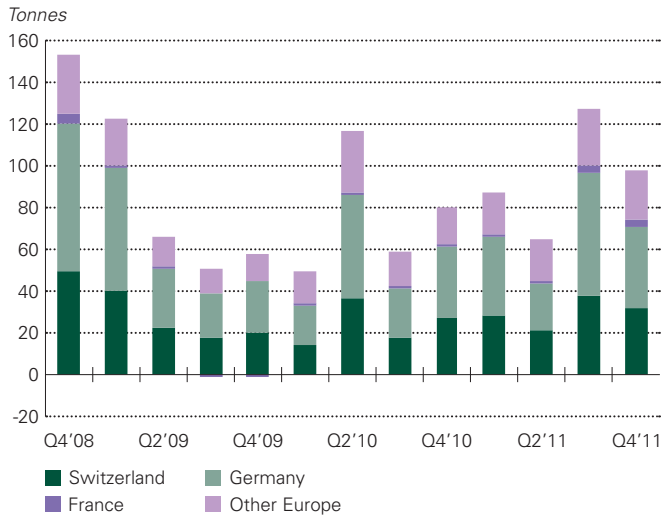
Source: Thomson Reuters GFMS, World Gold Council

**Chart 19: Total bar and coin demand in tonnes (Q4 2011 and Q4 2010)**



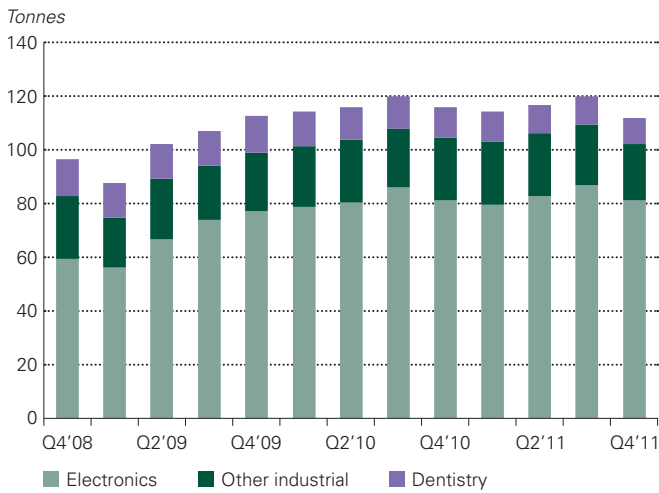
Source: Thomson Reuters GFMS, World Gold Council

**Chart 20: European total bar and coin demand in tonnes**



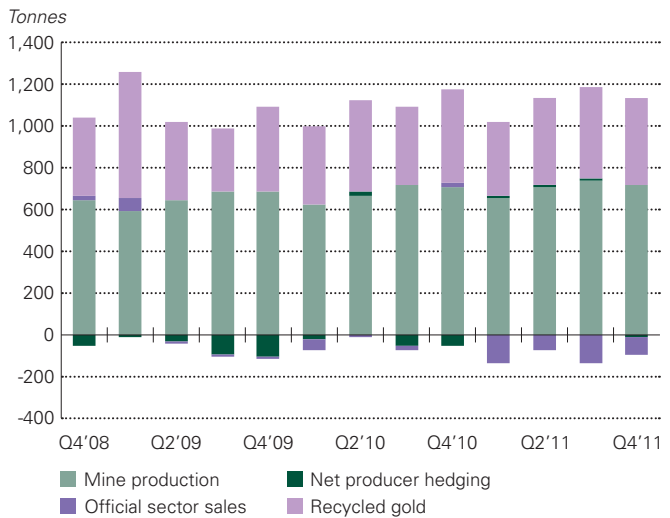
Source: Thomson Reuters GFMS, World Gold Council

**Chart 21: Technology demand by category in tonnes**



Source: Thomson Reuters GFMS, World Gold Council

**Chart 22: Quarterly supply in tonnes**



Source: Thomson Reuters GFMS, World Gold Council



## Notes and definitions

All statistics (except where specified) are in weights of fine gold “\_”

Not applicable or Not available

### Consumer demand

The sum of jewellery and total bar and coin purchases for a country i.e. the amount of gold acquired directly by individuals.

### Dental

The first transformation of raw gold into intermediate or final products destined for dental applications such as dental alloys.

### London PM fix

Unless described otherwise, gold price values are based on the London PM fix.

### Jewellery

All newly-made carat jewellery and gold watches, whether plain gold or combined with other materials. It excludes second-hand jewellery, other metals plated with gold, coins and bars used as jewellery and purchases funded by the trading in of existing jewellery.

### Mine production

Formal and informal output.

### N/A

Not available

### Net producer hedging

The change in the physical market impact of mining companies' gold loans, forwards and options positions.

### Official sector sales

Gross sales less gross purchases by central banks and other official institutions. Swaps and the effects of delta hedging are excluded.

### OTC investment and stock flows

Partly a statistical residual, this data is largely reflective of demand in the opaque over-the-counter (OTC) market, with an additional contribution occasionally from changes to fabrication inventories.

### Physical bar demand

Global investment in physical gold in bar form.

### Recycled gold (previously gold scrap)

Gold sourced from old fabricated products which has been recovered and refined back into bars.

### Technology

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

### Tonne

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

### Total bar and coin demand

This comprises individuals' purchases of coins and bars, defined according to the standard adopted by the European Union for investment gold, but includes demand for coins and bars in both the western and non-western markets. Medallions of at least 99% purity, wires and lumps sold in small quantities are also included. In practice this includes the initial sale of many coins destined ultimately to be considered as numismatic rather than bullion. It excludes second-hand coins and is measured as net purchases.

### Total investment

Represents the amalgamation of all components of investment demand, including all demand for physical bars and coins, demand for ETFs and similar products, and OTC investment and stock flows.

### Revisions to data

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

### Historical data

Data covering a longer time period will be available on Bloomberg after initial publication of this report; alternatively, contact Thomson Reuters GFMS Ltd (+44 20 7369 7015; emma.hastings@thomsonreuters.com).

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