

THE SILVER INSTITUTE



World Silver Survey 2009

A Summary

*Produced for The Silver Institute
by GFMS Limited*

GFMS Limited

Hedges House, 153-155 Regent Street
London W1B 4JE, United Kingdom
Switchboard: +44 (0)20 7478 1777
Fax: +44 (0)20 7478 1779
info@gfms.co.uk
www.gfms.co.uk

The Silver Institute

888 16th Street, NW, Suite 303
Washington, D.C., 20006, USA
Switchboard: +1 202 835-0185
Fax: +1 202 835-0155
info@silverinstitute.org
www.silverinstitute.org

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Coeur d'Alene Mines Corporation



Coeur d'Alene Mines Corporation is one of the world's leading silver companies and also a significant gold producer. The Company, which has no silver production hedged, will have its first full year of production this year at the world's largest pure silver mine – San Bartolomé in Bolivia – and began production in March at another world-leading silver mine – Palmarejo in Mexico. These two new mines are fueling an expected 66% increase in silver production – to 20 million ounces – and an 85% increase in gold production over last year's levels. The Company also operates underground mines in southern Chile and Argentina and one surface mine in Nevada; and owns non-operating interests in two low-cost mines in Australia. Coeur also owns a major gold project – Kensington in Alaska – and conducts exploration activities in Argentina, Chile and Mexico. Coeur common shares are traded on the New York Stock Exchange under the symbol CDE, the Toronto Stock Exchange under the symbol CDM, and its CHES Depository Interests are traded on the Australian Securities Exchange under symbol CXC.

Fresnillo Plc



Fresnillo Plc is the world's largest primary silver producer and Mexico's second largest gold producer, listed on the London Stock Exchange under the symbol FRES. Fresnillo has three producing mines, all of them in Mexico – Fresnillo, Ciénega and Herradura; two development projects: Saucito and Soledad Dipolos; and three advanced exploration prospects – San Juan, San Julian, Orsivo, as well as a number of other long term exploration prospects and, in total, has mining concessions covering approximately 1.75 million hectares in Mexico. Fresnillo has a strong and long tradition of mining, a proven track record of mining development and reserves replacement, and a low cost of production, being in the lowest quartile of the cost curve for both silver and gold. Fresnillo intends to maintain its position as the world's largest primary silver producer with the aim of approximately doubling production, on a silver equivalent ounce basis by 2018.

Industrias Peñoles, S.A.B. de C.V.



Peñoles is a mining group with integrated operations in smelting and refining non-ferrous metals, and producing chemicals. Peñoles is the world's top producer of refined silver, metallic bismuth and sodium sulfate, and the leading Latin American producer of refined gold, lead and zinc. The Company was founded in 1887 and it is part of "Grupo BAL", a privately held diversified group of independent Mexican companies. Peñoles's shares have traded on the Mexican Stock Exchange since 1968 under the ticker PE&OLES.

Peñoles highlights:

- Began operations in 1887 as a mining company.
- Has integrated operations in the areas of exploration, mining, metallurgy and chemicals.
- Listed on the Mexican Stock Exchange since 1968; the stock is included in the IPC index.
- One of the largest net exporters in Mexico's private sector.

Silver Wheaton Corp.

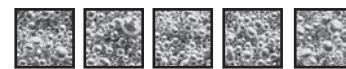


Silver Wheaton is the largest silver streaming company in the world. The company forecasts annual silver sales of 15 to 17 million ounces in 2009, with this growing to approximately 30 million ounces annually by 2013, without any on-going capital expenditures being required to generate this growth. Silver Wheaton has entered into nine long-term agreements to purchase, at a low fixed cost, all or a portion of the silver production from high-quality mines located in Mexico, Sweden, Peru, Greece, Canada and the United States. The company's unique, simple, and proven business model has reduced many of the risks faced by traditional mining companies. With fixed cash costs and unhedged silver sales, the model is designed to create long-term shareholder value, providing strong upside potential with downside protection. Silver Wheaton is well positioned for further growth.



THE SILVER INSTITUTE
(major funding companies)

Barrick Gold Corporation
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Pan American Silver Corp.
Silver Standard Resources Inc.
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The **World Silver Survey** has been published annually by The Silver Institute since 1990. Copies of previous editions can be obtained by contacting The Silver Institute at the address and telephone number on the opening page. For copies outside of North America, contact GFMS at the address on the front cover. The price per copy for the 2009 edition of the Survey is US\$225, €180 or £130.

Notes

Units used:

supply and demand data are given in units of million troy ounces (Moz) rounded to one decimal place.

1 Moz = 31.103 t (metric tons)

1 ton = 32,151 troy ounces

1 ton = 1,000,000 grams (g)

Terminology:

"-" = not available or not applicable

0.0 = zero or less than 0.05

"dollar" refers to the US dollar unless otherwise stated.

Implied Net Investment = the residual from combining all other GFMS data on silver supply/demand as shown in the table on page 6. As such, it captures the net physical impact of all transactions not covered by the other supply/demand variables.

Prices:

Unless otherwise stated, US dollar prices are for the London Silver Market fixing.

Table Rounding:

Throughout the tables and charts, totals may not add due to independent rounding.

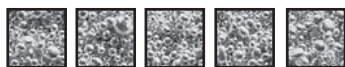
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The data on which this report is based has been obtained by The Silver Institute and GFMS Limited from sources which are generally believed to be reliable. However, this does not guarantee complete accuracy in the information presented here. It is in the nature of the precious metals markets that estimates for a number of components must be made on the basis of incomplete information. A number of figures may have been revised from last year's World Silver Survey in the light of new information. The opinions expressed here represent those of the authors of the report at the time of writing.

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This report is a summary of *World Silver Survey 2009*. The *World Silver Survey (WSS)* is an annual review of the international silver market. It contains the only truly global analysis of the world's silver markets and has been produced by GFMS Limited, the London-based analysts of global precious metals markets, on behalf of the Silver Institute in Washington DC since 1994. The WSS is a unique source of silver supply and demand statistics for more than sixty countries. It contains a comprehensive analysis of investor activity, worldwide silver stocks and bullion flows as well as a lucid and concise account of the financial, economic and social factors underlying market trends. Details on how to order the full 100-page survey can be found on Page 5.

1. Review & Outlook

2008 was an exceptionally volatile year for silver prices, with the market being pulled in two opposite directions. In the first half of the year, the dominant influence was investors sending prices to a high of \$20.92 in March, although ably supported by firm fabricated demand. However, as the economic outlook deteriorated rapidly a sell-off by investors, anticipating the eventual weakness in industrial demand that set in over the fourth quarter, saw prices drop to a low of under \$9 in October.

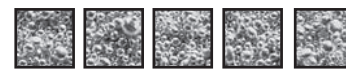
Total supply in 2008 was unchanged from its level of a year earlier at 888.4 Moz (28,564 t), although the composition of this varied significantly between the two years. Mine production was, for the second year running, the only area of supply to grow, rising by 2.5% to 680.9 Moz (21,179 t) in 2008. This was buoyed by strong growth in the gold and lead/zinc by-product sectors. Offsetting the growth in mine production in 2008 were declines in net government sales and old silver scrap supply. The former tumbled by 27% to 30.9 Moz (961 t), its lowest annual level for over a decade. Last year's decline was partly due to a reduction in Russian government sales. Meanwhile, scrap supply continued to decline, falling to an 11-year low chiefly due to the long term structural decline from photographic sources.

Turning to fabrication demand, a surge in coin minting was insufficient to outweigh losses in almost all other areas, leading to total fabrication being lower by 0.9% to 832.6 Moz (25,896 t) in 2008. Demand for coins rose by a spectacular 63% or 25.2 Moz (784 t) due to investor related buying, principally in the United States and western Europe. The largest fall was, once more, in photography, whose decline accelerated to 16% or 19.9 Moz (620 t). Jewelry and silverware losses were, in contrast, minor. The percentage fall for industrial demand was smaller still as strong first half gains were only just outweighed by an end-year slump.

World Silver Supply and Demand (Moz)		
	2007	2008
Supply		
Mine Production	664.2	680.9
Net Government Sales	42.3	30.9
Old Silver Scrap	181.9	176.6
Producer Hedging	-	-
Implied Net Disinvestment	-	-
Total Supply	888.4	888.4
Demand		
Fabrication		
Industrial Applications	453.5	447.2
Photography	124.8	104.8
Jewelry	163.5	158.3
Silverware	58.8	57.3
Coins & Medals	39.7	64.9
Total Fabrication	840.3	832.6
Net Government Purchases	-	-
Producer De-Hedging	23.5	5.6
Implied Net Investment	24.7	50.2
Total Demand	888.4	888.4
Silver Price (London US\$/oz)	13.384	14.989

Net investment rose to 50.2 Moz (1,562 t) in 2008, up markedly (by over 100%) on the previous year's level. This was aided by net inflows of 93.1 Moz (2,894 t) into silver ETFs by year-end, which was partially offset by the overall net selling that took place last year, particularly during the second half, on the Comex and, according to our research, in the over-the-counter (OTC) market. Outflows from these sectors were fuelled by the deleveraging in global asset markets and the acute flight from risk, especially in the wake of the failure of Lehman Brothers in September.

Overall, we doubt that 2009 will see such an extreme trading range as last year. Prices will continue to be driven in different directions by expected weakness in fabrication and the strength of investment demand.



2. Silver Price - Developments in 2008

The annual average silver price last year, at \$14.99, was the highest, in nominal terms, since 1980's \$20.98. The increase over the 2007 average was a robust 12% and, while that paled in comparison to some recent years' gains, such as 2006's jump of 58%, it represented the seventh successive annual rise. This led to the 2008 average being 182% higher in constant 2008 money than the 2001 trough, although in euro terms, the gain was a less dramatic 85%, highlighting the long run drop in the dollar. In real terms, silver's price gains last year were impressive, with a return to 1984 necessary to find a higher annual average, although the rest of the early 1980s and much of the 1970s saw higher real prices.

Last year's increase was, however, substantially smaller than gold's 25% rise, as the yellow metal suffered far less from a shrinking industrial base. However, silver's precious edge meant it did better than most base metals, with average copper prices, for example, down 2%. Silver's daily high of \$20.92, posted in mid-March, was only last bettered in 1980, with its record \$49.45. In contrast, it was only in January 2006 that prices were below the (late October) 2008 trough, of \$8.88.

At the start of the year, the market began in a decidedly bullish fashion, with the price rising from an opening fix of \$14.93 to \$20.80 on March 6th. The rally was chiefly driven by the surging gold price, although in this period silver outperformed gold (the only time that this properly occurred in 2008), perhaps mainly as a result of silver's generally lower liquidity, with the gold:silver ratio narrowing to 47 at the time of this initial price peak.

From March, prices then entered a volatile but ultimately rangebound period through to the beginning of July. However, following a peak of over \$19 in mid-July on the back of a record dollar low and oil price highs, from mid-July a relentless correction started. Much of this was driven by a turnaround in the price of oil, and other commodities, as a belief began to grow that the US and perhaps also the world economy could soon face an abrupt slowdown in growth. Despite this sentiment, the dollar began to recover strongly due to factors including capital repatriation.

Some expected the financial crisis, arguably at its height in September, would have ended this correction. This

Silver - Trading Details

Silver is predominantly traded on the London Bullion Market and Comex in New York. The former, as the global hub of OTC (Over-The-Counter) trading in silver, is the metal's main physical market. Here, a bidding process generates a daily reference price known as the fix. Comex, in contrast, is a futures and options exchange. It is here that most fund activity is focused. Silver is invariably quoted in US dollars per troy ounce.

looked to be the case when silver bounced over \$2.50 higher in the third week of September to \$13.38, in the aftermath of the collapse of Lehman Brothers. However, these gains proved to be short-lived as the market had to contend with a bout of heavy fund selling, which ended up driving the price down to its low for the year in late October. Much of this was in a sense 'forced' as funds were obliged to raise cash for margin calls or to cover losses elsewhere (as they were often faced with redemptions by nervous clients questioning funds' solidity).

From this point, a volatile recovery began that saw the price end the year at \$10.79. The turnaround in gold explained a fair portion of silver's recovery, with both benefiting from initial pronounced dollar weakness.

The March spike and subsequent correction meant that price volatility shot up to 53% last year from 26% in 2007. It is also notable that there were scarcely any periods in which the price could be described as stable; the lowest figure for quarterly volatility was the second quarter's 36% in comparison to a low during the second quarter of 2007 of 21%.

The Silver Price since January 2007





3. Supply

- **Mine production in 2008 totaled 680.9 Moz (21,179 t) representing a new record following the revised high of 664.2 Moz (20,660 t) seen in 2007.**
- **A further decline in Russian disposals, as well as the absence of any sales from China and India, resulted in a 27% fall in net government sales.**
- **The 5.3 Moz (166 t) decline in scrap supply, to an 11-year low, was the result of a drop in photo-related recycling.**

Global silver **mine production** reached a new record high last year, totaling 680.9 Moz (21,179 t), an increase of 3%. A small number of large scale developments were behind the bulk of the increase. Bolivia, for example, where silver output more than doubled, benefited from a full year of operations from Sumitomo Corp's San Cristobal zinc-silver mine. Similarly, in Russia, it was a single operation, Kinross' majority owned Kupol gold-silver mine, that was the driving force behind the second strongest country level growth of the year. Output was also higher in Peru, the world's leading silver producer, chiefly due to robust contributions from two of Hochschild's operations.

Not surprisingly, Chilean production stood out for the scale of its decline. This was due to output from its long established copper mines having contracted and the La Coipa mine moved back to conventional operations, following roughly one year of exceptional silver production levels.

In fact, given the widespread cuts made to base metal production in the second half of the year, it is noteworthy

that a year-on-year increase was sustained, although it will be the current year when the magnitude and potentially sustained impact of cut backs will be fully realized. Contrary to the production trend of gold, where mine production declined again last year, silver recovery from gold mines advanced strongly in 2008, expanding by 26%. Primary silver mine output decreased by a marginal 1% year-on-year.

Net government sales dropped by 27% to 30.9 Moz (961 t). Sales from this source now account for only 4% of total net supply, just half the level of only two years earlier. A slowdown in sales out of Russian stocks, as well as the absence of any disposals from China and India (for the second consecutive year), accounted for the decline.

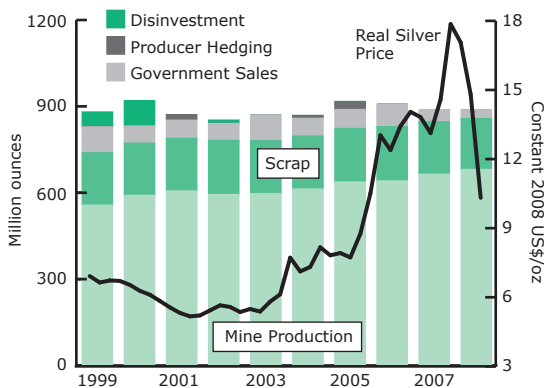
The supply of old silver from recycled products dropped by close to 3% in 2008, to 176.6 Moz (5,494 t), its lowest level since 1997. This may appear surprising, given not only the 12% rise in average dollar silver prices, but also the 15% rise in annual average rupee prices. In fact, Indian scrap volumes did fall in 2008, the result of both strong price expectations in the first half, at a time of rising prices, and then price weakness

Silver Supply - Its Components

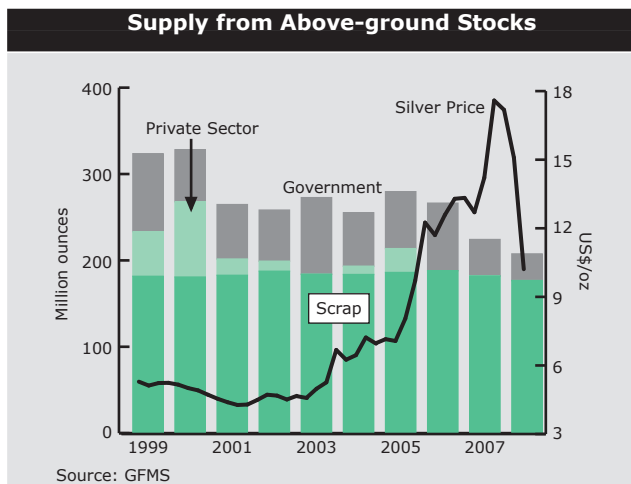
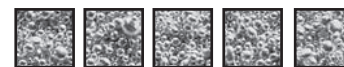
Mine production remains by far the largest component of silver supply, normally accounting for around two-thirds of the total (last year was higher at 77%). However, mine production is not the sole source; the others being scrap, disinvestment, government sales and producer hedging. Scrap, or more properly "old scrap," is the silver that returns to the market when recovered from manufactured goods. This could include old jewelry, photographic chemicals, even discarded computers. However, it excludes silver that is returned untransformed by the manufacturing process or that never becomes an end product - so called "process scrap". Old scrap normally makes up around a fifth of total supply.

Disinvestment and government sales are similar in that both comprise the return to the market of old bars and coins by the private sector and governments. It is worth bearing in mind that these sources may not add to supply every year on a net basis. In some years, individuals have been net investors (as was the case in 2008) and governments net buyers. The final, though normally minor, component of supply is producer hedging or the early sale by mining companies of future production. Hedging may also not appear every year on the supply side on a net basis as it can form part of demand as de-hedging (as occurred last year).

World Silver Supply



Source: GFMS



towards year-end. Elsewhere, however, higher prices did elicit growth in jewelry and silverware recycling, for example in the Middle East, East Asia and some western markets. However, a further decline in the scrapping of photo-related products offset gains both from the aforementioned jewelry and silverware and a slightly greater contribution from the scrapping of industrial products.

Silver Output by Source Metal

(million ounces)

	2007 Output	% of Total	2008 Output	% of Total	Change y-o-y
Primary	194.1	29%	191.2	28%	-1%
Gold	60.7	9%	76.7	11%	3%
Lead/zinc	234.9	35%	249.9	37%	6%
Copper	171.3	26%	159.6	23%	-7%
Other	3.3	0%	3.6	2%	9%
Total	664.2		680.9		4%

Source: GFMS



4. Demand

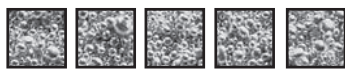
- **Total fabrication in 2008 slipped by 0.9% to 832.6 Moz (25,896 t).**
- **Industrial offtake, fell for the first time in seven years. However, for the year as a whole, the drop was a slight 1.4% to 447.2 Moz (13,910 t). This was due to the fourth quarter slump in nearly every key fabricating market, in the process eradicating the gains of a strong first half.**
- **The long-term decline in the use of silver in photographic applications continued. Indeed it recorded its most significant decline to-date, with the global total in 2008 falling by 16%.**
- **Jewelry demand declined by 3% in 2008. This was predominantly due to Italy's losses, as consumption at home and in many export markets fell as a result of the economic crisis.**
- **In the silverware market, gains in India were overcome by lower fabrication in East Asia and western markets.**
- **In stark contrast to all other areas of fabrication in 2008, coins and medals offtake climbed to a record high of 64.9 Moz (2,019 t), driven by strong investment-related acquisitions.**
- **Implied net investment was up strongly, due to a record inflow into silver ETFs by year-end.**

Industrial demand in 2008 eased by 1.4% to 447.2 Moz (13,910 t), with most of the losses seen in the fourth quarter. Weakness was apparent in most sectors of end use, although some, for example, photo voltaic cells,

Silver Mine Production - Where It Comes From

Geographically, just over half of mined silver comes from the Americas. Indeed 6 of the 10 largest producing countries are in this region including the two biggest, Peru and Mexico. Of greater market relevance however, is the type of mine that silver comes from – most silver emerges as a by-product of the mining of other metals. Most substantially silver production comes from lead/zinc operations.

Only around 30% of output comes from so-called primary silver mines, where silver is the main source of revenue. This is noteworthy given that the impact of the price of silver is most acute on primary silver production, whereas by-product silver production is in large part a function of the price of the other metals, with which silver is mined.



continued to show growth. Performance by country varied quite widely, with US offtake up and Japanese demand lower by 12%. Losses were overwhelmingly due to the abrupt slowdown in GDP growth that occurred towards the end of the year as the financial crisis spilled over into the 'real' economy. This was transmitted to silver demand as sales by major end users, in particular producers of big ticket consumer goods, such as household appliances or cars, slumped and as residential construction fell sharply. It was this that largely ended the growth since 2001 in electrical/electronics offtake and caused the near 2% drop in brazing alloys and solder fabrication last year. Destocking throughout the supply chain also explains some of this weakness.

World **jewelry** demand in 2008 at 158.3 Moz (4,923 t) was down by 3%, impacted by higher prices and the onset of recession. Losses were greatest for Italy and Thailand as exports were hit by consumption declines in the major western markets. However, Indian jewelry fabrication rose by 10% to 11.4 Moz (355 t) last year, the first significant increase since 2001. Much of the rise in jewelry demand in India was driven by the fast growing modern silver jewelry segment, although there was also some growth in the traditional sector too.

Silverware demand fell, a perhaps surprisingly modest, 2% in 2008 to 57.3 Moz (1,783 t) especially as demand was hit hard in Italy. This decline was a result of secular trends, silver prices and the economic crisis in many countries. Partially countering these falls was an increase in India, chiefly due to stock replenishment, and Russia's consumption-led gains.

The largest drop in silver demand in 2008 was recorded in **photography**, where the pace of decline actually accelerated, as further gains by digital solutions were compounded by the rapid deterioration in the global economy. Almost all regions recorded declines, with Europe, the United States, Japan and China all registering double digit falls. Once again, substitution gains made by digital technology at the expense of traditional silver halide-based analog systems was the chief culprit. The greatest source of weakness continued to be collapsing demand for film. In contrast, offtake of silver in x-ray applications in Japan is estimated to have risen marginally. The increase was mainly due to the rise in exports to developing countries, which have yet to switch to digital medical imagery.

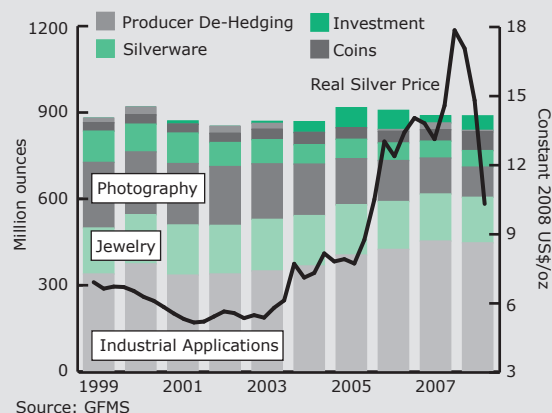
Last year, **coin** fabrication jumped by over 63% to 64.9 Moz (2,019 t), due to a surge in investor related buying, principally in North America and western Europe. In North America, sales of US Eagle coins in 2008 nearly doubled year-on-year, hitting a record high of 19.6 Moz (609 t), while purchases of the Royal Canadian Mint's Maple Leaf coin also soared to a fresh, all-time high.

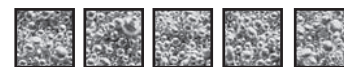
Net **producer de-hedging** provided just 5.6 Moz (175 t) of demand last year as the global producer hedge book at end-2008 was scaled back to 54.6 Moz (1,698 t). This was the third consecutive year that this swing factor has aided demand, although this represented a slowdown in the rate of de-hedging compared with 2007. A major reduction to the options book was responsible for much of the de-hedging as several producers allowed positions to be run down and did not renew cover at a comparable rate. In fact, fresh hedging activity occurred in relatively small quantities again last year. Additionally, active buy-

Silver Demand - Its Components

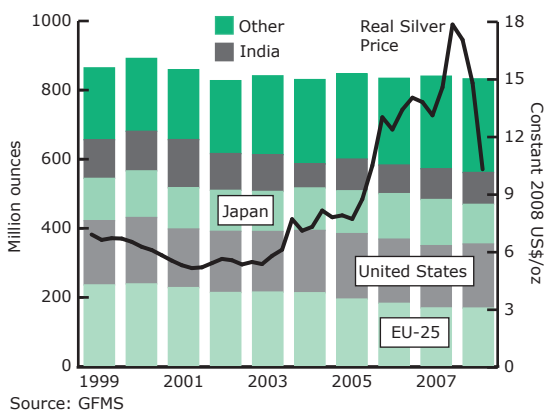
Demand is dominated by the industrial offtake category, which for the last two years has accounted for just over half the total. The second most important areas are the relatively price sensitive segment of jewelry (18% of total demand) and photography (12%), whose share has been falling greatly due to digital technology. The rest of fabrication is made up of coins (7%) and silverware (6%). The other elements of demand (government purchases, producer de-hedging and investment) are alike in that, on a net basis, they may not feature every year on the demand side. The official sector, for example, has not generated net purchases since 1997. Investment, as noted previously, was the main driver of last year's rally and this stands in contrast to the sustained net disinvestment seen in the 1990s.

World Silver Demand





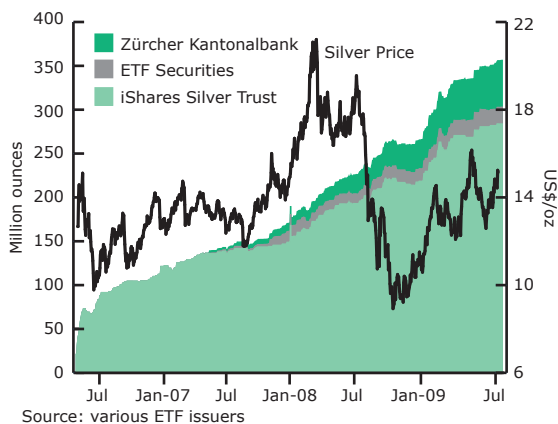
World Silver Fabrication (by region)



backs to forward sales portfolios, notably by Barrick and Kinross, also took place.

Taken at face value the increase in **implied net investment** to 50.2 Moz (1,562 t) in 2008, may appear modest, especially given the record inflow of 93.1 Moz (2,894 t) into silver ETFs by year-end. In addition, this apparent 'mismatch' is only magnified when considering the robust net retail purchases seen in the physical markets during the year, in particular in India, where retail investment soared to 103.1 Moz (3,207 t). The picture is nonetheless resolved when taking into account the overall net selling that took place last year, particularly during the second half, on the Comex and OTC markets. Outflows from these arenas owed much to widespread deleveraging in global asset markets and the pronounced flight from risk, particularly in the fall.

Silver ETF Holdings



Silver's Fabrication Uses

Industry: Silver is the best electrical and thermal conductor of all metals and so is used in many electrical applications, particularly in conductors, switches, contacts and fuses. Contacts provide junctions between two conductors that can be separated and through which current can flow, and account for the largest proportion of electrical demand. The most significant uses of silver in electronics are in the preparation of thick-film pastes, in multi-layer ceramic capacitors, in the manufacture of membrane switches, silvered film in electrically heated automobile windshields and in conductive adhesives. Silver used in the fabrication of photo voltaic cells is seen as an area of rapid growth in the short to medium term. Other industrial uses for silver include as a coating material for compact disks and digital video disks, mirrors, glass coatings and cellophane and batteries.

Jewelry and Silverware: Silver possesses working qualities similar to gold, enjoys greater reflectivity and can achieve the most brilliant polish of any metal. Consequently, the silversmith's objective has always been to enhance the play of light on silver's already bright surface. Pure silver (999 fineness) does not tarnish easily but to make it durable for jewelry, it is often alloyed with small quantities of copper. It is also widely used with base metals in gold alloys. Sterling silver, at a fineness of 925, has been the standard of silverware since the 14th century, particularly in the manufacture of "hollow-ware" and "flatware". Plated silverware usually has a coating of 20-30 microns, while jewelry plating is 3-5 microns.

Photography: The photographic process is based on the presence of light sensitive silver halide crystals, prepared by mixing a solution of soluble silver, usually silver nitrate, with a soluble alkali metal halide such as sodium chloride or potassium bromide. These grains are then suspended in the unexposed film. The effect of light on the silver halide disturbs the structure of this compound, rendering it selectively reducible to metallic silver by reducing agents called developers. The resulting negative image is converted to the positive by repeating the process under specific conditions. Photographic film is used in radiography, the graphic arts and in consumer photography. Photographic film manufacturers demand very high purity silver.

Coins: Historically, silver was more widely used in coinage than gold, being in greater supply and of less value, thus being practical for everyday payments. Most nations were on a silver standard until the late 19th century with silver coin forming the main circulating currency. But after the gold rushes, the silver standard increasingly gave way to gold. Silver was gradually phased out of regular coinage, although it is still used in some circulating coins and especially in American, Australian, Canada, Mexican and Austrian bullion coins for investors.