THE SILVER INSTITUTE

GFMS

World Silver Survey 2005
A Summary

Produced for The Silver Institute
by GFMS Limited

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Coeur d' Alene Mines Corporation is the world's largest primary silver producer and a growing, low-cost gold producer. Producing properties include two of the largest silver mines in the United States, and two new, expanding low-cost mines in southern Chile and Argentina. In April, 2005 the Company also acquired the silver production and reserves of the Endeavor mine in Australia. In 2004, Coeur produced 14.1 million ounces of silver and 129,000 ounces of gold at an average cash cost of $3.65 per ounce of silver. The Company has no silver or gold production hedged. Through an aggressive exploration program, Coeur silver reserve levels increased by 12% in 2004 to 196 million ounces, a company record. The company also has 1.4 million ounces of gold reserves. An expanded exploration program, focused primarily at existing operating mines, is continuing in 2005. Coeur also has two 100%-owned development projects nearing production, in Bolivia and Alaska, which are expected to increase company-wide silver production by 66% and gold production by 77% from current levels in 2006. Coeur entered 2005 in its strongest financial position in more than a decade, with $322 million in cash, cash equivalents and short-term investments and no net debt. Coeur common shares are traded on the New York Stock Exchange (NYSE) under the symbol CDE and the Toronto Stock Exchange (TSX) under the symbol CDM.

Industrias Peñoles, S.A. de C.V.

Peñoles is a mining group with integrated operations in smelting and refining non-ferrous metals, and producing inorganic 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. Its mission is to add value to non-renewable natural resources in a sustainable manner. The company was founded in 1887. Its shares have traded on the Mexican Stock Exchange since 1968 under the ticker PE&OLES.

Noranda Inc.

Noranda is a leading copper and nickel company with investments in fully-integrated zinc and aluminum assets. The Company's primary focus is the identification and development of world-class copper and nickel mining deposits. Noranda is also a major recycler of secondary copper, nickel and precious metals. It employs 15,000 people at its operations and offices in 18 countries and is listed on the New York Stock Exchange and the Toronto Stock Exchange (NRD).

The ***World Silver Survey*** has been published annually by The Silver Institute since 1990. Copies of the full *World Silver Survey 2005* 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 2005 edition of the Survey is US$195, €160 or £115.

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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.

Prices:

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

Table Rounding:

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

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 2005*. 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 87-page WSS can be found on Page 4.

1. Review & Outlook

Silver's stunning performance in 2004 – the annual average price rising 36.5% to a 17-year high of $6.658 – raises several important questions. Chief among these is whether last year's development signals a fundamental change in the market and in the price level or merely a temporary blip up from the metal's largely unspectacular record since the late 1980s? GFMS' view is that changes in silver's supply/demand balance have provided a foundation for higher prices, although the absolute levels reached over the last eighteen months or so owe more to temporary factors and therefore may not be sustainable in the long run.

Total supply in 2004 declined fractionally to 879.2 Moz (27,345 t), notwithstanding a moderate increase in mine production, which is anticipated to accelerate in 2006. Scrap supply is tending to decline independently of the price because of lower photographic demand. Government sales dropped last year, as the flow of Chinese silver was reduced. This could well herald a period of reduced pressure on the price from government sales, in spite of occasional contributions from the likes of Russia (as last year) or the Indian program of stock disposals.

Fabrication demand provided significant support to the silver rally. Despite slipping by just under 2% to 836.7 Moz (26,023 t), its lowest level since 1998, demand remained remarkably strong in the context of the increase in silver prices. The bulk of the losses last year were seen in jewelry & silverware, chiefly thanks to a slump in India (indeed, total fabrication *excluding* India actually rose by almost 4%). These losses plus a further decline for photographic offtake more than outweighed the sizeable gains for industrial and coin fabrication.

Looking ahead, GFMS see continued growth in investor interest in commodities as an asset class. Even if in the short term there could be some setbacks to commodity prices if and when the world, and in particular the Chinese, economy slows, the trend growth in investor dollars being committed to commodities is set to continue. Second, in our view, silver will, in any case, be driven more by developments in gold than in, for example, base metal prices. Historically, the correlation is much closer to the former and GFMS is forecasting further advances in gold prices over the next year. Third, silver's upward price trend and volatility should continue to attract speculative interest both in futures and in the over-the-counter market from funds and high net worth investors. Finally, the improvement in silver's supply/demand fundamentals is having a positive impact on market sentiment and behavior. We expect this to continue providing support for the price on dips and encouraging longs to maintain their core positions.

World Silver Supply and Demand

	2003	2004
Supply		
Mine Production	611.2	634.4
Net Government Sales	88.2	61.7
Old Silver Scrap	183.6	181.1
Producer Hedging	-	2.0
Implied Net Disinvestment	-	-
Total Supply	**883.1**	**879.2**
Demand		
Fabrication		
Industrial Applications	350.5	367.1
Photography	192.9	181.0
Jewelry & Silverware	274.2	247.5
Coins & Medals	35.8	41.1
Total Fabrication	853.4	836.7
Net Government Purchases	-	-
Producer De-Hedging	21.0	-
Implied Net Investment	8.7	42.5
Total Demand	**883.1**	**879.2**
Silver Price (London US$/oz)	4.879	6.658

2. Silver Price - Developments in 2004

The silver price staged a dramatic rally last year, rising a hefty 36% to $6.658 basis annual averages. This was substantially greater than the 13%, 22% and 15% gain that gold, platinum and palladium respectively registered. Silver's intra-year gain was more modest at 14%, pointing out the strength of the two main corrections last year in April and December (and how low prices had been prior to the late 2003 rally). The rally also lifted the annual average out of the broad $4.50-$5.50 band in which it had become stuck for the last ten or so years.

In contrast to gold, the increase in the silver price translated very clearly into other currencies. Euro silver for example rose by over 24% or almost ten times as fast as euro gold. Perhaps more important was the 30% rise in the rupee price, with its obvious deleterious implications for physical offtake. Finally, the Mexican peso price rose by 42%.

By some margin, the most important of all the factors driving the price last year was investment, in particular as regards day-to-day moves or medium term developments such as the March/April price spike. Hedge funds and commodity trading advisors dominated the silver investment market, with much of their activity taking place on futures exchanges.

The rationale for investor involvement was largely based on interest in commodities in general remaining very much in vogue. This in turn mainly stemmed from people still thinking there was some mileage left in commodities' front running of recent years' acceleration in global GDP growth and as 'alternative' investments were seen to remain attractive in a time of potential dollar weakness. Silver has never really enjoyed the 'safe haven' status that gold possesses. However, its linkage to gold and the base metals meant silver was often an attractive home for speculative capital since it was perceived as likely to ride the coat-tails of any rally in these other markets.

Industrial offtake was at its strongest during the first half and this did much to halt the slide in prices in May. It cannot, however, be held responsible for the March/April rally as this sector's purchases would be likely to have been reined in and/or postponed when prices were looking excessive and frothy.

Silver - Trading Details

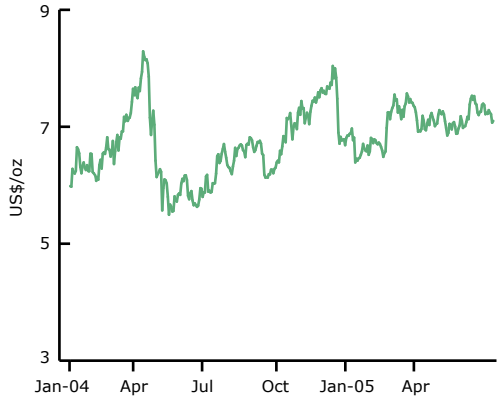
Silver is predominantly traded on the London Bullion Market and Comex in New York. The former, as the global hub of OTC (Over-The-Counter) trading in silver, is the metal's main physical market. Here, a bidding process generates a daily reference price known as the fix. Comex, in contrast, is a futures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

Looking at the jewelry & silverware sector, total demand fell quite substantially, the bulk of any losses occurred as Indian buying dried up when prices were viewed as unsustainable. As soon as the market returned to 'fair' levels (particularly during the May/June window of sub-$6 prices), its offtake recovered strongly, again assisting the market to recuperate from the speculative bail out.

It may initially seem odd that, given the overall price derived fall for jewelry & silverware, its flipside, higher scrap, not only failed to materialise but in fact fell. This, however, should come as little surprise given that levels of at least $10 would be required to see much of a pick up in scrap from the industrial sector while photographic scrap continued its decline basis the switch to digital.

A more significant price driver on the supply side was the 30% slump in net government sales, due chiefly to China. There was, in sharp contrast, a marked rise in sales by Russia and these are thought to have mainly occurred during the March/April rally. It was primarily this in conjunction with a collapse in the physical markets and profit taking that brought that rally to an end.

The Silver Price since January 2004



3. Supply

- ***Global mine production registered a 4%, or 23.2 Moz (720 t), rise year-on-year to reach 634.4 Moz (19,731 t).***
- ***A significant fall in the release of silver from Chinese stocks saw net government sales decline by 30% year-on-year.***
- ***Scrap supply fell to a four year low of 181.1 Moz (5,633 t).***
- ***Higher prices encouraged producers to increase their hedge cover, generating an estimated 2.0 Moz (62 t) of accelerated supply.***

Mine production registered strong growth in 2004 with an estimated 23.2 Moz (720 t) of additional supply. The significant rise took global output to a record high at 634.4 Moz (19,731 t). Growth was concentrated in the primary sector, with increased volumes generated at lead/zinc and copper operations contributing to the gains. Silver as a secondary product of gold mining was the only category to register a fall, with output slipping by 2% year-on-year. Regarding the distribution of last year's rise, the world's four largest silver producers, namely, Mexico, Peru, Australia and China, provided the bulk of the increase. Improvements in Russia and, to a lesser extent, in Chile further boosted the figure.

Peru and Chile both benefited from the restoration of idled capacity in the copper sector with higher throughput at BHP Billiton's Tintaya and Escondida mines. In addition, a return to the normal mine plan at Peru's Antamina following the removal of lakebed sediments in May 2004 helped lift output at the mine by 19% year-on-year. In Australia "congestion" issues at Cannington, the world's largest silver producing mine, were largely resolved with mining rates and throughput both significantly improved and output, despite a modest drop in grade, rose by 20% to reach 46.0 Moz (1,428 t). Lastly, the acceleration of the development of the silver rich lead/zinc ores in northeast China, and further gains at Russia's Dukat and Lunnoye operations, complemented by new output at Khakanjinskoye, helped lift respective output in these countries by 9% to 63.8 Moz (1,985 t) and by 10% to 37.9 Moz (1,180 t).

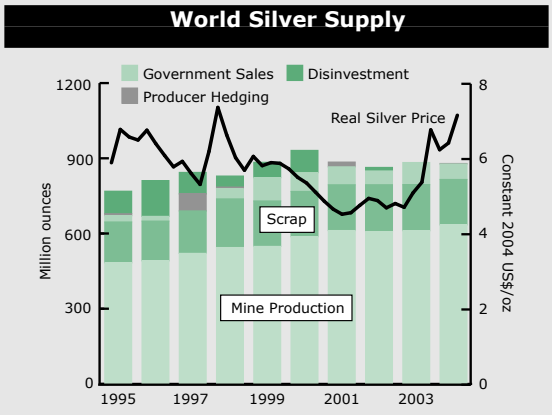
Negating the growth in part, Kazakhstan, Bolivia and Indonesia, among others, posted output declines: Mine closures played a role in the year-on-year losses in Bolivia and Indonesia, with results in the latter aggravated by operational difficulties at the giant Grasberg copper-gold mine. Elsewhere, there were modest falls in Canada, Sweden and Poland.

At 61.7 Moz (1,920 t), **net government sales** in 2004 registered a 30% year-on-year decline. The fall was

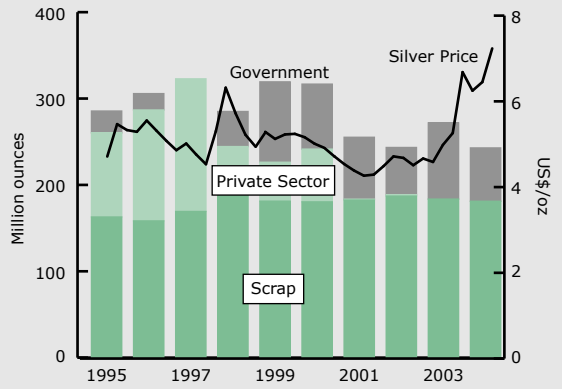
Silver Supply - Its Components

Mine production is unsurprisingly the largest component of silver supply. It normally accounts for a little under two-thirds of the total (last year was slightly higher at 72%). 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 existing manufactured goods or waste. This could include old jewelry, photographic chemicals, even discarded computers (but it excludes silver that is returned untransformed by the manufacturing process - so called "process scrap"). Old scrap normally makes up a little over one-fifth of supply. Disinvestment and government sales are similar in that both comprise the return to the market of old coins or bars respectively by the private sector or 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 appears to have been the case in 2001) and governments net buyers (as occurred most recently in 1997).

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 as an element of supply on a net basis as it can contribute to demand as producer de-hedging.



Supply from Above-ground Stocks



mainly driven by a significant reduction in sales from Chinese stocks, which once again made up the bulk of the total, with much of the balance accounted for by higher sales from Russia. Elsewhere, European sales saw a marked decline, while India announced its intention to sell part of its silver stocks, starting in 2005.

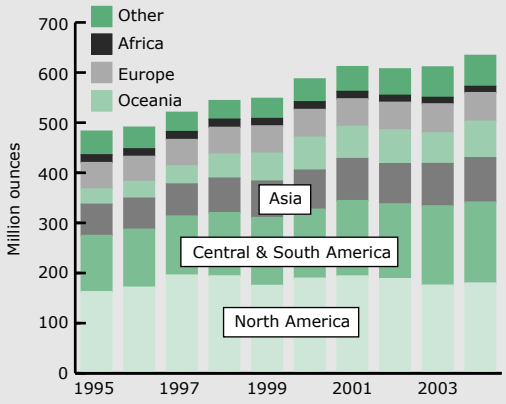
The fall in global **scrap** supply, a slight decline of 1.3% may look surprising, given the 36.5% rise in the dollar silver price last year. However, the ongoing drop in photographic fabrication, overwhelmingly driven by digital penetration of silver halide markets in developed countries, was mirrored in a significant fall in such countries' photographic scrap. This more than offset higher volumes coming from the other main sources of supply, namely the industrial sector and the jewelry industry. Industrial scrap was higher last year, largely as a result of tighter environmental legislation, which has facilitated additional recycling.

Producer hedging activities generated an estimated 2.0 Moz (62 t) of supply in 2004. The modest increase in delta-adjusted terms left total outstanding producer positions at end-2004 at 53.5 Moz (1,665 t), equivalent to roughly 8% of annual mine production. In nominal terms, volumes increased by 15.0 Moz (467 t), with the year-on-year gains mostly concentrated into forward sales and purchased put option contracts. The muted response of the book year-on-year in delta-adjusted terms was largely due to the low delta against the volume of sold calls, the bulk of which, at end-2004, were out-of-the-money.

Silver Mine Production - Where It Comes From

Geographically, just over half of mined silver comes from the Americas with Mexico, Peru and the United States respectively, the first, second and seventh largest producing countries. The third largest is Australia. 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. Only around 30% of output comes from mines where the main source of revenue is silver, a so-called primary silver mine. As shown in the graph below, around the same amount comes from lead/zinc mines. This is important as the price of silver will only have a direct impact on primary output, which means the amount of silver mined is more a function of the price of other source metals.

World Silver Mine Production



Silver Output by Source Metal

	2003 output	% of total	2004 output	% of total	Change y-o-y
Primary	173.2	28%	188.5	30%	9%
Lead/Zinc	198.9	33%	204.6	32%	3%
Copper	158.8	26%	162.2	26%	2%
Gold	75.6	12%	74.4	12%	-2%
Identified 'other'	3.3	1%	3.5	1%	6%

Demand

- ***Total fabrication in 2004 fell by 2% to a six year low of 836.7 Moz (26,023 t).***
- ***Industrial offtake rose by 5% to 367.1 Moz (11,419 t), with electronics spearheading the gains.***
- ***Jewelry & silverware fabrication fell by almost 10% to 247.5 Moz (7,698 t), a nine year low.***
- ***Photographic demand fell for the fifth year in succession, to 181.0 Moz (5,629 t).***
- **Coin & medal *offtake increased by 15% in 2004 to a ten year high of 41.1 Moz (1,277 t).***
- ***Implied net investment rose by around a factor of five to 42.5 Moz (1,323 t).***

Last year's acceleration in global GDP growth fed through to a solid 5% increase in **industrial fabrication** to 367.1 Moz (11,419 t), or only a little under its peak in 2000 at the height of the 'tech bubble'. Most countries saw growth though India again saw a substantial fall due to losses in its semi-industrial areas. Much of the overall growth in industrial fabrication was driven by a buoyant **electronics** sector whose demand rose by almost 14% to 166.5 Moz (5,177 t). This was its third successive year of growth, with offtake surpassing the previous record level set in 2000. Around three-quarters of these gains were attributable to Japan and the United States, as a result of booming end-use in a wide variety of new areas such as plasma display panels and more traditional areas, for example contacts and chip registers. People might have been expecting faster growth from China given media coverage of relocation of manufacturing capacity to that country. However, this has often only involved assembly using silver components fabricated elsewhere (for example fuses) or the focus has been on lower-tech areas of the industrial category, for example **brazing alloys**. In fact last year, China's 11% growth in this area meant that its share of global fabrication of brazing alloys (which rose 2% to 38.5 Moz or 1,197 t) climbed to a quarter.

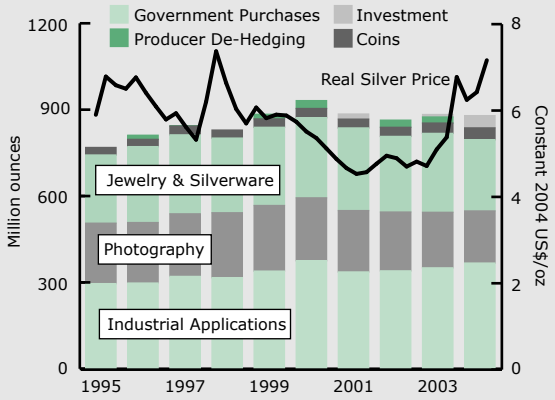
Last year, saw another decline in **photographic** fabrication, marking the fifth year in a row of falling volumes. The 6% decline may look modest, given widespread reports of the demise of this sector, but the decline within the industry has been far from uniform. Without doubt, digital products have made substantial inroads, notably, into the graphic arts and consumer film divisions. This was particularly telling in East Asia, where Japan, the second largest producer of silver nitrate for photographic uses, saw an 8% fall in 2004, the largest annual percentage decline the country's photographic industry has experienced. In other areas, paper consumption saw only a modest reduction and this was a contributory factor behind the "only" 5% fall in Europe, whereas every other major producing region saw declines in excess of 6%. The one positive note last year was in the motion picture sector, which may have actually seen higher silver consumption last year.

Jewelry & silverware fabrication fell a hefty 10% to 247.5 Moz (7,698 t), a nine year low. The decline was overwhelmingly due to the 32.7 Moz (1,018 t) slump in Indian offtake, itself a product of the 30% rise in the local price and a poor monsoon. Indeed, if we were to exclude India, global jewelry & silverware fabrication would have

Silver Demand - Its Components

Demand is dominated by three main categories: jewelry and silverware; industrial; and photographic fabrication. These accounted respectively for 28%, 42% and 21% of demand last year, though photographic's share has slipped over the last decade with the advent of digital photography. Coin demand, the final part of fabrication offtake, saw a slight gain in its share of the total. The remaining elements of demand; government purchases 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 significant net purchases since 1992, while investment's role, as alluded to previously, was the fundamental component of last year's rally.

World Silver Demand

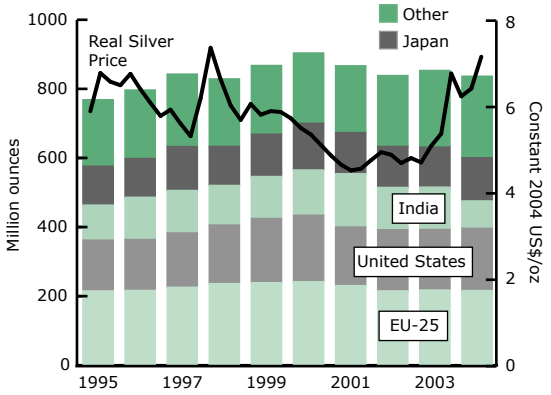


risen by 3%. The countries that accounted for the bulk of this increase were Thailand and then China, chiefly on the back of jewelry export growth. It was this successful penetration of many markets in Europe that was largely responsible for the slight dip in that continent's jewelry fabrication, despite good signs of its jewelry consumption continuing to grow (if more slowly than previously). Global silverware fabrication looks to have fallen slightly faster than jewelry, as quality issues further undermined Indian demand and its secular decline in consumption continued in most western markets.

Implied net investment rose by almost 400% last year to a substantial 42.5 Moz or 1,323 t (please note that our previous estimate for 2003 of slight *dis*investment has now been amended to modest *in*vestment). The boom in investor activity last year was mainly driven by funds operating on futures exchanges and considerable buy side interest from high net worth individuals, chiefly in the over-the-counter market. Their rationale for involvement was largely based on a belief that silver would act as a usefully geared home for capital to ride the coat-tails of expected rallies in gold and the base metals at a time of anticipated dollar weakness.

Coin & medal fabrication rose by almost 15% last year to 41.1 Moz (1,277 t). Much of the increase was due to increased minting of commemorative coins in Portugal, Spain and Canada plus higher US proof set demand.

World Silver Fabrication (by region)



Silver's Fabrication Uses

Industry: Silver can be found in many electrical applications, particularly conductors, switches and contacts. Contacts provide junctions between two conductors that can be separated and through which a current can flow, and account for the largest proportion of electrical demand. The main uses of silver in electronics include pastes for silkscreened circuit paths, multi-layer ceramic capacitors, silvered film in electrically heated automobile windshields, and in conductive adhesives.

The ease of electro-deposition of silver, mainly from the salts silver cyanide and potassium silver cyanide, accounts for its widespread use in plating.

The joining of materials through silver brazing or soldering alloys is facilitated by the metal's fluidity and strength. These alloys are used widely in applications such as refrigeration equipment, automobiles and aerospace.

Miscellaneous industrial uses for silver include mirrors, batteries, as a catalyst in numerous chemical reactions and as a bactericide and algaecide.

Jewelry and Silverware: Silver possesses working qualities similar to gold, enjoys greater reflectivity and can achieve the most brilliant polish of any metal. 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 for long been the standard for silverware. Plated silverware usually has a coating of 20-30 microns, while jewelry plating is only 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. Within this sector, the radiography market is now the largest end user. Just a little smaller is consumer demand with the printed images taking slightly more silver than that used in the films themselves. The graphic arts account for much of the remaining offtake. Photographic film manufacturers demand very high quality 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 in bullion coins for investors.