

SILVER

(Data in metric tons¹ of silver content, unless otherwise noted)

Domestic Production and Use: Silver, produced by about 76 mines in 16 States, had an estimated value of \$238 million in 1997. Nevada (39%), Idaho (15%), and Arizona (12%), were the largest producing States. Precious metal ores accounted for approximately one-half of domestic silver production; the other one-half was recovered as a by-product from copper, lead, and zinc ores. There were 22 principal refiners of commercial-grade silver with an estimated output of approximately 3,900 tons. About 30 fabricators accounted for more than 90% of the silver consumed in arts and industry. The remainder was consumed mostly by small companies and artisans. Aesthetic uses of silver for decorative articles, jewelry, tableware, and coinage were overshadowed by industrial and technical uses. Industrial and technical uses include photographic materials, electrical products, brazing alloys, dental amalgam, bearings, and catalysts.

<u>Salient Statistics—United States:</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997^e</u>
Production: Mine	1,640	1,490	1,560	1,570	1,600
Refinery: Primary	1,790	1,810	NA	NA	NA
Secondary	2,020	1,700	NA	NA	NA
Imports for consumption ²	2,500	2,600	3,250	3,010	3,300
Exports ²	811	967	2,890	2,950	3,000
Shipments from Government stockpile excesses	404	186	220	232	300
Price, average, New York, dollars per troy ounce	4.30	5.29	5.15	5.19	4.62
Stocks, yearend: Treasury Department ³	912	882	765	740	740
COMEX, CBT ⁴	10,500	10,400	6,290	4,550	5,000
Department of Defense	34	15	13	10	10
Employment, mine and mill, ⁵ number	1,100	1,000	1,200	1,400	1,400

Recycling: About 2,000 tons of silver was recovered from recycled material in 1997.

Import Sources² (1993-96): Canada, 26%; Mexico, 23%; Germany, 9%; Peru, 9%; Chile, 7%; and other, 26%.

Tariff: No duties are imposed on imports of unrefined silver or refined bullion.

Depletion Allowance: 15% (Domestic), 14% (Foreign).

Government Stockpile:

Stockpile Status—9-30-97⁶

Material	Uncommitted inventory	Committed inventory	Authorized for disposal	Disposal plan FY 1997	Disposals FY 1997
Silver	1,220	—	1,220	280	271

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Events, Trends, and Issues: Domestic mine production of silver in 1997 increased by about 2% from production in 1996. Domestic consumption of silver was estimated to have increased slightly, owing to increased use in the electronic and photographic sectors.

The Government continued to dispose of the silver held in the National Defense Stockpile, using it primarily for the production of commemorative coins and the Eagle silver bullion coins. During the past 15 years, from 1982 through September 30, 1997, the Government has reduced the quantity of silver held in the stockpile from nearly 4,300 tons to about 1,200 tons.

The average price of silver through the first 9 months of 1997 was \$4.628 per ounce, which was down from the average \$5.19 per ounce through the first 9 months of 1996. The silver price at the end of 1996 was at about \$4.73 per ounce. The price began to rise in January 1997, briefly breaking through the \$5.00 mark on January 27 before falling back. The highest price of the year occurred on February 27 at \$5.26 per ounce. The price remained above \$5.00 until April 1, falling back to \$4.74 on April 4. During the next 4 months the price of silver fluctuated between \$4.30 and \$4.95. The price on September 30, 1997, was \$5.21 per ounce.

World Mine Production, Reserves, and Reserve Base:

	Mine production		Reserves ⁷	Reserve base ⁷
	1996	1997 ^e		
United States	1,570	1,600	31,000	72,000
Australia	1,020	1,100	29,000	33,000
Canada	1,230	1,200	37,000	47,000
Mexico	2,500	2,500	37,000	40,000
Peru	1,970	2,000	25,000	37,000
Other countries	<u>6,910</u>	<u>6,900</u>	<u>120,000</u>	<u>190,000</u>
World total (may be rounded)	15,200	15,300	280,000	420,000

World Resources: Approximately two-thirds of world silver resources are associated with copper, lead, and zinc deposits. The remaining one-third is in vein deposits in which silver is the most valuable metallic component. Although most recent discoveries have been primarily gold and silver deposits, significant future reserves and resources are expected from major base metal discoveries that contain byproduct silver.

Substitutes: Aluminum and rhodium substitute for silver in mirrors and other reflecting surfaces. Tantalum can be used in place of silver for surgical plates, pins, and sutures. Stainless steel is an alternate material used widely in the manufacture of table flatware. Nonsilver batteries being developed may replace silver batteries in some applications. Silverless black and white film, film with reduced silver content, and xerography are alternatives to some uses of silver in photography.

^eEstimated. NA Not available.

¹One metric ton (1,000 kilograms) = 32,150.7 troy ounces.

²Refined bullion, plus silver content of ores, concentrates, precipitates, and doré; excludes coinage, waste, and scrap material.

³Balance in Mint only.

⁴COMEX: Commodity Exchange Inc., New York. CBT: Chicago Board of Trade.

⁵Source: Mine Safety and Health Administration.

⁶See Appendix C for definitions.

⁷Includes silver recoverable from base metal ores. See Appendix D for definitions.