Silver

Patrick Chevalier

The author is with the Minerals and Metals Sector, Natural Resources Canada.

Telephone: (613) 992-4401 E-mail: pchevali@nrcan.gc.ca

Silver is a naturally occurring metallic element with a brilliant white lustre and a melting point of 961.9°C. Known since ancient times, silver has the highest electrical and thermal conductivities of all metals and, although tarnished by sulphur, it is relatively corrosion resistant. Silver's chemical symbol, Ag, comes from the Latin word argentum. Silver is second only to gold in malleability and ductility, being easily rolled or beaten into foil or drawn into fine wire. Its use for ornaments and utensils pre-dates recorded history. Archeological evidence suggests that people learned how to separate silver from leadbearing ores as early as 3000 B.C. Silver has been an important medium of exchange since very early times. Commonly associated with gold, copper, lead and zinc, silver is found in some 60 different minerals including argentite (Ag₂S), cerargyrite (AgCl), and many other sulphides and tellurides.

CANADA

With the closure of the Equity Silver mine in British Columbia in 1994, silver in Canada is now only mined as a by-product of base-metal or gold mining. In 2003, silver-in-concentrate production totalled 1276 t, down 6% from 2002, with base-metal mines accounting for 44% of the total output and gold mines contributing the remaining 56%.

In 2003, silver was produced from mines in Newfoundland and Labrador, New Brunswick, Quebec, Ontario, Manitoba, Saskatchewan, British Columbia, Nunavut, the Yukon and Northwest Territories (Figure 1). The decline in mine production in 2003 was mainly the result of reduced output from Falconbridge Limited's Kidd Creek mine near Timmins, Ontario, and lower production from Billiton Metal Canada Ltd.'s Selbaie mine in northwestern

Quebec. The closure of Breakwater Resources Limited's Nanisivik mine towards the end of 2002 also contributed to the lower output.

WORLD DEVELOPMENTS

Silver is recovered from mines in over 50 countries. According to data from the World Bureau of Metal Statistics, the top 10 producing countries were responsible for some 70% of the total world mine production of silver in 2003. In decreasing order of production, they are Peru, Mexico, China, Australia, Poland, Canada, Chile, the United States, Kazakhstan and Bolivia (Figure 2). Data from The Silver Institute indicate that approximately 30% of the silver mined in 2003 came from primary silver mines, largely based in South and Central America, with the remaining amount produced from base-metal or gold operations.

World mine production of silver was down slightly in 2003 from 18 878.5 t in 2002 to an estimated 18 591 t. The decline in world output was primarily the result of sharp declines in North America and Australia. Elsewhere in the world, mine production increased. Silver production declined 10% in Australia while lower grades, mine closures and technical difficulties led to a 13% decline in the United States. Combined with mine closures and lower production in Canada and Mexico, overall North American supply declined by close to 8%.

In addition to mined ores and concentrates, silver is also recovered from recycled industrial scrap, photographic wastes, electronic goods, jewellery and other materials. According to The Silver Institute, silver recovered from recycled materials increased by about 2.6%, for a total of about 5958 t, or 22% of world supply in 2003 (Figure 3).

Vancouver-based Pan American Silver Corp. and Corner Bay Silver Inc. formally concluded their announced merger in February 2003. The transaction combined Pan American's silver production and operational experience with Corner Bay's Alamo Dorado silver-gold deposit in Sonora State, Mexico. Pan American now owns and operates silver mines in Peru and Mexico, as well as development projects in Argentina and Bolivia.

★ Matagami 12 **③ ●**₁₁ Joutel ⊚10 * Amos 9 8 ★® ®7 *⁶⊚ Val-d'Or Scale 1:6 000 000 N.W.T. ●31 Alta. 25 J Sask® ● 28 Que. 4● Ont. U.S.A. Principal mine producers

Figure 1 Silver Producers in Canada, 2003

Numbers refer to locations on map above.

SILVER-PRODUCING MINES

1. Hammerdown Richmont Mines Inc. Brunswick Noranda Inc. 3. Joe Mann Meston Resources Inc. Troilus 4. Inmet Mining Corporation Aur Resources Inc. 5. Louvicourt McWatters Mining Inc. (closed in 2003) 6. Sigma Beaufor Richmont Mines Inc. (50%) and Louvem Mines Inc. (50%) 7. LaRonde Agnico Eagle Mines Limited Cambior Inc. 8. Doyon Cambior Inc. Mouska Bouchard-Hébert Breakwater Resources Ltd. Sleeping Giant Cambior Inc. (50%) and 10. Aurizon Mines Ltd. (50%) Bell Allard 11. Noranda Inc. 12. Selbaie Billiton Metals Canada Inc. Holt-McDermott Barrick Gold Inc. 13. Holloway Newmont Canada Ltd. (84.65%) and Teddy Bear Valley Mines, Limited (15.35%) 14. Macassa Kirkland Lake Gold Inc. Placer Dome (CLA) Limited (50%) and 15. Porcupine J.V. Kinross Gold Corporation (50%) Golden Giant Newmont Canada Limited Kidd Creek Falconbridge Limited Sudbury Division Falconbridge Limited Ontario Division Inco Limited River Gold Mines Ltd. 17. Eagle River

WEB SITE

www.richmont-mines.com www.noranda.com www.ressourcescampbell.com www.inmet-mining.com www.aurresources.com www.mcwatters.com www.richmont-mines.com

www.agnico-eagle.com www.cambior.com www.cambior.com www.breakwater.ca www.cambior.com www.aurizon.com www.breakwater.ca www.bhpbilliton.com www.barrick.com www.newmont.com

www.klgold.com www.placerdome.com www.kinross.com www.newmont.com www.falconbridge.com www.falconbridge.com www.inco.com www.rivergoldmine.com

Figure 1 (cont'd)

SILVER-PRODUCING MINES (CONT'D)

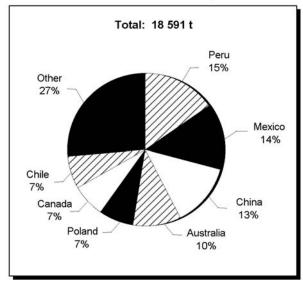
18. Hemlo Mines Barrick Gold Inc. (50%) and Teck Cominco Limited (50%) Placer Dome (CLA) Limited 19. Campbell Red Lake Goldcorp Inc. 20. Musslewhite Placer Dome (CLA) Limited 21. Manitoba Division Inco Limited 22. New Britannia Kinross Gold Corporation 23 Manitoba Mines Hudson Bay Mining & Smelting Hudson Bay Mining & Smelting 24 Konuto Lake 25. Seabee Claude Resources Inc. Miramar Mining Corporation (closed in 2003) 26 Con Giant Miramar Mining Corporation 27. Lupin Kinross Gold Corporation (on care and maintenance) 28. Highland Valley Teck Cominco Limited Myra Falls Boliden Westmin (Canada) Limited 29 30. Huckleberry Huckleberry Mines Ltd. (50%) and Japan Group (50%) 31 Kemess South Northgate Exploration Limited 32. Eskay Creek Barrick Gold Inc.

WEB SITE (CONT'D)

www.barrick.com www.teckcominco.com www.placerdome.com www.goldcorp.com www.placerdome.com www.inco.com www.kinross.com www.angloamerican.co.uk www.angloamerican.co.uk www.clauderessources.com www.miramarmining.com www.miramarmining.com www.kinross.com www.aurizon.com www.teckcominco.com www.boliden.ca www.imperialmetals.com

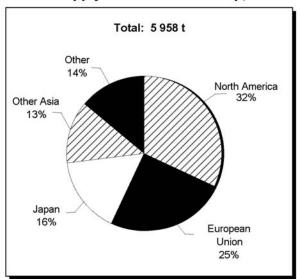
www.northgateexploration.ca www.barrick.com

Figure 2
World Silver Mine Production, 2003



Sources: Natural Resources Canada; The Silver Institute.

Figure 3 World Supply of Silver From Scrap, 2003



Source: The Silver Institute.

Hecla Mining Company announced its decision to drive a 1.7-km drift on the 5900 level of the Lucky Friday silver mine in northern Idaho. The development drift is expected to give Hecla access to another 870 t of silver and allow the mine to double production to 125 t of silver annually. The Lucky Friday mine has been in operation for the past 45 years and has produced close to 4000 t of silver to date.

It employs 94 people and, when the new development drift is completed and full production is reached, the mine will increase employment by up to 50%. Hecla Mining Company, headquartered in Coeur d'Alene, Idaho, mines and processes silver and gold in the United States, Venezuela and Mexico. According to company reports, Hecla produced a record amount of silver at its lowest cost ever in

the company's 113-year history of operations in 2003 when it produced 305 t of silver at a record low average total cash cost of US\$1.43/oz.

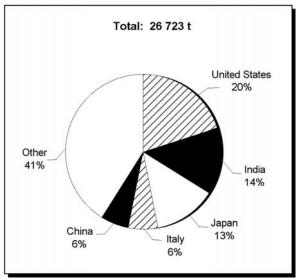
Coeur d'Alene Mines Corporation, based in Coeur d'Alene, Idaho, is the world's largest primary silver producer. In 2003, the company produced 441 t of silver at a cash operating cost of US\$3.27/oz of silver. Coeur owns and operates two of the largest silver mines in the United States, two expanding low-cost mines in southern Chile and Argentina, and two advanced development projects in Bolivia and Alaska.

USE

Since 1997, the last year when silver was reviewed in the *Canadian Minerals Yearbook*, world silver demand has increased by about 4%, in part due to increased use in industrial applications, while the increased popularity of digital cameras has led to declines in photographic demand. The United States, India and Japan continued to be the largest users of silver in 2003, representing about 20%, 14% and 13%, respectively, of total world demand (Figure 4).

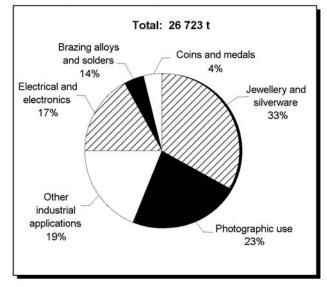
Silver used in silverware, jewellery and works of art as sterling silver (92.5% silver, 7.5% copper) and for silver plating accounted for over 33% of silver demand in 2003, while photographic films and papers accounted for 23% (Figure 5). Other industrial and decorative applications, including coatings on mirrors, a bactericide or algicide in water purification systems, and contacts, conductors and

Figure 4 Silver Use, by Country, 2003



Source: The Silver Institute.

Figure 5 World Silver Markets, 2003



Source: The Silver Institute.

batteries in the electrical and electronics industries, together represent the largest markets for silver at 36% in 2003.

The use of silver in coinage is now largely confined to numismatic coins and medallions representing about 4% of the market, while the production of brazing alloys and solders requires an additional 4%.

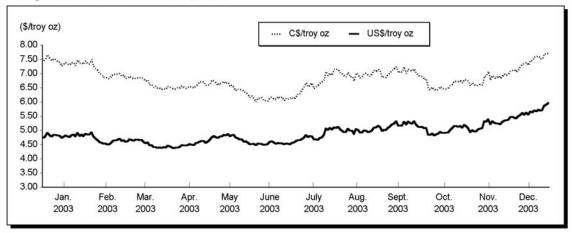
STOCKS

Silver stocks are held in a variety of forms ranging from consumer inventories (e.g., jewellery, coins, etc.) to bullion held by dealers, trading warehouses (such as Comex, Tokyo Commodity Exchange [Tocom], and the Chicago Board of Trade [CBOT]); government (e.g., the U.S. defense stockpile), banks, refiners, and others. Data from The Silver Institute indicate that the overall supply from aboveground stocks increased in 2003 by 441 t to reach 8198 t. Much of this increase was attributed to an increase in government sales.

PRICES

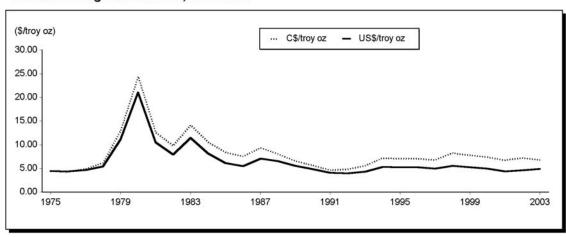
Silver prices outperformed those of gold in 2003, rising some 24%. Prices ranged from a low of US\$4.35/oz to a high of US\$5.98/oz and averaged US\$4.89/oz for the year (Figure 6). The most significant factors influencing downward pressure on silver prices in 2003 were: lower jewellery and silverware demand; lower photographic

Figure 6
Daily London Silver Fix Price, 2003



Source: The Silver Institute.

Figure 7 Annual Average Silver Price, 1975-2003



Source: The Silver Institute.

demand, largely reflecting a decline in the tourism industry and, to some extent, the trend towards digital photography; and higher supply from producer hedging. The upward pressure on prices came from overall higher industrial demand, higher investment demand, lower mine supply, and lower Chinese stockpile sales. Fabrication demand again exceeded the supply of silver from mines and scrap by about 85 million oz.

The decline in the value of the U.S. dollar against most international currencies coincided with an upsurge in the value of most metal commodities, including silver, in 2003. This translated into only slightly better silver prices overall, in Canadian dollar terms, at year-end compared to

prices at the start of 2003. Many analysts are forecasting continued weakness in the U.S. dollar for 2004, which in turn should translate into higher precious metal prices, including for silver. A better-than-expected economic performance in the U.S. economy, combined with higher interest rates, could, however, dampen the overall market enthusiasm for silver and weaken the strong investment fund buying of silver seen towards the end of 2003. On the more positive side, an increase in industrial demand in both China and the rest of the world as economic conditions continue to improve, coupled with lower Chinese silver stockpile sales, could translate into stronger prices in 2004.

OUTLOOK

Canadian mine production of silver is expected to remain relatively stable at around 1200 t/y during the next few years. Prices may vary considerably on a daily or monthly basis in the short and medium term depending upon speculative buying and selling by fund managers and others or if world events trigger an increase in investment demand. Prices are expected to trade in the US\$5.00-\$7.00/oz range over the coming year.

The outlook beyond 2004 looks promising for the silver market due to continuing investment demand and promising new applications of silver in industrial products. These range from new uses of silver as a biocide in medical and environmental products and as a catalyst in fuel cells and other technologies to use in flat-screen televisions and superconductors. As for the photographic industry, silver use is forecast to continue to decline, particularly in the important markets of Japan, North America and Europe as the use of digital technology increases. Last year also saw, for the first time, a drop in demand for radiographic film. Overall, the decline in developed countries has been offset, to some extent, by increases in the developing world using more conventional technologies and this trend is expected to continue, at least for the short to medium term. In terms of prices, the key factors that

will influence prices in 2004 will be fabrication demand, investment demand and government stock sales. While fabrication demand will continue to grow as the world economies continue to show strength, some forecasts pointing to slower growth toward the end of the year could dampen the price recovery seen in 2003. Fund investors and speculators will continue to play an important role in setting the silver price beyond what would otherwise be expected based on market fundamentals.

Notes: (1) For definitions and valuation of mineral production, shipments and trade, please refer to Chapter 64. (2) Information in this review was current as of June 25, 2004. (3) This and other reviews, including previous editions, are available on the Internet at www.nrcan.gc.ca/mms/cmy/com_e.html.

NOTE TO READERS

The intent of this document is to provide general information and to elicit discussion. It is not intended as a reference, guide or suggestion to be used in trading, investment, or other commercial activities. The author and Natural Resources Canada make no warranty of any kind with respect to the content and accept no liability, either incidental, consequential, financial or otherwise, arising from the use of this document.

TARIFFS

		Canada			United States	EU	Japan
Item No.	Description	MFN	GPT	USA	Canada	Conventional Rate (1)	WTO (2)
2616.10	Silver ores and concentrates	Free	Free	Free	Free	Free	Free
71.06	Silver (including silver plated with gold or platinum), unwrought or in semi-manufactured forms, or in powder form						
7106.10	Powder	Free	Free	Free	Free	Free	Free
7106.91	Unwrought	Free	Free	Free	Free	Free	Free
7106.92	Semi-manufactured Containing by weight 92.5% or more of silver:						
7106.92.11	In bars, sheets or plates	Free	Free	Free	Free	Free	Free
7106.92.19	Other	7%	Free	Free	Free	Free	Free
7106.92.21	Containing by weight 50% or more of copper	2.5%	Free	Free	Free	Free	Free
7106.92.22	Containing by weight less than 50% of copper	6.5%	Free	Free	Free	Free	Free
7107.00	Base metals clad with silver, not further worked than semi-manufactured	3%	Free	Free	Free	Free	Free

Sources: Canadian Customs Tariff, effective January 2004, Canada Border Services Agency; Harmonized Tariff Schedule of the United States, 2004; Official Journal of the European Union (October 30, 2003 Edition); Customs Tariff Schedules of Japan, 2003.

⁽¹⁾ The customs duties applicable to imported goods originating in countries that are Contracting Parties to the General Agreement on Tariffs and Trade or with which the European Community has concluded agreements containing the most-favoured-nation tariff clause shall be the conventional duties shown in column 3 of the Schedule of Duties. (2) WTO rate is shown; lower tariff rates may apply circumstantially.

TABLE 1. CANADA, SILVER PRODUCTION AND TRADE, 2001-03

Item No.		20	01	20	02	2003		
		(kg)	(\$000)	(kg)	(\$000)	(kg)	(\$000)	
PRODUCTION	(Shipments) (1)							
	Newfoundland and Labrador	329	72	232	54	143	31	
	New Brunswick	224 956	49 435	201 516	47 059	201 155	44 113	
	Quebec	238 776	52 472	252 705	59 012	230 252	50 494	
	Ontario	146 132	32 113	187 695	43 831	144 745	31 743	
	Manitoba	31 507	6 924	34 344	8 020	25 702	5 637	
	Saskatchewan	1 729	380	1 495	349	1 619	355	
	British Columbia	604 269	132 792	652 681	152 416	649 554	142 447	
	Yukon Northwest Tarritarias	880	193	517	121	397	87	
	Northwest Territories Nunavut	944 15 136	207 3 326	912 19 905	213 4 648	780 365	171 80	
	Total	1 264 659	277 916	1 352 002	315 723	1 254 712	275 158	
EXPORTS								
2603.00.81,	Silver contained in ores and							
2607.00.81,	concentrates							
2608.00.81,	Japan	121 965	28 983	_	_	290 426	62 403	
2616.10.81,	China	22 149	2 185	48 167	7 740	74 229	12 204	
2616.90.81	United States	7 547	4 277	4 624	4 380	2 544	1 854	
	Belgium	21 746	2 096	32 342	3 907	10 668	1 093	
	Poland	7 137	719	7 125	747	6 568	736	
	South Korea	224	27	_	-	3 522	697	
	Other	4 269	1 106	2 787	301	20 204	3 018	
	Total	185 037	39 393	95 045	17 075	408 161	82 005	
2603.00.81	Copper ores and concentrates; silver content	14 067	3 032	31 995	5 612	142 201	26 821	
2607.00.81	Lead ores and concentrates; silver content	29 842	3 693	35 029	4 598	17 345	2 093	
2608.00.81	Zinc ores and concentrates; silver content	25 579	2 421	23 380	2 482	41 422	5 856	
2616.10.81	Silver ores and concentrates; silver content	115 445	30 228	4 624	4 380	134 832	31 358	
2616.90.81	Precious metal ores and concentrates Other precious metal content; silver content	104	19	17	4	72 361	15 877	
7106.10	Silver powder	1 069	229	250	79	1 523	118	
7106.91	Unwrought silver	1 640 357	389 836	1 810 806	425 030	1 755 027	348 033	
7106.92	Silver semi-manufactured	44 239	8 969	43 039	9 585	15 640	3 250	
7107.00	Base metal or silver, clad with gold, not further worked than semi- manufactured	381	75	712	106	1 504	266	
	Total exports	2 056 120	477 895	2 044 897	468 951	2 590 016	515 677	
IMPORTS 2603.00.00.81,	Silver contained in ores and							
2604.00.00.81, 2607.00.00.81,	concentrates United States	164 700	33 290	122 604	25 110	334 731	42 741	
2608.00.00.81,	Peru	54 977	12 450	94 915	19 477	117 478	19 174	
2616.10.00.81,	Mexico	29 329	5 099	90 050	15 051	82 471	10 021	
2616.90.00.10	Australia	-	-	39 322	7 855	47 341	8 361	
	Chile	12 086	2 384	9 686	1 763	44 734	7 357	
	Brazil	12 740	1 776	14 531	2 448	18 656	3 090	
	Bulgaria	446	81	454	54	10 718	1 868	
	Bolivia	13 704	2 701	11 851	2 395	5 093	961	
	Netherlands	9 696	717	-	-	4 974	697	
	Germany	- -	_	999	179	2 886	622	
	Saudi Arabia	4 682	853		_	2 087	444	
	Argentina	1 879	328	674	156	1 586	186	
	Spain	3 073	463	233	48	821	153	
	Other	22 587	4 155	5 903	1 676	7 566	1 408	
	Total	329 899	64 297	391 222	76 212	681 132	97 083	

TABLE 1 (cont'd)

Item No.		200	2001		2002		2003	
		(kg)	(\$000)	(kg)	(\$000)	(kg	(\$000)	
IMPORTS (cont 2603.00.00.81	d) Copper ores and concentrates; silver content	75 400	16 410	64 565	13 852	81 638	14 494	
2604.00.00.81	Nickel ores and concentrates; silver content	-	-	696	169	-	-	
2607.00.00.81	Lead ores and concentrate; silver content	139 407	27 420	195 268	38 981	442 112	60 807	
2608.00.00.81	Zinc ores and concentrates; silver content	33 416	5 935	75 730	11 314	112 689	14 439	
2616.10.00.81	Silver ores and concentrates; precious metal content; silver content	54 863	11 312	54 962	11 896	44 688	7 343	
2616.90.00.10	Precious metal ores and concentrates: other; silver content	26 813	3 218	3		5	1	
7106.10	Silver powder	19 309	4 449	11 199	2 736	12 248	2 767	
7106.91	Unwrought silver	73 085	19 255	96 763	23 160	60 665	13 589	
7106.92	Silver semi-manufactured	67 684	13 250	103 626	22 433	58 410	11 361	
7107.00	Base metals clad with silver, not further worked than semi-manufactured	1 681	674	767	331	821	333	
	Total imports	821 557	166 220	994 801	201 084	1 494 408	222 217	

Sources: Natural Resources Canada; Statistics Canada.

Note: Numbers may not add to totals due to rounding.

TABLE 2. CANADA, SILVER PRODUCTION, TRADE (1) AND USE, 1988-2003

			Exports		Imports	Use (3)
	_	In Ores and	Refined		Refined	Refined
	Production (2)	Concentrates	Silver	Total	Silver	Silver
			(kilograi	ns)		
1988	1 443 166	448 069	1 144 120	1 592 189	107 970	457 698
1989	1 312 433	527 204	1 023 562	1 550 766	161 574	531 046
1990	1 381 257	624 756	1 269 760	1 894 516	123 035	579 407
1991	1 261 359	523 859	991 211	1 515 070	143 078	399 295
1992	1 168 968	420 196	1 054 957	1 475 153	155 472	364 470
1993	879 113	226 773	1 066 034	1 292 807	260 056	472 530
1994	740 342	146 685	1 097 226	1 243 911	198 022	421 345
1995	1 244 606	230 119	1 210 090	1 440 209	156 691	432 015
1996	1 242 846	388 243	1 438 036	1 826 279	98 393	410 730
1997	1 193 971	216 991	1 260 682	1 477 673	301 661	333 402
1998	1 140 238	149 445	1 624 769	1 774 214	235 444	334 857
1999	1 174 328	108 608	1 693 914	1 802 522	141 215	349 146
2000	1 168 630	182 635	1 595 040	1 777 675	151 624	395 712
2001	1 264 659	185 036	1 686 045	1 871 081	159 725	323 829
2002	1 352 002	95 045	1 854 806	1 949 851	210 512	309 026
2003 (p)	1 254 712	408 160	1 773 692	2 181 852	132 144	

Sources: Natural Resources Canada; Statistics Canada.

Nil;...Amount too small to be expressed.
 (1) Includes silver in crude bullion obtained directly from placer workings and lode gold mines, and recoverable silver in all types of ores and concentrates shipped.

^{..} Not available; (p) Preliminary.

⁽¹⁾ Beginning in 1988, exports and imports are based on the new Harmonized System and may not be in complete accordance with previous method of reporting. Ores and concentrates include HS classes 2603.00.81, 2607.00.81, 2608.00.81, 2616.10.81 and 2616.90.81. Refined silver includes HS classes 7106.10, 7106.91, 7106.92 and 7107.00. (2) Includes silver in crude bullion obtained directly from placer workings and lode gold mines, and recoverable silver in all types of ores and concentrates shipped. (3) In some years, includes only partial use of coinage. Note: Numbers may not add to totals due to rounding.

TABLE 3. WORLD MINE PRODUCTION OF SILVER, 1997-2003

	1997	1998	1999	2000	2001	2002	2003 (e)
EUROPE				(tonnes)			
Bulgaria	31.5	23.8	25.0	25.0	25.0	25.0	24.0
Greece	37.3	44.0	40.7	33.3	62.4	74.8	79.0
Ireland	12.3	10.8	15.3	25.1	19.3	4.5	20.0
Poland	1 084.2	1 143.7	1 160.4	1 164.7	1 232.3	1 343.0	1 377.0
Portugal	33.9	31.4	26.5	20.4	23.1	22.5	22.0
Romania	18.0	18.0	18.0	18.0	18.0	18.0	18.0
Russia	395.0	353.0	380.0	400.0	400.0	400.0	400.0
Spain	66.0	65.0	96.0	83.0	68.4	50.0	26.0
Sweden	304.0	299.1	341.6	328.7	306.0	320.8	307.0
Other Europe	59.4	48.0	18.8	19.9	16.7	17.6	22.0
Total Europe	2 041.6	2 036.8	2 122.3	2 118.1	2 171.2	2 276.2	2 295.0
AFRICA							
Morocco	261.0	307.0	277.9	289.0	280.7	276.7	253.0
Namibia	41.0	22.7	9.7	9.3	32.0	23.6	29.0
South Africa	153.1	144.5	152.0	144.1	109.6	113.1	106.0
Zambia	6.9	7.7	6.1	6.0	6.0	6.0	6.0
Zimbabwe	5.9	6.7	5.4	3.8	3.4	3.2	4.0
Other Africa	7.5	9.0	11.5	10.7	17.1	24.8	52.0
Total Africa	475.4	497.6	462.6	462.9	448.8	447.4	450.0
ASIA							
China	1 300.0	1 299.0	1 320.0	1 600.0	1 910.0	2 500.0	2 500.0
India	48.1	49.8	53.7	40.5	49.5	52.1	55.0
Indonesia	279.2	349.1	292.3	314.0	348.3	289.5	297.0
Japan	87.2	94.5	94.0	103.8	80.4	81.4	80.0
Kazahstan	389.6	535.8	645.6	855.0	755.8	700.0	711.0
Mongolia	21.0	21.0	21.0	21.0	21.0	21.0	34.0
North Korea	50.0	50.0	50.0	50.0	50.0	50.0	20.0
Philippines	20.7	18.2	17.6	23.6	29.6	8.8	7.0
Saudi Arabia	17.2	13.8	10.5	9.3	15.0	14.0	17.0
Turkey	90.0	87.0	90.0	193.0	112.0	100.0	113.0
Uzbekistan	50.0	50.5	61.1	60.0	60.0	60.0	53.0
Other Asia	31.6	40.1	36.7	32.4	31.2	33.7	111.0
Total Asia	2 384.6	2 608.8	2 692.5	3 302.6	3 462.8	3 910.5	3 998.0
AMERICAS							
Argentina	52.6	35.8	73.8	78.3	152.8	125.9	130.0
Bolivia	387.2	404.0	422.5	433.6	410.5	409.2	460.0
Brazil	10.0	10.0	10.0	10.0	7.3	8.0	7.0
Canada	1 224.0	1 195.9	1 246.4	1 212.4	1 320.0	1 400.9	1 309.0
Chile	1 091.3	1 340.2	1 380.7	1 242.2	1 348.7	1 210.5	1 300.0
Honduras	42.9	43.0	46.5	52.5	46.8	52.9	50.0
Mexico	2 679.1	2 686.0	2 467.0	2 620.5	2 760.0	2 747.0	2 600.0
Peru	2 090.3	2 024.6	2 231.0	2 145.2	2 353.0	2 686.6	2 775.0
United States	2 180.0	2 064.8	1 950.9	1 980.1	1 740.0	1 420.0	1 240.0
Other Americas	21.4	18.6	16.6	13.7	13.8	13.5	12.0
Total Americas	9 778.8	9 822.9	9 845.4	9 788.5	10 152.9	10 074.5	9 883.0
OCEANIA							
Australia	1 106.0	1 474.0	1 720.0	2 059.0	1 970.0	2 077.0	1 872.0
Papua New Guinea	49.2	59.3	66.5	79.2	69.4	63.3	63.0
New Zealand	31.7	22.7	24.3	22.9	27.1	28.7	30.0
Other Oceania	2.7	3.3	4.3	2.2	2.0	1.9	2.0
Total Oceania	1 186.9	1 556.0	1 810.8	2 161.1	2 066.5	2 169.0	1 965.0

Sources: Natural Resources Canada; International Consultative Group on Nonferrous Metals Statistics; The Silver Institute.

(e) Estimated.

TABLE 4. AVERAGE ANNUAL SILVER PRICES, 1975-2003

	Comex Spot Settlement	London Bullion Market
		(US\$/oz)
1975	4.42	4.43
1976	4.35	4.35
1977	4.62	4.63
1978	5.41	5.42
1979	11.11	11.07
1980	20.66	20.98
1981	10.50	10.49
1982	7.93	7.92
1983	11.43	11.43
1984	8.16	8.14
1985	6.15	6.13
1986	5.47	5.46
1987	7.02	7.02
1988	6.53	6.53
1989	5.49	5.50
1990	4.82	4.83
1991	4.04	4.06
1992	3.93	3.95
1993	4.30	4.31
1994	5.28	5.29
1995	5.19	5.20
1996	5.18	5.20
1997	4.87	4.90
1998	5.53	5.54
1999	5.22	5.22
2000	4.97	4.95
2001	4.36	4.37
2002	4.60	4.60
2003	4.89	4.85

Source: The Silver Institute.

TABLE 5. CANADIAN USE (1) OF UNMANUFACTURED SILVER, 1996-2002

			• • • • • • • • • • • • • • • • • • • 				
	1996	1997	1998	1999	2000	2001	2002
				(kilograms)			
Coinage	(a) x	(a) x	(a) x	(a) x	(a) x	(a) x	(a) x
Wire, rod and sheet	2 200	12 247	9 333	(a) x	(a) x	(a) x	(a) x
Sterling and electro- plating	21 154	911	805	835	858	800	1 090
Silver alloys	10 967	(a) x	(a) x	(a) x	(a) x	(a) x	(a) x
Chemicals - silver salts and others	(a) x	(a) x	(a) x	(a) x	(a) x	(a) x	(a) –
Other uses	(b) 376 409	(d) 320 245	(d) 256 486	(d) 348 310	394 854	323 029	307 935
Total	410 730	333 402	334 857	349 146	395 712	323 829	309 026

Source: Natural Resources Canada.

⁻ Nil; x Confidential.

⁽a) Included in "Other uses" to avoid disclosing confidential data. (b) Includes coinage and silver salts. (c) Includes silver salts.

⁽d) Includes coinage, silver salts, and silver alloys.

(1) Available data as reported by users. (2) Increase in number of companies being surveyed. Note: Numbers may not add totals due to rounding.