

Gold

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Canada's gold output increased by 2.6% to 169 t in 1997. Canada is the world's fourth largest gold producer behind South Africa, the United States and Australia. The value of Canadian gold shipments decreased by 3.6% to \$2.5 billion in 1997.

The average price of gold decreased to US\$328.41 per troy oz in 1997 from \$387.80/oz (London a.m. fix) in 1996. The price volatility was high with gold trading in a range of US\$367.80-\$283.05/oz, its lowest level in the past 18.5 years. In addition to fear of widespread central bank gold sales, the depressed gold price was caused mostly by the strengthening of the U.S. dollar and by Asia's stock market crisis. This sentiment encouraged speculators to bet on future price declines by selling gold they did not own and buying it back at a profit once prices fell.

Major central bank sales in 1997 were made by the Bank of The Netherlands (300 t), the Reserve Bank of Australia (176 t) and the Central Bank of Argentina (124 t). In addition, potential future sales by the Swiss National Bank by the year 2000, and by other European central banks before the creation of a single currency in 1999, could further erode market confidence. In early 1998, from January 1 to February 14, prices traded between US\$278.50 and \$304.50/oz.

Unless gold prices recover above \$340/oz before the end of 1998, Canada's gold production will likely decline below 150 t/y by the year 2000. Also because of this low gold price environment, it is expected that several companies will merge to improve their financial performance.

CANADIAN DEVELOPMENTS

There were about 42 primary gold mines operating in Canada at the end of 1997 accounting for 90.4% of the gold produced. The rest of the gold production came from base-metal mines (7.2%) and placer operations (2.1%). During 1997, three mines opened and eleven

closed, while others resorted to layoffs. In addition, several mine openings and expansions have been postponed until market conditions improve. Employment in primary gold mines in 1996 totalled 9406, compared to the 1995 level of 9472. Employment figures in the gold industry have been generally declining from their 1989 peak of 12 631.

British Columbia

British Columbia's gold production decreased by 5% to 17.2 t in 1997 from 18.1 t in 1996; its gold production is expected to remain stable until the end of the decade.

Royal Oak Mines Inc. plans to start production at the Kemess gold project in 1998 at a rate of 6.5 t/y. Kemess has reserves of 200 Mt grading 0.63 g/t gold and 0.22% copper. It will likely be the most important project to come on stream in Canada before the end of the decade.

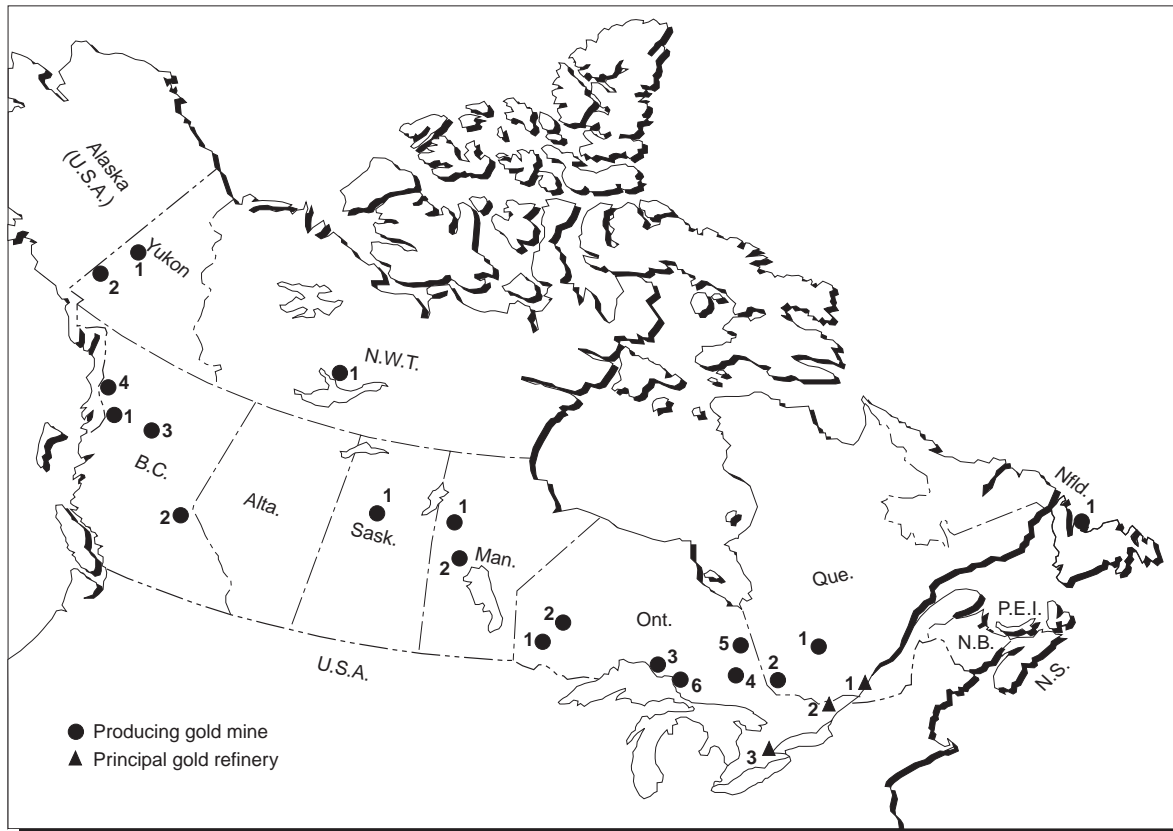
Imperial Metals Corporation and Sumitomo Corporation began production at the Mount Polley copper-gold project in 1997. Mount Polley has reserves of 81.5 Mt grading 0.4 g/t gold and 0.30% copper. Its gold production is expected to be at a rate of 2.7 t/y of gold.

North American Metals Corp. resumed production at the Golden Bear mine. Gold production at this heap leaching operation was estimated at about 1 t in 1997.

The Eskay Creek project of Prime Resources Group Inc. is British Columbia's largest gold producer with an output of 7.2 t in 1997. The ore at the Eskay Creek mine, which began production in 1995, is shipped to smelters in Japan and North America. Prime Resources has also completed the construction of a \$17 million 150-t/d milling facility at the Eskay Creek mine site. The mill would treat ore zones that are amenable to gravity and flotation concentration. Eskay Creek is one of the highest-grade deposits in the world with reserves of 1.3 Mt grading 63 g/t gold. Homestake Mining Company, which holds a 51% controlling interest in Prime Resources, is the mine operator at Eskay Creek.

Prime Resources also operates the Snip mine at a production rate of 4 t/y. Current reserves at the Snip mine are 0.2 Mt grading 26 g/t gold, representing 4.9 t of gold.

Figure 1
Primary Canadian Gold Mines and Principal Gold Refineries, 1997



PRIMARY GOLD MINES

Yukon

1. Viceroy Resources Corporation – Brewery Creek mine
2. B.Y.G. Natural Resources Inc. – Mt. Nansen mine

Northwest Territories

1. Royal Oak Mines Inc. – Giant and Super Crest mines
Miramar Mining Corporation – Con mine

British Columbia

1. Prime Resources Group Inc. – Eskay Creek mine
2. Imperial Metals Corporation/Sumitomo Corp. – Mount Polley mine
3. Cusac Gold Mines Ltd. – Table Mountain mine
4. Prime Resources Group Inc. – Snip mine
North American Metals Corp. – Golden Bear mine

Saskatchewan

1. La Ronge Area
Claude Resources – Seabee mine
Cameco Corporation/Uranerz Exploration and Mining Limited – Contact Lake mine

Manitoba

1. Black Hawk Mining Inc. – Farley Lake mine
2. TVX Gold Inc./High River Gold Mines Ltd. – New Britannia mine

Ontario

1. Red Lake Area
Placer Dome Inc. – Campbell mine
Goldcorp Inc. – Red Lake mine
2. Pickle Lake Area
Placer Dome Inc./TVX Gold Inc. – Musselwhite mine
3. Hemlo Area
Homestake Mining Company/Teck Corporation – Williams mine
Battle Mountain Gold Company – Golden Giant mine
Homestake Mining Company/Teck Corporation – David Bell mine
4. Timmins – Kirkland Lake Area
Placer Dome Inc. – Dome mine
Royal Oak Mines Inc. – Pamour, Hoyle and Nighthawk Lake mines
Kinross Gold Corporation – Hoyle Pond mine

Ontario (cont'd)

4. Timmins – Kirkland Lake Area (cont'd)
Kinross Gold Corporation – Macassa mine and Lake Shore tailings project
Barrick Gold Corporation – Holt-McDermott mine
Battle Mountain Gold Company/Teddy Bear Valley Mines Limited – Holloway mine
Exall Resources Limited/Glimmer Resources Inc. – Glimmer mine
5. Placer Dome Inc. – Detour Lake mine
6. River Gold Mines Ltd. – Eagle River mine

Quebec

1. Desmaraisville – Chibougamau Area
Campbell Resources Inc. – Joe Mann mine
2. Rouyn-Noranda – Val-d'Or Area
Barrick Gold Corporation – Bousquet mine
Agnico-Eagle Mines Limited – LaRonde mine
McWatters des Mines Inc. – Sigma and Kiema mines
Cambior inc./Aurizon Mines Ltd. – Sleeping Giant mine
Cambior inc. – Doyon and Mouska mines
Richmont Mines Inc. – Francœur mine
Western Quebec Mines Inc. – Joubi mine
Aurizon Mines Ltd. Louvem Mines Inc. – Beaufor mine

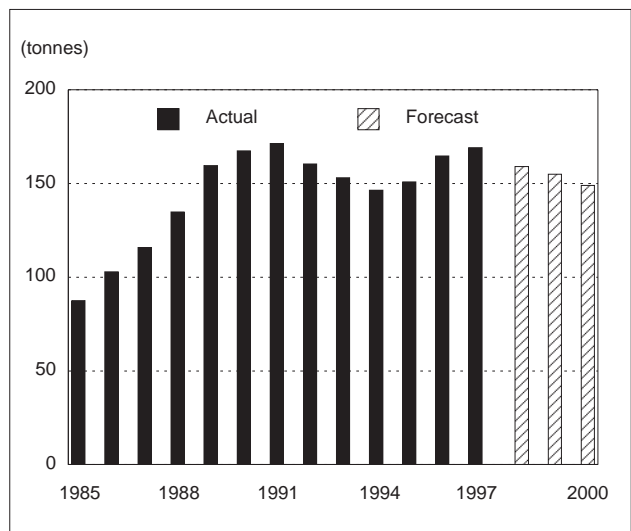
Newfoundland

1. Richmont Mines Inc. – Nugget Pond mine

PRINCIPAL GOLD REFINERIES

1. Noranda Inc., CCR Division
2. Royal Canadian Mint
3. Johnson Matthey Limited

Figure 2
Canadian Gold Production, 1985-2000



Source: Natural Resources Canada.

Kinross Gold Corporation announced that the QR mine will be put on care and maintenance starting March 1, 1998, due to high operating costs. Its production was 1.3 t/y.

Northwest Territories and Yukon

Gold production in the Northwest Territories (N.W.T.) and the Yukon increased by 11.7% from 18.2 t in 1996 to 20.3 t in 1997. However, future gold production in the N.W.T. is expected to decrease sharply following the announcement of the closure of the Colomac (4 t/y) and Lupin (5 t/y) mines, which are owned respectively by Royal Oak Mines Inc. and Echo Bay Mines Ltd. These mine closures are the result of high operating costs and the low price of gold.

A total of 900 jobs were lost in the N.W.T. as a result of these two mine closures and layoffs at Royal Oak's Giant mine (25) and Miramar Mining Corporation's Con mine (130). Operating costs in N.W.T. gold mines are particularly high due to high wages and high transportation and energy costs.

The Yukon's gold production increased by 51% to 6.8 t in 1997 following the commissioning of Loki Gold Corporation's Brewery Creek mine and B.Y.G. Natural Resources Inc.'s Mt. Nansen mine in 1996. The Yukon's remaining gold production of 3.6 t is derived from placer deposits.

Saskatchewan

Following the closure of Golden Rule Resources Ltd.'s Komis mine, there are currently two operating gold mines in Saskatchewan: Cameco Corporation's Contact Lake mine, and Claude Resources Inc.'s Seabee mine. Total production at these operations reached 4.1 t in 1997, a 26.3% increase over 1996.

As a result of ore reserves depletion, the Contact Lake mine is expected to close in the middle of 1998; its production in 1997 was 1.6 t.

Manitoba

Manitoba's gold production increased by 33.9% in 1997 to 8.1 t following a full year of production at the New Britannia gold mine of TVX Gold Inc. and High River Gold Mines Ltd., and an increase in production at Black Hawk Mining Inc.'s Farley Lake mine in the Lynn Lake area.

Elsewhere, REA Gold Corporation's Bissett gold mine, which opened in July 1997, closed in November due to high operating costs and the low gold price. Bissett's target production was initially planned to be nearly 3 t/y of gold.

Ontario

Ontario's gold production increased by 5% to 78.8 t in 1997, compared to its 1996 level of 75.1 t. The increase in Ontario's production in 1997 was mainly due to the opening of the Musselwhite mine of Placer Dome Inc. (68%) and TVX Gold Inc. (32%). The Musselwhite mine, which is located in northwestern Ontario, has a production capacity of 6 t/y.

The Glimmer mine of Exall Resources Limited and Glimmer Resources Inc. started production in April 1997. Its output is expected to be 2 t/y.

The three mines in the Hemlo area accounted for 37.3% of Ontario's total gold production in 1997.

Several project expansions have been postponed due to the low gold price. These projects include Royal Oak's plan to significantly expand its production in the Timmins camp, and Echo Bay Mines Ltd.'s intention to bring on stream the Aquarius mine near Timmins. These two expansion projects were supposed to increase the Timmins camp's annual production by nearly 11 t.

As a result of the low gold price and reserve depletion, Placer Dome Inc. announced that the Detour Lake mine will close in the middle of 1999. Its current rate of production is approximately 3.8 t/y.

Barrick Gold Corporation closed its Golden Patricia mine near Pickle Lake due to the depletion of economic ore reserves. Its annual gold production was 1.7 t.

Ontario's output of gold is expected to remain relatively stable at around 75 t/y until the end of the decade.

Quebec

Quebec's gold production decreased 9% from 41.1 t in 1996 to 37.4 t in 1997.

In January 1997, TVX Gold Inc. and Golden Knight Resources Inc. announced the closure of the Casa Berardi mine due to high operating costs. Gold production at the Casa Berardi complex was approximately 2.4 t in 1996. Its owners are currently looking for buyers for the operation.

Other closures in 1997 included MSV Resources Inc.'s Copper Rand and Portage mines, Battle Mountain Gold Company's Silidor mine, and Lithos Corporation's Wrightbar mine.

Inmet Mining Corporation brought the Troilus project on stream at the end of 1996. This project, located 150 km north of Chibougamau, has reserves of 49 Mt grading 1.34 g/t gold. Its gold production is expected to reach 5 t/y.

Also during 1997, the Kiena and Sigma mines near Val-d'Or were acquired by McWatters Mining Inc. from Placer Dome Inc. for a price of US\$55 million.

Newfoundland

Royal Oak Mines Inc. closed the Hope Brook mine in September 1997. The Hope Brook mine had a production level of 3 t/y of gold.

Also in Newfoundland, Richmond Mines Inc. began production in 1997 at the Nugget Pond mine at a rate of 1.3 t/y of gold.

WORLD DEVELOPMENTS

South Africa

Despite a 2% decline in production, South Africa remained the world's largest gold producer in 1997 with an estimated output of 485 t. South Africa's share of world production was estimated at 20% in 1997, compared to approximately 66% in 1970.

South Africa has moved from being the lowest-cost gold producer in 1985 to being one of the highest-cost producers. Cash costs in South Africa in 1985 were approximately US\$147/oz, while cash costs at other major Western World producers averaged about \$200/oz. However, by 1997, South Africa had a cash cost of \$310/oz, compared to the average Western World cost of \$263/oz.

In South Africa, wages represent more than 50% of total production costs. In order to improve South Africa's world competitiveness, the National Union of Mineworkers (NUM) and the Chamber of Mines accepted the principle of a link between wage increases over the next two years and productivity improvements.

Anglo American Corporation of South Africa Limited is the world's largest gold producer with total production of 226 t in 1996.

Gold Fields of South Africa Ltd. and Gencor Ltd., which were respectively the world's third and eighth largest gold producers in 1996, announced their plan to merge to form Goldco and become the world's second largest gold producer.

Despite the fact that South Africa accounts for 40% of the world's identified gold reserves, its gold industry faces major difficulties due to declining ore grades (grades declined from 13 g/t gold in 1973 to around 5 g/t in 1997), the extreme depth of gold reserves (an average depth of 2500 m), and intensifying competition from low-cost producing countries.

It is expected that, in order to remain competitive, some South African operations will have to close, thereby reducing the employment level in gold mines, which is currently higher than 300 000 employees.

Because some major projects are scheduled to come on stream before the year 2000, South Africa's gold production level is expected to remain above 425 t/y until the end of the decade.

United States

Gold production in the United States in 1997 increased by 10 t to around 340 t. U.S. gold production has experienced a decade of rapid growth from its 1985 level of 80 t. The United States is the world's second largest gold producer behind the Republic of South Africa.

According to the U.S. Geological Survey, 25 mines yielded about 75% of the gold produced in the country. The state of Nevada was the leading producer with several heap leaching operations accounting for about two thirds of U.S. production. The other major producing states are California and Montana.

In 1997, Amax Gold Inc. began production at the Fort Knox mine in Alaska at a rate of 11 t/y.

Newmont Gold Corporation became the United States' largest gold producer following its acquisition of Santa Fe Pacific Gold Corp. In 1997, Newmont's gold production in the United States increased from 53 t to 93 t.

Placer Dome Inc. (60%) and Kennecott Minerals Company (40%) own the Cortez mine, which hosts total reserves of 50 Mt grading 2.7 g/t gold and resources of 50 Mt grading 1.5 g/t gold, representing over 200 t of gold. Placer Dome announced that once the Cortez mine is in full production, it will produce nearly 18 t/y of gold at a cash operating cost of US\$115/oz for an estimated period of 12 years.

The announcement by Pegasus Gold Inc., whose annual U.S. gold production is about 13 t, that it will file for reorganization under Chapter 11 of Bankruptcy Protection, which will likely result in mine closures.

Echo Bay Mines Ltd. and Homestake Mining Co. announced their plans to scale back production at their McCoy Cove mine in Nevada and Homestake gold mine in South Dakota, respectively. These announcements will result in a total production reduction of approximately 10 t.

After a period of substantial growth, gold production in the United States is expected to decline to approximately 300-310 t/y by the end of the decade.

Australia

Australia's gold production increased by 5% to an estimated level of 304 t in 1997. Its gold production has shown a spectacular increase over the past 11 years from its 1985 level of 59 t. The growth in Australia's gold industry was made possible by the success of its mining companies continuing their underground operations once their open-pit reserves were exhausted. Australia's gold production is derived mainly from Western Australia (75%), Queensland (12%), the Northern Territory (7%), and New South Wales (3%).

Australian gold mines, which had an estimated cash cost of around US\$270/oz in 1997, were the world's second highest-cost producer behind South Africa (\$310/oz). However, the use of forward sales has shielded the industry from declines in the price of gold and has enabled higher-cost producers to maintain and, in some cases, expand output.

Placer Dome Inc. acquired the 24.6% publicly owned shares of its subsidiary, Placer Pacific Limited, through a takeover bid. Placer Pacific produced 25 t of gold in 1996 from its operations in Australia and Papua New Guinea.

In New South Wales, Newcrest Mining Limited plans to bring the Cadia Hill mine on stream in September 1998 at a cost of A\$400 million. Cadia Hill, which is scheduled to produce 9 t/y, has reserves of 200 Mt grading 0.74 g/t gold and 0.17% copper.

GoldCorp was set up by the Western Australian government to produce a series of Australian Nugget bullion investor coins. The coins come in denominations of two ounces, ten ounces and one kilogram. GoldCorp is Australia's largest gold refiner with a capacity of 150 t/y.

Asia and Pacific Rim Countries

In addition to being prolific regions for gold production, Asia and Pacific Rim countries are very significant gold consumers.

China

China produced 167 t of gold in 1997, an increase of approximately 10% over the 1996 total. According to the Gold Administration Bureau of the Ministry of

Metallurgical Industries (MMI), the four largest provinces that account for 55% of Chinese gold production are Shandong, Henan, Hebei and Shanxi.

It is reported that the majority of China's 600 mines produce less than 0.3 t/y of gold each, while 40 operations produce more than 0.3 t/y each. The majority of China's production is derived from lode deposits (75%); the balance of output is 15% from placer deposits (mainly from the Heilongjiang Province), and 10% as a by-product of base-metal deposits (primarily copper mines from the Jiangxi and Anhui provinces).

The main government organization dealing with gold production is the China National Gold Corporation (CNGC), which accounts for 10% of China's gold production. The CNGC reports to the MMI's Gold Administration Bureau, which has responsibility for overall policy formulation, management, monitoring and coordination.

To become more attractive to foreign investment, China amended its Mineral Resources Law in the summer of 1996, and its regulations on the Management of Foreign Investment in Exploration and Exploitation of Mineral Resources in 1995. However, several factors prevent China from increasing its gold production faster. By law, gold producers have to sell their entire production to the People's Bank of China (PBOC).

As another measure to encourage growth in its gold production, China announced in 1993 that foreign companies will be allowed to engage in gold mining in the country. China has made available to foreign companies a number of low-grade deposits with refractory ore grading less than 3.5 g/t gold.

Currently, about 10 mineral exploration companies are active in China. Several of these companies are attracted by the good potential of the Xingjiang Province in northwestern China, which is adjacent to mineral-rich C.I.S. countries.

After more than three years, Vancouver-based Asia Minerals Corp. and Zhaoyuan Gold Industrial Group received all the necessary government approvals from Chinese authorities to form a joint venture. Yingezhuang became the first foreign joint-venture gold mining company to be legally approved and legally incorporated in China since gold industry reforms were initiated in 1993. However, a dispute by Asia Minerals and its Chinese joint-venture partner, the Zhaoyuan Gold Industrial Group, may lead to the termination of the joint venture.

Should gold prices remain weak, China, which currently faces increased production costs, may experience some difficulties in maintaining its production level above 150 t/y by 2000.

According to the World Gold Council, current gold consumption in China is around 0.2 g/y per person

compared to 8 g/y in Taiwan. The average annual salary for citizens living in the largest 100 cities in China is US\$500. As this figure increases, so should gold demand.

China mints 99.9%-pure gold and silver Panda coins. According to the China Gold Coin Corporation, gold coin sales are estimated at 3 t/y. The gold coins are available in five sizes ranging from one ounce to one twentieth of an ounce.

Indonesia

Indonesia's gold output increased by 3 t to 91 t in 1997. Its gold production is likely to continue to grow at a rapid pace.

The bulk of Indonesia's production is from Freeport McMoRan Copper & Gold Inc.'s Ertsberg/Grasberg copper-gold mine. After expanding its daily milling capacity from 71 000 t to 115 000 t, the company is planning a further expansion to a possible 190 000 t/d. Gold production by Freeport McMoRan was around 60 t in 1997. Proven and probable reserves stand at 2 billion t grading 1.18 g/t gold, 3.8 g/t silver and 1.19% copper. The precious metal content of the ore represents 1720 t of gold and 3691 t of silver.

Newmont Gold Corporation's Minahasa mine, which was commissioned in 1996, is expected to produce around 4.5 t/y of gold for a period of 13 years. In addition, Newmont announced that the Batu Hiau copper-gold project has reserves of 450 t of gold. When in production by 1999, the US\$1.9 billion mine will produce in excess of 15 t/y of gold as well as significant copper values. Batu Hiau is owned by Newmont Gold (45%), Sumitomo Metal Mining Co., Ltd. (35%) and an Indonesian partner (20%).

Other producing mines in Indonesia include Rio Tinto Limited's Kelian mine, which produces around 10 t/y of gold.

Papua New Guinea

Papua New Guinea's (PNG) gold production in 1997 increased by 10% to 58 t. Its gold production, which peaked in 1992 at 71 t, is expected to recover to 70 t/y by 1998 once the Lihir mine reaches full production.

Initial production at the Lihir gold mine began in the middle of 1997 at a rate of 19 t/y. Total development costs at Lihir were US\$670 million. The mine is owned by Lihir Gold Ltd. (22.5%) and Niugini Mining Ltd. (17%), as well as by Orogen Minerals, the PNG government and the land-owners of Lihir Island, each with an 8.5% share. The balance of Lihir Gold Ltd. shares is held by institutional investors and the general public. Lihir has mineable reserves of approximately 100 Mt grading an average of 3.25 g/t gold. Its cash operating cost is projected to be US\$214/oz for the first five years of the project.

Production from the Porgera gold mine declined from 27 t in 1996 to 22 t in 1997 mainly because of a drought. Porgera's proven and probable reserves are 70 Mt grading 4.5 g/t gold, representing around 300 t of gold. Following the acquisition of Highlands Gold Limited by Placer Dome Inc., the mine is now owned by Placer Dome Inc. (50%) (the operator), Renison Goldfields Consolidated Ltd. (25%) and the government of PNG (25%).

The OK Tedi gold-copper mine is owned by The Broken Hill Proprietary Company Limited (52%), Inmet Mining Corporation (18%) and the PNG government (30%). The mine has reserves of 300 Mt grading 0.9 g/t gold and 0.87% copper, and a production capacity of 15 t/y of gold.

Placer Dome Inc. announced that mining of its 80%-owned Misima mine will cease during 1999 due to high operating costs. However, milling of ore stock-piles is expected to continue until the year 2000. Misima's 1997 gold production was 6.7 t.

Commonwealth of Independent States

Gold production in the C.I.S. was estimated to be 250 t in 1997. The general decline in production from a peak of over 285 t in 1989 is largely attributed to the exhaustion of some placer deposits (particularly in Russia) and a shortage of hard currency to develop new mines. About 20% of the C.I.S.'s annual gold production is believed to originate as a by-product from base-metal operations, particularly copper.

As a result of foreign investment, gold production in the C.I.S. is expected to remain stable over the next few years, even though there will be a further decline in placer gold production in Russia.

Russia

Russia's gold production in 1997 was reported to have decreased by 2 t to 120 t. Currently, Russia's production originates mostly from the Far East (62%), East Siberia (24%) and the Ural mountains (12%). The decreased Russian production can be attributed principally to declining reserves at several alluvial operations, high taxes that average 60%, and late payments by central authorities. Other problems include high import taxes for machinery and a shortage of funds for geological surveys.

About 80% of Russia's gold production comes from placer deposits, but these deposits account for only 20% of the total proven reserve base. As gold reserves are generally concentrated in large low-grade deposits, Russia's gold production will likely continue to decline in the medium term.

In August 1996, the functions of the former Russian Federation Committee on Precious Metals and Precious Stones (Roskomdragmet) were split between

the Ministry of Finance and the Ministry of the Economy. Roskomdragmet's policy functions pertaining to production and refining processes were transferred to the Ministry of the Economy. Other responsibilities such as assaying and the sale and uses of precious metals and stones became functions of the Ministry of Finance. Organizations that report to the Ministry of Finance include the Central Bank of Russia and Gokhran. The Ministry of Finance has the right of first refusal to purchase precious metals bullion from mining companies.

Russia's gold output is produced by state-owned enterprises and by private enterprises and cooperatives known as Artels. There are about 350 producers with various forms of ownership, including 200 Artels that generally operate small placer deposits. Artels account for approximately 60% of Russia's total gold production originating mostly from Magadan, Yakutia and Chita.

U.S.-based Amax Gold Inc. brought on stream the Kubaka gold project in the Magadan region in 1997 at a cost of US\$228 million. Amax Gold Inc., which owns 50% of the Omolon Mining Company, plans to produce 10 t/y at Kubaka for a period of seven years. In February 1998, Amax Gold Inc. and Canadian-based Kinross Gold Corporation announced their plan to merge.

Star Mining Corp. of Australia has an option to earn a 35% interest in the LenaGold Company and the Sukhoi Log project in eastern Siberia. Sukhoi Log, with estimated reserves of 400 Mt grading 2.6 g/t gold and potential production of 50 t/y, is reported to be one of the largest undeveloped gold deposits in the world.

Natural Resources Canada conducted a survey of 17 mining and exploration companies that are involved in the gold (15), silver (1) and diamond (1) sectors of Russia. A total of around \$225 million was spent from 1995 to 1997 by Canadian companies on Russian projects. The major areas of expenses incurred by Canadian companies were in exploration, feasibility studies, developments, and the acquisition of a Russian joint-venture partner.

Uncertainty about Russia's legal framework and the jurisdictional conflicts between local and central authorities make the present investment climate there unattractive. However, the enormous undeveloped potential of Russia, coupled with its high need for foreign investment, is expected to encourage authorities to make Russia's legal framework more attractive for foreign investment in mining. According to Russian government sources, Russia's gold mining industry would require more than US\$5 billion to build or upgrade approximately 30 mining and milling complexes in the next four years.

Uzbekistan

Uzbekistan's gold production in 1997 increased by 2 t to 73 t.

The Muruntau low-grade open-pit mine was commissioned in 1969 and is reported to have an annual production of 55 t. The mine treats about 20 Mt/y of ore grading 3 g/t gold.

Production at the Zarafshan tailings retreatment joint venture at Muruntau, which began operating in 1996, achieved an output of 14 t in 1997. The Zarafshan joint venture is owned by Newmont Gold (50%), as well as the Uzbek State Committee of Geology and Mineral Resources and Navoi Mining and Metallurgical Combinat each with a 25% share. The joint venture plans to process Muruntau gold tailings with reserves of 150 t of gold over a 16-year period.

Kazakstan

Kazakstan's 20-t/y gold production is derived mostly from the Ust-Kamenogorsk base-metal operation and the Tselinny mining and chemical plant slag heaps.

No final decision has yet been reached regarding the privatization of the Vasilkovskoye gold deposit. Vasilkovskoye has a geological resource of 138 Mt grading 3 g/t gold.

Kyrgyzstan

Kyrgyzstan's gold production, which was almost exclusively derived from the 3-t/y Machmal mine, increased to nearly 20 t as a result of the production start-up of the Kumtor mine in 1997.

The Kumtor mine is owned by Cameco Corporation (33%) and the Kyrgyzstan government (67%). Production at the US\$450 million open-pit gold project started in January 1997 at a rate of 15.6 t/y for a period of 11 years. Kumtor has total estimated reserves of 500 t of gold, of which 211 t are amenable to open-pit mining. Grades at Kumtor are 3.9 g/t gold, and its cash operating cost is approximately US\$160/oz.

Africa

Following important investments by international development agencies and local governments in geo-science activities, as well as the revision of mining codes and investment laws, increased attention is being devoted to gold exploration in African countries.

Ghana

Ghana's gold production has more than tripled in the past seven years from 17 t in 1990 to 54 t in 1997. Ghana's gold output could exceed 60 t/y by the end of the century due to its good mineral potential and a liberalization of the country's mining laws.

Gold production in 1997 at Ashanti Goldfields Company Ltd.'s Oabusi mine was expected to total 25 t. Production at the Oabusi gold mine is derived from underground, open-pit and tailings retreatment

operations. Total reserves at the mine are 90 Mt grading 7.1 g/t gold. Ashanti Goldfields is owned by Lonrho Plc (41.3%) and the Ghana government (31.3%), with institutional and private investors owning the remainder. Ashanti Goldfields also operates the Iduapriem (6 t/y), Ayanfuri (1 t/y), and Bibiani deposits in Ghana.

Gold Fields of South Africa Ltd. announced a production increase at the Tarkwa mine complex. In addition to the current underground operation that produced 1.4 t of gold in 1997, Goldfields will commission an open pit that will increase production from its current level to 9 t/y by the year 2000. The total resource at Tarkwa is 286.6 Mt grading 1.4 g/t gold.

Mali

Production at Randgold Exploration Ltd.'s Syama mine in Mali was estimated at 3.5 t in 1997. The other owners are the government of Mali (20%) and the International Finance Corporation (IFC) (15%). According to Randgold, production at Syama could increase to 6 t/y within two years.

Anglo American Corporation of South Africa Limited started production at the Sadiola gold mine in early 1997. Production at Sadiola is expected to increase from its 1997 level of 11 t to 15.5 t in 1998. Its reserves are estimated at 50 Mt grading 2 g/t gold. Anglo American Corporation and International African Mining Gold Corporation (IamGold) each own 38% of the project, while the government of Mali and the IFC own 18% and 6%, respectively.

Latin America and Mexico

Currently, there are several foreign companies pursuing gold mining projects in Latin America, particularly in Brazil, Chile, Peru, Mexico and Argentina. A number of state-owned enterprises in Peru and Venezuela are currently in the process of being privatized. Because of these factors, South America's gold output could increase from its 1997 level of nearly 300 t to around 350 t/y by the end of the decade.

Peru

In 1997, Peru became Latin America's largest gold producer with an output of 77 t. According to officials of the Energy and Mines Ministry of Peru, its production could rise to 100 t/y by the year 2000. The portion of Peru's gold production that was derived from placer operations was around 20 t.

The Yanacocha open-pit heap leaching mine of Newmont Mining Corporation (38%), Compania Minera Condessa (32.3%), Bureau de Recherches Géologiques et Minières (BRGM) (24.7%) and the International Finance Corporation (IFC) (5%) remained South America's largest gold mine in 1997 with a production level of 43 t at a cash operating cost of US\$95/oz. Total reserves at Yanacocha are estimated at around 400 t of gold.

Barrick Gold Corporation is expected to start production at the Pierina mine in 1999. The heap leaching operation is expected to have a production capacity of 23 t/y at a cash cost of US\$50/oz.

Brazil

Brazil's 1997 gold production was expected to have declined by 4 t to 60 t. Mining companies accounted for approximately 65% (40 t) of production in 1996, while the Garimpeiros' share of output continued to decline to 35% (24 t).

The sharp decline in the Garimpeiros' production from its peak of 90 t in 1989 is mainly due to the depletion of easily accessible alluvial gold deposits, more stringent environmental regulations, and restricted land access to certain regions, particularly in the Amazon. The number of Garimpeiros, which was estimated at one million in 1989 when Brazilian gold production peaked at 101 t, has declined to less than 300 000 in 1997.

Production by the Companhia Vale do Rio Doce (CVRD), Brazil's largest gold producer, was expected to reach 20 t in 1997. CVRD plans to increase its production to around 30 t/y by the year 2000. Currently, the Igarape Bahia mine is the company's largest gold mine with an output of 10 t of gold in 1997. To achieve its objective of producing around 30 t/y by the year 2000, CVRD plans to bring on stream its newly discovered Serra Leste project, which is reported to contain 150 t of gold.

TVX Gold Inc. owns portions of two Brazilian operations. It has a 50% share in the Crixas mine and a 49% share in the Brasilia mine, which is the second largest gold operation in Brazil. TVX and its partner Rio Tinto Limited are investing US\$65 million to increase production at Brasilia to 8 t/y starting in 1998.

Chile

Chile's 1997 gold production decreased by 5 t to around 52 t. Approximately 6 t, or 15%, of Chile's gold production was as a by-product of copper mining.

Barrick Gold Corporation announced the closure of the El Indio and Tambo mines due to high operating costs. El Indio and Tambo produced a total of around 6 t in 1997. Barrick also announced that the Pascua mine will produce an estimated 25 t/y of gold starting in 2001.

Teck Corporation and Anglo American Corporation announced that they will produce around 10 t/y of gold at the Lobo-Marte mine by the year 2000.

Placer Dome Inc. reached an agreement with Bema Gold Corporation and Arizona Star Resources Corp. for the right to acquire a 51% interest in the Cerro Cassale gold-copper project in northern Chile. According to a prefeasibility study by Bema Gold and Arizona Star, Cerro Cassale could produce an esti-

mated 27 t/y of gold over a 16-year period. Placer Dome is expected to spend US\$40 million over the next two years on this project.

Mexico

Gold production in Mexico increased to 26 t in 1997. As with other Latin American countries, Mexico's gold production outlook is fueled by foreign investment.

Currently, Industrias Penoles SA de CV is Mexico's largest gold producer with an output of 7 t/y. The La Cienega mine is Mexico's largest gold mine with an estimated output of 3 t/y.

Several projects are also expected to come on stream within the next few years. Metallica Resources Inc. and Cambior inc. are currently finalizing the feasibility study at the Cerro San Pedro gold-silver project.

Given the current depressed gold price, Placer Dome Inc. announced the deferral of its 70%-owned Mulatos property in Sonora State.

Venezuela

Venezuela's gold production, estimated at 20 t in 1997, was mostly attributed to placer mining by several small private miners. State-owned Minerven is currently Venezuela's largest gold producer with an estimated output of 7 t/y.

Minera Las Cristinas (MINCA), which is 70% owned by Placer Dome Inc. and 30% owned by state-owned Corporacion Venezolana de Guyana, announced that construction at the Las Cristinas gold mine will be delayed until the Supreme Court of Venezuela ratifies its decision of July 15, 1997, regarding ownership of the deposit. MINCA, which discovered Las Cristinas in 1992, has spent a total of US\$110 million on this project to date. Total proven and probable ore reserves at Las Cristinas are 326 Mt grading 1.1 g/t gold. Once in production, the Las Cristinas mine is expected to produce 15 t/y of gold.

Argentina

Argentina's gold production should grow to around 20 t/y from its current level of 1 t/y. This production increase is the result of the production start-up in 1997 of the Bajo de la Alumbrera copper-gold project of M.I.M. Holdings Limited (50%), North Limited (25%) and Rio Algom Limited (25%). According to feasibility estimates, this mine has reserves of 581 Mt grading 0.67 g/t gold and 0.52% copper. The project is expected to have an average production level of 20 t/y over a 20-year period.

Amsa, a subsidiary of Anglo American Corporation and Perez Companac, is expected to bring the Cerro Vanguardia mine on stream in 1998. The US\$180 million project is expected to produce 6.5 t/y of gold.

Guyana

Production at the Omai gold mine in 1997 was 11 t. Total reserves at Omai are 54 Mt grading 1.4 g/t gold. Omai Gold Mines Limited is owned by Cambior (65%), Golden Star Resources Ltd. (30%) and the Guyana government (5%).

CONSUMPTION AND USES

Total world fabrication demand for gold in 1997 increased by about 14% to reach 3750 t. Gold jewellery demand has doubled in the past 10 years, and it exceeded total world production of gold by 800 t in 1997. World gold jewellery manufacturing increased by about 15% to 3200 t in 1997.

Other important sectors where gold is in demand include electronics, dentistry and coinage. World demand from the electronics sector in 1997 increased by around 11% to 200 t. Japan accounts for nearly 40% of fabrication in this sector. Demand for coinage increased by 23% from 63 t in 1996 to 77 t in 1997. The coinage market is subject to volatility from gold speculative trends and commemorative coin issues. Dentistry fabrication was stable at around 60 t, with Japan accounting for 28% of that market.

India is by far the world's largest and fastest-growing consumer of gold with an increase of 45% to reach 745 t in 1997. Other major gold consumers include the United States, 377 t (+9%), and China, 214 t (+3%). Significant consumption increases also took place in Turkey (+32%) and the Gulf States (+21%).

The future growth in Asian countries is being dampened by the Asian monetary crisis. Other factors that also influenced the gold price negatively in 1997 were the strength of the U.S. dollar, and speculation and forward sales by gold producers. It is reported that, as a result of the Asian financial crisis and the resulting liquidity problems faced by countries such as the Republic of Korea (South Korea) and Indonesia, several tonnes of gold originating mostly from the jewellery sector were melted to generate foreign exchange earnings. Major decreases in gold consumption were registered in Japan, 130 t (-23%); the Republic of Korea, 114 t (-9%); and Indonesia 94 t (-28%).

Canada's gold fabrication demand increased to around 33 t in 1997 from 25 t in 1996. The increase was attributable to a major increase in sales of gold Maple Leaf coins from 6.8 t in 1996 to 16.7 t in 1997. Apart from coin production, gold fabrication demand in Canada in 1997 was for jewellery, 15 t; electronics, 0.5 t; and dentistry and other industrial uses, 0.5 t. It is estimated that jewellery consumption in Canada stood at 20 t in 1997.

The Royal Canadian Mint produces the gold Maple Leaf bullion coins. Since its introduction in 1979, the Maple Leaf coin program has consumed some 527 t of

gold, or 23.3% of total Canadian gold production during that period. In 1997, the gold Maple Leaf coin ranked second in terms of world sales behind the U.S. Eagle coin.

OUTLOOK

The world's current economic growth, low inflation rates, and the relative stability of its political climate should help gold fabrication demand growth continue in the future. The record gap between fabrication demand and production of 800 t in 1997 was, however, hindered by the threat of gold sales by central banks and by private sales. It is expected that 1998 will be a decisive year for the role of gold in the future European Central Bank because of the anticipated creation of the European Monetary Union in 1999. In the short term, the fear of widespread central bank sales, particularly from European countries, will continue to sustain a negative market sentiment. With total central bank gold holdings of over 34 000 t, representing approximately 25% of all the gold that has ever been produced, the role of gold as a monetary instrument needs to be redefined.

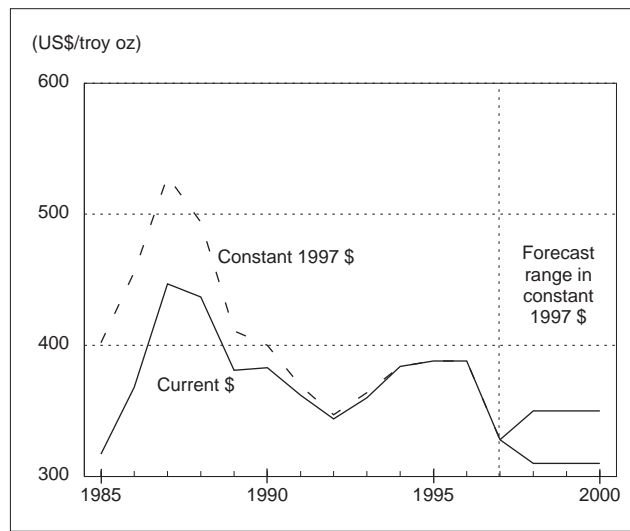
In addition, a plan by the Swiss National Bank to sell over half of its gold reserves of 2600 t to create a fund to compensate the victims of the Holocaust and other humanitarian causes is expected to dampen future price increases. In order for this to take place, the gold sales will ultimately have to be approved via a national referendum.

In 1998, a 1% increase in total gold fabrication demand is anticipated, with the jewellery sector being responsible for most of that growth. The current low real interest rates are positive for the gold market.

In 1998, an average gold price of US\$310/troy oz is forecast, compared to \$331/oz in 1997 and \$388/oz in 1996. In the medium term, the combined effect of increased demand for gold products, particularly in the jewellery sector, along with a 1-2% decrease in world gold production, should result in some strengthening in the price of gold. For the years 1999 and 2000, an average annual gold price of between US\$310 and \$340/oz (in constant 1997 dollars) is forecast.

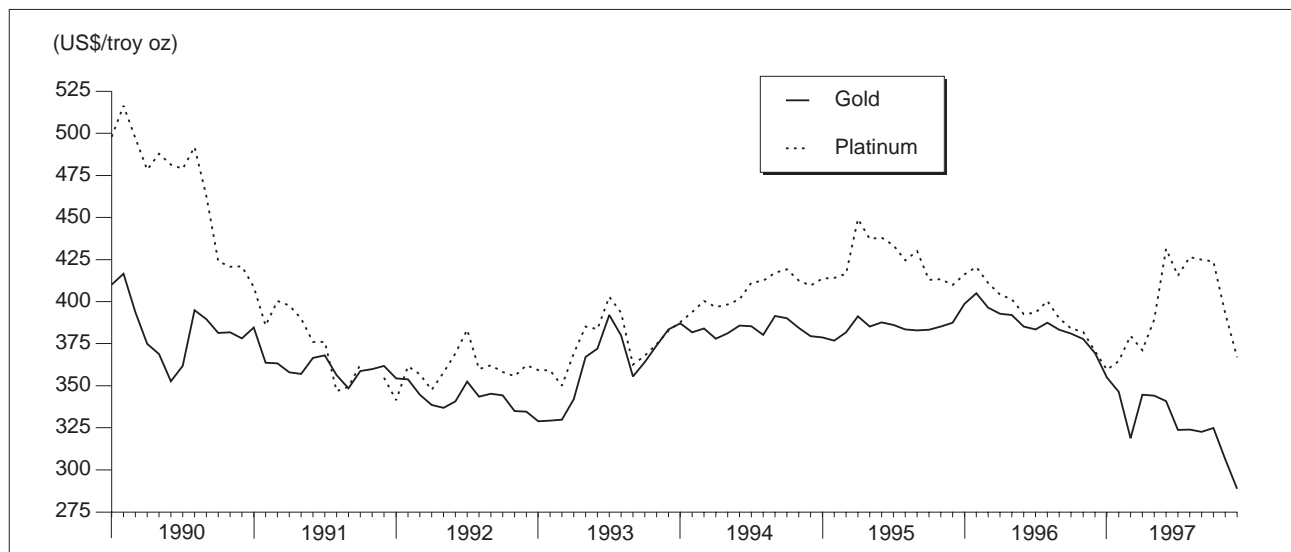
Notes: (1) For definitions and valuation of mineral production, shipments and trade, please refer to Chapter 65. (2) Information in this review was current as of February 15, 1998.

Figure 3
Gold Prices, Annual Average, 1985-2000



Sources: Natural Resources Canada; London Bullion Market Association.

Figure 4
Precious Metal Prices, Monthly Averages, 1990-97



Sources: London Bullion Market Association; Johnson Matthey Public Limited Company.

TARIFFS

Item No.	Description	Canada			United States	EU	Japan ¹
		MFN	GPT	USA	Canada	MFN	WTO
71.08	Gold (including gold plated with platinum) unwrought or in semi-manufactured forms, or in powder form						
	Non-monetary:						
7108.11.00	Powder	Free	Free	Free	Free	1.6%	Free
7108.12.00	Other unwrought forms	Free	Free	Free	Free	Free	Free
7108.13	Other semi-manufactured forms						
7108.13.10	Of 10 carats or more	Free	Free	Free	Free	Free-2.1%	Free
7108.13.20	Of less than 10 carats	4%	Free	Free	Free	Free-2.1%	Free

Sources: Customs Tariff, effective January 1998, Revenue Canada; Harmonized Tariff Schedule of the United States, 1998; Worldtariff Guidebook on Customs Tariff Schedules of Import Duties of the European Union (37th Annual Edition: 1997); Customs Tariff Schedules of Japan, 1997.

¹ WTO rate is shown; lower tariff rates may apply circumstantially.

TABLE 1. CANADA, GOLD PRODUCTION AND TRADE, 1996 AND 1997

Item No.	1996		1997P		
	(kilograms)	(\$000)	(kilograms)	(\$000)	
PRODUCTION					
Newfoundland	2 813 ^r	47 827 ^r	2 914	43 267	
Prince Edward Island	—	—	—	—	
Nova Scotia	—	—	—	—	
New Brunswick	217 ^r	3 695 ^r	229	3 399	
Quebec	41 103 ^r	698 842 ^r	37 430	555 836	
Ontario	75 074 ^r	1 276 402 ^r	78 827	1 170 578	
Manitoba	6 015 ^r	102 262 ^r	8 052	119 576	
Saskatchewan	3 240 ^r	55 082 ^r	4 093	60 784	
Alberta	18 ^r	304 ^r	—	—	
British Columbia	18 010 ^r	306 213 ^r	17 218	255 690	
Yukon	4 517 ^r	76 791 ^r	6 821	101 289	
Northwest Territories	13 653 ^r	232 129 ^r	13 466	199 970	
Total	164 660 ^r	2 799 547 ^r	169 050	2 510 389	
Mine output	166 378 ^r	..	169 188	..	
EXPORTS					
2600.00 ¹	Gold in ores and concentrates	8 766 ^r	101 635 ^r	19 932	70 137
7108.11	Gold powder				
	United States	16	282	2 683	36 583
	Total	16	282	2 683	36 583
7108.12	Other unwrought forms				
	United States	131 181	2 223 892	155 896	2 341 299
	Hong Kong	1 500	25 686	18 055	266 637
	Taiwan	—	—	9 530	143 605
	Korea, Republic of	8 650	146 419	8 109	118 625
	Germany	12 322	210 364	7 451	116 388
	Switzerland	30 223	519 101	6 310	92 765
	Japan	3 208	54 693	2 239	33 844
	Netherlands	1 497	26 462	498	7 050
	People's Republic of China	—	—	502	4 988
	Surinam	—	—	100	1 465
	United Kingdom	3 664	64 741	16	267
	Other countries	1 120	18 964	8	105
	Total	193 365	3 290 322	208 714	3 127 038
7108.13	Other semi-manufactured forms				
	United States	2 960	47 297	6 280	85 886
	France	332	5 569	235	3 630
	Portugal	146	2 407	105	1 579
	United Kingdom	56	957	83	1 251
	Other countries	51	892	—	—
	Total	3 545	57 122	6 703	92 346
	Total refined gold exports	205 692 ^r	3 449 361 ^r	238 032	3 326 104
IMPORTS²					
2600.00 ³	Gold in ores and concentrates	3 173 ^r	46 961 ^r	3 322	38 840
7108.11	Gold powder				
	United States	5	56	6	73
	Italy	—	—	4	38
	Germany	...	3	1	18
	United Kingdom	...	7	...	3
	Other countries	3	32	—	—
	Total	8	98	11	132

TABLE 1 (cont'd)

Item No.	1996		1997 ^p		
	(kilograms)	(\$000)	(kilograms)	(\$000)	
IMPORTS (cont'd)					
7108.12	Other unwrought forms				
	United States	24 269 ^r	344 625 ^r	47 185	696 168
	Guyana	12 219 ^r	189 079	13 900	190 104
	Netherlands	. . .	7	3 914	52 806
	Germany	7	39	3 251	48 173
	Dominican Republic	10 523 ^r	35 777 ^r	7 381	21 346
	Panama	1 777	9 459	4 724	16 442
	Surinam	2 116	25 457	1 042	16 110
	Costa Rica	38	624	350	5 218
	United Kingdom	13	70	356	4 613
	Turkey	—	—	72	1 061
	South Africa	—	—	71	936
	Philippines	1	17	90	516
	Other countries	1 782	25 994	29	448
	Total	52 745 ^r	631 148 ^r	82 365	1 053 941
7108.13	Other semi-manufactured forms				
	United States	1 352	10 522	684	10 463
	Ecuador	6	71	196	1 697
	Switzerland	96	1 338	87	1 157
	United Kingdom	—	—	16	220
	Germany	10	161	8	103
	Italy	3	52	3	51
	Other countries	16	318	2	62
	Total	1 483	12 462	996	13 753
	Total refined gold imports	57 409 ^r	690 669 ^r	86 694	1 106 666

Sources: Natural Resources Canada; Statistics Canada.

— Nil; . . Not available; . . . Amount too small to be expressed; ^p Preliminary; ^r Revised.

¹ Includes HS classes 2603.00.82, 2607.00.82, 2608.00.82, 2616.10.82 and 2616.90.82. ² Imports from "Other countries" may include re-imports from Canada. ³ Includes HS classes 2603.00.00.82, 2604.00.00.82, 2607.00.00.82, 2608.00.00.82, 2616.10.00.82 and 2616.90.00.20.

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

TABLE 2. CANADA, GOLD PRODUCTION BY SOURCE, 1975, 1980 AND 1985-97

Year	Auriferous Quartz Mines		Placer Operations		Base-Metal Ores		Total	
	(kg)	(%)	(kg)	(%)	(kg)	(%)	(kg)	(%)
1975	37 530	73.0	335	0.6	13 569	26.4	51 433	100.0
1980	31 929	63.1	2 060	4.0	16 632	32.9	50 620	100.0
1985	67 241	76.8	3 464	4.0	16 857	19.2	87 562	100.0
1986	83 197	80.9	2 802	2.7	16 900	16.4	102 899	100.0
1987	94 723	81.8	4 009	3.5	17 086	14.8	115 818	100.0
1988	112 404	83.4	4 879	3.6	17 530	13.0	134 813	100.0
1989	138 211	86.6	5 354	3.4	15 930	10.0	159 494	100.0
1990	147 355	88.0	3 993	2.4	16 025	9.6	167 373	100.0
1991	153 859	87.8	3 834	2.2	17 589	10.0	175 282	100.0
1992	141 965	88.5	3 469	2.2	14 917	9.3	160 351	100.0
1993	137 346	89.7	3 787	2.5	11 997	7.8	153 129	100.0
1994	133 018	90.8	3 714	2.5	9 696	6.6	146 428	100.0
1995	132 834	88.0	5 303	3.5	12 730	8.4	150 867	100.0
1996	147 052	89.3	3 971	2.4	13 635	8.3	164 660	100.0
1997 ^p	152 831	90.4	3 968	2.3	12 251	7.3	169 050	100.0

Source: Natural Resources Canada.

^p Preliminary.

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

TABLE 3. WORLD MINE PRODUCTION OF GOLD, 1980 AND 1989-96

Country	1980	1989	1990	1991	1992	1993	1994	1995	1996
	(tonnes)								
South Africa	675.1	607.5	605.1	601.1	614.1	619.5	583.9	522.4	494.6
Canada ¹	50.6	159.5	167.4	175.3	160.4	153.1	146.4	150.9	164.7
United States	30.5	265.7	294.2	296.0	329.1	332.1	326.0	319.0	329.3
Other Africa									
Ghana	10.8	15.3	17.3	27.3	33.3	41.4	44.5	52.7	50.7
Zimbabwe	11.4	16.6	17.9	19.1	19.9	20.7	22.5	26.1	26.7
Other	11.0	35.8	35.3	43.5	48.1	49.2	50.9	52.1	51.0
Total, other Africa	33.2	67.7	70.5	89.9	101.3	111.3	117.9	130.9	128.4
Latin America									
Peru	5.0	12.6	14.6	15.1	18.0	27.4	39.3	57.4	64.8
Brazil	35.0	101.2	84.1	78.6	76.5	75.7	73.4	67.4	64.2
Chile	9.3	29.0	33.3	33.0	39.3	38.5	43.3	48.5	56.4
Mexico	5.9	10.8	9.6	8.5	10.4	11.1	13.9	20.3	24.5
Colombia	17.0	31.7	32.5	30.7	29.9	26.4	25.5	24.1	23.1
Venezuela	1.0	17.1	14.2	13.2	11.7	11.2	13.7	17.1	19.9
Bolivia	2.0	11.5	10.4	10.0	7.9	12.1	14.7	16.0	15.2
Ecuador	0.7	11.3	10.0	9.2	8.6	8.1	7.6	10.6	12.2
Guyana	—	2.0	2.5	2.8	3.4	10.0	11.7	8.8	11.4
Other	15.6	9.8	9.1	9.0	9.2	8.6	8.9	11.9	12.8
Total, Latin America	91.5	237.0	220.3	210.1	214.9	229.1	252.0	282.1	304.4
Asia									
Indonesia	2.1	10.8	17.6	24.4	45.9	52.2	55.3	74.1	92.1
Papua New Guinea	14.3	33.8	33.6	60.8	71.2	61.5	60.5	54.9	53.0
Philippines	22.0	38.0	37.2	30.5	27.2	29.8	31.0	29.4	31.1
Japan	6.7	6.1	7.3	8.3	8.9	9.4	9.6	9.2	8.6
Other	5.0	13.7	12.7	14.6	16.2	18.6	19.4	20.5	20.9
Total, Asia	50.1	102.4	108.4	138.6	169.4	171.5	175.8	188.1	205.7
Europe	11.8	30.3	35.2	32.2	25.3	25.1	26.4	28.1	27.9
Oceania									
Australia	17.0	203.6	244.2	236.2	243.5	247.3	254.9	253.5	288.8
Other	1.0	9.4	10.1	10.3	14.3	15.0	14.1	14.9	16.3
Total, Oceania	18.0	213.0	254.3	246.5	257.8	262.3	269.0	269.0	305.1
Total, Western World	960.8	1 683.1	1 755.4	1 789.7	1 872.3	1 904.0	1 898.0	1 890.5	1 960.1
Other countries									
C.I.S.	..	285.0	270.0	252.0	n.a.	n.a.	n.a.	n.a.	n.a.
Russia	..	..	..	..	151.7	164.5	158.1	142.1	130.0
Uzbekistan	..	..	..	..	64.5	66.6	64.4	63.6	71.0
Other C.I.S.	..	..	..	..	13.5	17.6	20.0	21.2	22.0
China	..	84.3	93.6	103.9	112.2	119.4	120.7	132.6	144.6
Korea, D.P.R.	..	9.5	13.0	13.0	17.0	15.0	14.0	14.0	13.3
Mongolia	..	1.1	1.0	0.8	1.0	1.4	2.1	4.9	5.3
Total, other countries	..	379.9	377.6	369.7	359.9	384.5	379.3	378.4	386.2
Total, world production	..	2 063.0	2 133.0	2 159.4	2 232.2	2 288.5	2 276.7	2 268.9	2 346.3

Source: Consolidated Gold Fields PLC, "Gold 1997."

— Nil; .. Not available; n.a. Not applicable.

¹ Production figures for Canada were obtained from Natural Resources Canada.

TABLE 4. CANADA, GOLD PRODUCTION, AVERAGE VALUE AND PERCENT OF TOTAL MINERAL PRODUCTION, 1975, 1980 AND 1985-97

Year	Total Production	Total Value	Average Value ¹	Gold as a Percent of Total Mineral Production
	(kg)	(\$000)	(\$/g)	(%)
1975	51 433	270 830	5.27	2.0
1980	50 620	1 165 416	23.02	3.7
1985	87 562	1 219 653	13.93	2.7
1986	102 899	1 689 292	16.42	5.2
1987	115 818	2 204 472	19.03	6.1
1988	134 813	2 331 989	17.30	6.3
1989	159 494	2 315 860	14.52	5.9
1990	167 373	2 407 654	14.38	5.9
1991	175 282	2 338 614	13.34	6.7
1992	160 351	2 141 161	13.35	6.0
1993	153 129	2 284 991	14.92	6.2
1994	146 428	2 448 926	16.86	6.0
1995	150 867	2 557 502	16.95	5.9
1996	164 660	2 799 547	17.02	5.6
1997 ^P	169 050	2 510 388	14.85	5.0

Source: Natural Resources Canada.

^P Preliminary.

¹ Value is based on average London p.m. fix price for gold.

TABLE 5. GOLD FABRICATION IN DEVELOPED AND DEVELOPING COUNTRIES, 1980 AND 1990-96

Fabricated Gold	1980	1990	1991	1992	1993	1994	1995	1996
	(tonnes)							
DEVELOPED COUNTRIES								
Carat jewellery	318	870	883	925	892	890	901	891
Electronics	93	136	140	129	139	148	161	162
Dentistry	63	48	51	55	54	55	59	59
Other uses	58	56	57	60	60	62	64	65
Medals and fake coins	18	9	9	6	4	4	3	2
Official coins	170	89	121	77	98	58	70	47
Subtotal	719	1 207	1 261	1 252	1 247	1 217	1 258	1 227
DEVELOPING COUNTRIES								
Carat jewellery	196	1 317	1 474	1 833	1 660	1 720	1 866	1 916
Electronics	2	80	65	46	41	42	44	45
Dentistry	2	13	12	11	10	9	8	8
Other uses	4	17	16	25	39	41	44	46
Medals and fake coins	3	14	18	23	21	23	32	32
Official coins	21	33	22	16	19	22	14	16
Subtotal	228	1 474	1 607	1 953	1 790	1 857	2 008	2 063
TOTAL								
Carat jewellery	514	2 187	2 357	2 758	2 552	2 610	2 767	2 807
Electronics	95	216	205	175	180	190	205	207
Dentistry	65	61	63	66	64	64	67	67
Other uses	62	73	67	85	99	103	108	111
Medals and fake coins	21	23	27	29	25	27	38	34
Official coins	191	122	143	93	117	80	84	63
Total	946	2 682	2 868	3 206	3 037	3 074	3 269	3 290

Source: Consolidated Gold Fields PLC, "Gold 1997."

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

TABLE 6. AVERAGE ANNUAL GOLD PRICES, 1934-97, AND MONTHLY, 1993-97

Year	US\$/oz	C\$/oz	Year	US\$/oz	C\$/oz
1934-67	35	. .	1983	423.52	521.82
1968	38.82	41.82	1984	360.63	466.99
1969	41.13	44.29	1985	317.35	433.21
1970	35.97	37.54	1986	367.58	510.73
1971	40.87	41.27	1987	446.66	592.18
1972	58.22	57.66	1988	436.45	554.76
1973	97.22	97.24	1989	381.27	451.33
1974	158.80	155.36	1990	383.72	447.79
1975	160.96	163.76	1991	362.34	415.09
1976	124.78	123.01	1992	343.86	415.23
1977	147.80	157.10	1993	360.06	464.35
1978	193.51	220.74	1994	384.15	524.60
1979	305.69	358.12	1995	384.07	526.94
1980	614.38	719.08	1996	387.69	528.62
1981	459.22	550.57	1997	328.41	454.52
1982	375.52	463.51			

Month	1993		1994		1995		1996		1997	
	(US\$/oz)	(C\$/oz)	(US\$/oz)	(C\$/oz)	(US\$/oz)	(C\$/oz)	(US\$/oz)	(C\$/oz)	(US\$/oz)	(C\$/oz)
January	328.99	420.28	387.14	509.53	378.74	535.16	398.70	545.02	355.03	479.65
February	329.31	415.13	381.66	518.66	376.75	527.45	404.92	556.77	346.43	469.41
March	329.89	411.34	384.00	523.87	381.82	537.22	396.35	540.62	318.76	437.02
April	341.95	431.37	377.91	522.70	391.34	538.88	392.87	533.91	344.71	480.53
May	367.04	465.96	381.18	526.06	385.23	523.91	391.99	536.63	344.10	474.86
June	371.98	475.61	385.71	533.63	387.62	534.14	385.25	526.25	340.83	471.71
July	392.03	502.66	385.45	532.98	386.14	525.54	383.46	525.34	323.78	445.52
August	379.80	496.28	380.21	524.14	383.50	519.64	387.51	531.66	324.00	450.03
September	355.56	469.45	391.37	529.95	382.93	517.72	383.29	524.72	322.62	447.15
October	363.99	482.54	390.16	526.82	383.20	515.79	380.91	514.23	324.85	450.24
November	373.94	492.37	384.38	524.32	385.21	521.19	377.85	505.56	306.35	432.57
December	383.40	510.57	379.48	526.91	387.44	530.02	369.34	502.67	288.78	412.09

Source: London Bullion Market Association, a.m. fix, compiled by Natural Resources Canada.
. . Not available.