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GOLD [ADVANCE RELEASE]

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Gold

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In 2018, domestic gold mine production decreased by 5% to 226,000 kilograms (kg) from 237,000 kg in 2017 (tables 1, 2). In 2018, the value of domestic gold production decreased by 4% to $9.22 billion, owing to a slight increase in the average price of gold for the year which partially offset the decreased production. Nevada and Alaska, the two leading producing States, accounted for 77% and 9%, respectively, of domestic gold production in 2018 (table 2). The remaining U.S. production came from mines in Arizona, California, Colorado, Idaho, Michigan, Montana, New Mexico, South Carolina, South Dakota, and Utah. Gold was recovered at lode mines in all gold-producing States, two large placer mines in Alaska, and numerous small placer mines, mostly in Alaska. In addition, about 6% of domestic mined gold was recovered as a byproduct of the recovery of base metals (primarily copper) and precious metals (primarily silver). The leading gold-producing operations, listed in table 3, accounted for more than 99% of domestic gold production.

Total world gold mine production in 2018 was 3,310,000 kg, slightly more than production in 2017 (table 8). In 2018, the top five gold-producing countries, in descending order of production, were China, Australia, Russia, the United States, and Canada; these accounted for about 43% of global gold production.

Commercial-grade refined gold was produced by about two dozen domestic companies. Many of these companies produced gold from domestic and imported products (bullion, concentrates, dore, and scrap) and were located mainly in Florida, Massachusetts, New Jersey, New York, Ohio, Rhode Island, and Utah. Among several thousand companies and artisans, a few dozen companies dominated the fabrication of gold into commercial products. Jewelry manufacturing in the United States was heavily concentrated in the New York, NY, and Providence, RI, areas, with other major manufacturers in California, Florida, and Texas. In 2018, the estimated percentages of gold consumed for commercial products (excluding investment products but including official coinage) were jewelry, 46%; electrical and electronics, 40%; official coins, 9%; and other, 5%.

As of yearend 2018, global estimated historical gold mine production has totaled about 194,000 metric tons (t) of gold. Because gold has been nearly 100% recycled and is resistant to corrosion and oxidation, about 98% of the gold that has been produced throughout history is still available. As of yearend 2018, about 91,600 t of gold was held privately as jewelry, about 42,400 t was held privately as investments, about 32,500 t was in official bullion holdings worldwide, about 24,800 t was in other fabricated products, and about 2,600 t was unaccounted for (Alexander and others, 2019, p. 30).

Legislation and Government Programs

Gold mining has been identified as a potential source of funding for armed groups involved in civil unrest in several countries, especially in the Democratic Republic of the Congo [Congo (Kinshasa)] and adjoining countries. The United States, through the enactment of section 1502 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) on July 21, 2010, made it a statutory obligation for all companies registered with the U.S. Securities and Exchange Commission (SEC) to perform due diligence to determine whether the products they manufacture, or the components of the products they manufacture, contain tantalum, tin, tungsten, or gold (3TG minerals) and, if so, to determine whether these minerals were sourced from Congo (Kinshasa) and (or) its bordering countries (covered countries). Accordingly, companies are required to file a specialized disclosure form (SD form) with the SEC including findings as to whether 3TG minerals used in their products and components were sourced from the conflict region (U.S. Government Printing Office, 2010, p. 2213–2220). In 2018, a total of 1,117 companies filed conflict minerals SD forms (1,165 and 1,230 companies filed disclosures in 2017 and 2016, respectively). In 2018, about 56% of the reporting companies were able to determine whether the conflict minerals in their products were derived from Congo (Kinshasa) or any of the adjoining countries, an increase from 53% and 49% in 2017 and 2016, respectively. Some companies reported in their 2018 disclosures that they had taken the same actions to improve their supply chain data collection as they had in previous years, and many reported difficulties in determining the country of origin for conflict minerals. The ability of reporting companies to identify the country of origin of their conflict minerals was hindered by a lack of access to supplier information and the complexity of supply chains involving many suppliers and processing facilities. Companies also reported a lack of response to inquiries or that responses were incomplete and contained errors. Some companies reported confusion by suppliers about the SEC disclosure rule requirements and gaps in supplier education and knowledge. Some companies noted that the revised 2017 guidance from the SEC had caused uncertainty about the filing process, although most filings were comparable to those submitted in prior years.

In 2018, about 17% of companies reported that they had not determined their minerals' origin and about 27% reported they were unable to determine country of origin. Those companies that had not determined their minerals' origin, or had reason to believe their minerals were from Congo (Kinshasa) or adjoining countries (and not from scrap or recycled sources), were required to conduct additional research (due diligence). Of those that conducted due diligence, about 35% reported that they were able to confirm that their conflict minerals were derived from covered countries or from scrap or recycled sources, compared with 37% in 2017 and 39% in 2016. Conversely, about 61% of the companies reported in 2018 that they were unable to definitively confirm the source of the conflict minerals in

their products, compared with 47% in 2017 and 55% in 2016. Similar to prior years, most of the companies that conducted due diligence reported that they could not determine whether the conflict minerals in their products had financed or benefited armed groups. Although reporting companies were not required to identify which conflict minerals they used, of those that did, 66% reported using gold in 2018 (U.S. Government Accountability Office, 2019, p. 9–12).

Other countries, groups, and international organizations were developing programs to assist companies to avoid contributing to regional conflicts. Some of these groups developing programs were the Electronic Industry Citizenship Coalition, the European Parliament, the Government of Canada, the London Bullion Trade Association, the Organisation for Economic Co-operation and Development, the Public Private Alliance on Responsible Mineral Trade, the Responsible Jewellery Council, the United Nations, and the World Gold Council. Some organizations have reported that efforts to document or curtail the supply of conflict minerals have hampered legal formal and artisanal mining while encouraging other criminal mining activities in the region. Gold is difficult to track once melted down and combined with gold from other sources (Webb, 2015).

Production

Domestic gold lode mine production data were compiled by the U.S. Geological Survey (USGS) from two separate voluntary monthly surveys of U.S. mining operations and from publicly available sources; the surveys represented 99% of this chapter's tabulated domestic gold production. Data on placer gold production in Alaska were provided by the Alaska Division of Geological & Geophysical Surveys and were included in the domestic production figures. However, individual company production data listed in table 3 or cited elsewhere in this chapter were obtained from published sources, such as company annual reports.

Alaska.—In 2018, Alaska produced 20,600 kg of gold (table 2), from both lode and placer operations, valued at $843 million. This was 21% less by quantity and 21% less by value than output in 2017. Gold was produced at 1 open pit gold mine, 2 underground gold mines, 1 underground silver-zinc mine, and about 240 placer operations. Kinross Gold Corp.'s open pit Fort Knox Mine, near Fairbanks, was Alaska's leading gold producer and produced 7,950 kg of gold equivalent (which includes other metals converted to gold weight, based on the value of the metal) in 2018, 33% less than that in 2017 owing to higher-than-average rainfall and a mine wall collapse resulting in less ore mined (Kinross Gold Corp., 2018, p. 18).

The underground Pogo Mine, 145 kilometers (km) southeast of Fairbanks, produced 7,090 kg of gold in 2018, 16% less than revised 2017 production. In August 2018, Northern Star Resources Ltd. announced their agreement to acquire the Pogo Mine from joint-venture owners Sumitomo Metal Mining Co., Ltd. and Sumitomo Corp., assuming management on September 28, 2018 (Athey and Werdon, 2019, p. 60–63). Coeur Mining, Inc.'s underground Kensington Mine, 74 km northwest of Juneau, produced 3,540 kg of gold, a slight decrease from that produced in 2017 owing to lower ore grades (Coeur Mining, Inc., 2019, p. 4).

The remaining lode-gold production in Alaska was as a byproduct from Hecla Mining Co.'s underground Greens Creek silver-zinc mine on Admiralty Island near Juneau, which produced 1,600 kg of gold, slightly more than that in 2017 (Hecla Mining Co., 2019, p. 19).

California.—In 2018, gold was produced at the Mesquite Mine and the Soledad Mountain Mine. On October 30, 2018, Equinox Gold Corp. purchased New Gold Inc., which owned the Mesquite Mine, 52 km northwest of Yuma, AZ. The mine produced 4,360 kg of gold, 17% less than that produced in 2017 (Zurowski and others, 2019, p. 6–4). Golden Queen Mining Co. Ltd.'s Soledad Mountain Mine, 8 km south of Mojave in Kern County, CA, produced 1,320 kg of gold in 2018, an 8% decrease from revised 2017 production (Golden Queen Mining Co. Ltd., 2019, p. 28).

Small quantities of gold also were produced in California as a byproduct of industrial mineral operations (such as limestone and sand and gravel operations), from several small underground mines that primarily recovered specimen gold products, and from small artisanal placer workings. This production was not included in the USGS production data.

Colorado.—In 2018, Newmont Mining Corp.'s open pit Cripple Creek Mine, near the town of Victor, produced 11,200 kg, about 20% less than 2017 production owing to lower ore grade mined and lower leach tons placed at Valley Leach Fill 2 (Newmont Mining Corp., 2019a, p. 67–70; 2019b, p. 1).

Montana.—Gold production at Barrick Gold Corp.'s underground Golden Sunlight Mine, 48 km east of Butte, produced 995 kg in 2018, about 22% less than that in 2017. Barrick announced in March 2019 that the Golden Sunlight operation would cease mining and forecast the final processing of residual production for May 2019. Barrick was to assess the potential of reprocessing historic tailings while shifting focus to care-and-maintenance status (Barrick Gold Corp., 2019a, p. 23; 2019b, p. 1).

Nevada.—In 2018, Nevada produced about 173,000 kg of gold valued at $7.08 billion, which was about the same quantity and value produced in 2017. Nevada retained its long-standing position as the Nation's leading gold-producing State.

In 2018, Barrick produced a total of 73,000 kg of gold from mines in north-central Nevada, 5% less than revised production in 2017. Barrick produced gold from its wholly owned Cortez Operations and Goldstrike Mine, its 75% share of the Turquoise Ridge Mine, and its 60% share of the South Arturo Mine. The production decrease resulted from lower grades and higher sulfide ores at the Cortez Hills open pit mine and harder ores reducing throughput rates compared to the prior year. The decrease was offset partially by increased production at the roaster due to higher refractory grade ore from the Cortez Hills open pit mine and increased ore from the Cortez Hills underground mine. Gold production from the Turquoise Ridge Mine increased by 27% compared with that in 2017, owing to increased processing capacity as a result of the new 7-year toll milling agreement between Barrick and Newmont in January 2018 for the processing of Turquoise Ridge ore at Newmont's Twin Creeks facility (Barrick Gold Corp., 2019a, p. 23–31, 56–67).

Newmont's operations in north-central Nevada produced 55,600 kg of gold, slightly less than that in 2017, from the Carlin Mines operations, the Long Canyon Mine, the Phoenix project, the Twin Creeks Mine, and the joint-venture Turquoise Ridge Mine (25% share). Long Canyon produced 5,290 kg of gold in 2018, slightly less than 2017, owing to lower ore grade mined. The Carlin Mines operations produced 28,800 kg, 5% less than 2017 production owing to lower leach tons placed and lower leach recoveries. In 2018, gold produced at the Twin Creeks Mine was 11,600 kg, 4% less than that in 2017, owing to lower ore grade mined. The Phoenix project operations produced 7,500 kg in 2018, essentially unchanged compared with 2017 production (Newmont Mining Corp., 2019a, p. 67–68; 2019b, p. 1).

In 2018, Kinross's Round Mountain Mine produced 12,000 kg of gold equivalent, about 12% less than 2017 production owing to a decrease in ore mined. Production at the Bald Mountain Mine was 8,850 kg of gold equivalent, which was essentially unchanged compared with that in 2017 (Kinross Gold Corp., 2018, p. 14–20).

On July 20, 2018, Hecla's Nevada Operations acquired Klondex Mines Ltd., which included Klondex's Aurora, Fire Creek, Hollister, and Midas gold mines in Nevada. Production from July 20 through December 2018 was 3,400 kg, 27% less than that produced in 2017 owing to the shorter production reporting period. In 2018, the Fire Creek and Midas Mines produced 2,040 kg and 422 kg of gold, respectively. The Hollister and Aurora Mines produced 115 kg and 828 kg of gold, respectively (Hecla Mining Co., 2019, p. 41–47).

Gold production at Coeur's Rochester silver mine was about 1,690 kg in 2018, a 7% increase compared with production in 2017 owing to the strong performance of leach pads (Coeur Mining, Inc., 2019, p. 3). Scorpio Gold Corp.'s 70%-owned Mineral Ridge operations produced 242 kg of gold, 59% less than production in 2017 (Scorpio Gold Corp., 2018, p. 3). SSR Mining Inc. operated the Marigold Mine in Humboldt County. The mine produced 6,380 kg of gold in concentrates, slightly more than that produced in 2017 owing to an increase in ore production (SSR Mining Inc., 2019, p. 2).

South Carolina.—OceanaGold Corp.'s Haile Gold Mine completed its first full year of commercial production in 2018, producing 4,100 kg, an 11% increase compared with 2017 production (OceanaGold Corp., 2019, p. 7, 13).

South Dakota.—Coeur's Wharf Mine near Lead produced about 2,390 kg of gold in 2018, 19% less than 2017 production owing to lower ore grades and downtime related to inclement weather (Coeur Mining, Inc., 2019, p. 4).

Utah.—Rio Tinto Kennecott Corp.'s Bingham Canyon Mine near Salt Lake City produced 6,120 kg of gold as a byproduct from copper and molybdenum mining. Gold production was 11% more than that in 2017 owing to an increase in ore grade and ore processed (Rio Tinto plc, 2019, p. 269).

Consumption

Thomson Reuters GFMS reported that total global fabrication (excluding retail investment) in 2018, including scrap, consumed 2,816 t of gold, slightly less than revised consumption in 2017. The major reason for the lower 2018 consumption was a 4% decrease in jewelry fabrication to 2,130 t. Jewelry manufacturers in India were reported to have decreased gold purchases as a weaker rupee increased the local gold prices. In 2018, the six leading jewelry-manufacturing countries, in descending order by gold consumed for jewelry, were China (688 t), India (632 t), Turkey (75 t), the United States (74 t), Italy (70 t), and Indonesia (48 t), accounting for almost 75% of the world's gold jewelry fabrication. In 2018, four countries had significant (more than 3 t) increases in gold consumption for jewelry—China (up by 14.3 t), the United States (6.4 t), Indonesia (4 t), and Vietnam (3.2 t). Five countries had significant (more than 3 t) decreases in gold used in jewelry fabrication owing to currency weaknesses that affected demand—India (down by 85.9 t), Turkey (13.1 t), United Arab Emirates (13 t), Iran (7.2 t), and Italy (4.8 t) (Alexander and others, 2019, p. 37–43).

In 2018, global consumption of gold for industrial uses (391 t) increased by 3%, owing to an increase in consumption by the electronics industry, mainly semiconductor manufacturers. Globally, gold consumption for electronics (288 t) increased by 4% and consumption for other industrial and decorative applications (74 t) increased slightly. However, demand was tempered in the latter portion of 2018 owing to uncertainty in the supply chain caused by the United States-China trade tensions. Gold used in dental and medical applications was 29 t, a slight decrease from 2017 (Alexander and others, 2019, p. 9–10, 45–47).

According to the GFMS, the 2018 domestic gold consumption used in fabrication (excluding retail investment) was 125 t, a 13% increase compared with 2017. Much of the consumption was used in the fabrication of jewelry, which increased 10% to 74 t in 2018. Gold contained in jewelry that was purchased in the United States was 134 t, a 10% increase compared with a revised 122 t in 2017. Consumption of gold for industrial uses increased by 17% to 51 t, mainly from the increase in domestic production of electronics (Alexander and others, 2019, p. 37–42, 45–47, 63–64).

Prices and Investment

The Engelhard daily gold price began the year at $1,316.88 per troy ounce and increased to the yearly high of $1,363.96 per troy ounce on January 25. The gold price trended downward during most of 2018, reaching the yearly low of $1,130.57 per troy ounce on October 19, and ended the year at $1,283.83 per troy ounce. The annual average price for 2018 of $1,271.62 per troy ounce was $10.58 per troy ounce higher than the average annual price in 2017.

The components of gold investments are the retail investments (gold bars, official coins, medals, and imitation coins) and the change in physical gold held by gold exchange-traded products (ETPs). Global net gold investment in 2018 decreased to 1,155 t, a 4% decline compared with that in 2017, because of less investment in gold ETPs. The net ETPs purchased in 2018 equaled 59 t, a 67% decrease compared with the net purchases of 177 t in 2017. The bulk of the global net retail investment was purchases of gold bars totaling 800 t, 4% more than 2017 purchases. In 2018, global purchases of official coins, medals, and imitation coins increased by 14% to 297 t (Alexander and

others, 2019, p. 10–21). In 2018, the U.S. Mint sold 7,640 kg of American Eagle gold bullion coins and 3,780 kg of American Buffalo gold bullion coins, an increase of 22% and a decrease of 19%, respectively, from quantities sold in 2017 (U.S. Mint, 2018).

According to GFMS global estimates, the official sector (governments and national banks) purchased a net 536 t of gold in 2018, a 46% increase and the highest level since 2012, with the second half of the year having significantly higher purchases. The leading buyer of gold in 2018 was Russia (274 t), holding the lead for the seventh consecutive year. Kazakhstan and Turkey were the next leading gold buyers, at 51 t each (Alexander and others, 2019, p. 9–10, 34–35).

Foreign Trade

The United States was a net exporter (exports minus imports) of nearly 261 t of gold contained in bullion, dore, and ores and concentrates (tables 4, 6). Based on unrounded data, refined bullion constituted 63% of exports (table 4) and 38% of U.S. total gold imports (table 6).

In 2018, exports of refined bullion were 299,000 kg, 6% more than 2017 exports. The United Kingdom (50%), Switzerland (24%), Hong Kong (12%), China (7%), and Canada and India (2% each) were the principal destinations for refined bullion exports from the United States in 2018 (table 4). Imports of refined bullion were 81,500 kg, 18% less than 2017 imports. Canada (33%), Peru (25%), Mexico (10%), South Africa (8%), and Brazil (6%) were the leading sources of refined bullion imported into the United States in 2018 (table 6).

Dore exports in 2018 were 171,000 kg, a 3% decrease compared with that in 2017. The primary destinations were Switzerland (53%), India (24%), Hong Kong (9%), and Canada (6%) (table 4). In 2018, imports of dore were 132,000 kg, 15% less than imports in 2017. Mexico (49%), Peru (16%), Canada (7%), and Colombia (6%) were the principal sources of dore in 2018 (table 6).

World Review

According to the GFMS annual review of world gold supply and demand, total global supply of gold in 2018 was 4,518 t, slightly less than that in 2017. Gold recovery from old scrap decreased by 3% to 1,178 t, a 3-year low. Economic instability and currency weakness initiated a rise in recycling rates in Europe and the Middle East while stability in gold prices accounted for the decline in consumers liquidating their gold assets. China, the leading scrap-producing country, produced 222 t of gold contained in scrap, which was essentially unchanged compared with 2017. Much of the decrease was from the Indian subcontinent, although East Asia and North America also recovered less gold from old scrap (Alexander and others, 2019, p. 7, 30–32). In 2018, U.S. recovery of gold from old and new scrap was 117,000 kg, slightly less than that in 2017 (table 1).

In 2018, world gold mine output from the almost 100 countries reporting or estimating production was about 3,310 t, slightly more than that in 2017 (table 8). This was the 10th year of increased global production.

The top 10 leading gold-producing countries, in decreasing order of production, were China, Australia, Russia, the United States, Canada, Peru, Indonesia, Ghana, Mexico, and South Africa; these 10 countries accounted for about 63% of global production. The next 12 leading gold-producing countries accounted for about 23% of global gold production. Gold production increased by more than 8 t in seven countries—Russia (up by 40,700 kg), Indonesia (34,000 kg), Australia (20,929 kg), Canada (14,975 kg), Kazakhstan (14,949 kg), Zimbabwe (11,171 kg), and Mali (8,546 kg). Major decreases were recorded in China (down by 25,023 kg), South Africa (19,933 kg), Sudan (13,700 kg), Mexico (13,147 kg), the United States (11,250 kg), Burkina Faso (10,200 kg), Peru (9,322 kg), and Colombia (9,100 kg) (table 8).

Australia.—In 2018, gold production in Australia was 315,100 kg, a 7% increase from 2017 and the sixth consecutive year of increased gold production. Some of the production increase was from Newcrest's Cadia Hill Mine, which increased production by 38% from the previous year (23,400 kg) owing to higher grades and throughput (Alexander and others, 2019, p. 24–27). AngloGold Ashanti Ltd. reported an increase of 12% compared with that in 2017, producing about 19,400 kg. The Sunrise Dam Mine produced 8,990 kg of gold, a 21% increase compared with 2017 production owing to higher mined grades in the first and fourth quarters. Production at the Tropicana Mine, a joint venture between AngloGold (70%) and Independence Group NL (30%), increased by 5% to 10,500 kg of gold in 2018 owing to higher grades and throughput (AngloGold Ashanti Ltd., 2019, p. 79, 93). Kirkland Lake Gold Ltd.'s Fosterville Mine produced 11,100 kg of gold in 2018, a 35% increase in production compared with the previous year, as a result of higher ore grades mined (Alexander and others, 2019, p. 23; Kirkland Lake Gold Ltd., 2019, p. 28).

Canada.—Reported gold mine production increased by 9% in 2018 to 183,047 kg, mainly because it was the first full year of operation at the Brucejack and Rainy River Mines. Pretium Resources Inc.'s Brucejack Mine produced 11,700 kg of gold in 2018 (Pretium Resources Inc., 2019, p. 5) and New Gold's Rainy River Mine produced 7,070 kg of gold (New Gold Inc., 2019, p. 16). This increase partially offset Agnico Eagle Mines Ltd.'s Meadowbank Mine, which produced 7,750 kg of gold in 2018, 29% less than 2017 production owing to reduced output as the mine transitioned through its final full year of open pit mining operations (Agnico Eagle Mines Ltd., 2019, p. MDA14–MDA52).

China.—Reported gold production in 2018 was 401,119 kg. While China's efforts to reduce the environmental impact of the mining industry resulted in a production decrease of 6%, it continued to be the world's leading gold producer in 2018.

China's gold consumption (excluding central bank purchases) was 998 t in 2018, essentially unchanged from that in 2017, after 4 consecutive years of decline. Chinese jewelry fabrication (including the use of scrap) accounted for 69% of the country's annual gold consumption at 688 t, a slight increase compared with that in 2017. This was the first consumption growth since 2013 as the demand was fostered by the market's preference for pure gold items. Gold investment demand in China was 213 t, a

3% decrease from the previous year and the second consecutive year of decline owing to fluctuations in the yuan currency. China's scrap supply in 2018 was 222 t, essentially unchanged from that in 2017 (Alexander and others, 2019, p. 8–21, 38–51).

Indonesia.—In 2018, gold production, excluding illegal artisanal and small-scale gold mining, was an estimated 135,000 kg, 34% more than that in 2017. Freeport-McMoRan Inc.'s (FCX) Grasberg Mine accounted for about 60% of gold production in Indonesia. Gold production at the Grasberg copper mine increased by 74% in 2018 to 83,900 kg owing primarily to higher milling rates and increases in gold ore grades. In December 2018, the Indonesian Government granted FCX a new special mining license which granted their subsidiary, PT Freeport Indonesia, an extension of mining rights through 2031, as well as rights to extend through 2041 (Freeport-McMoRan Inc., 2019, p. 8–14, 24–43).

Russia.—In 2018, gold production was about 311,000 kg, an increase of 15% from the previous year. A large portion of the increase was from Polyus operations, which reported a 10% increase in gold production owing to the Natalka Mine completing its first full year in operation, and increased production at the Olimpiada, the Verninskoye, and the Kuranakh Mines (Alexander and others, 2019, p. 23).

South Africa.—In 2018, gold production was 117,200 kg, 15% less than output in 2017. Sibanye Gold Ltd. operations in South Africa included the Beatrix, Cooke, Driefontein, and Kloof Mines, as well as interest in surface tailings retreatment facilities located from the East Rand to the West Rand via their 38.05% stake in DRDGOLD Ltd. Production in 2018 was about 36,600 kg of gold, 16% less than 2017 production. The primary reasons for the decrease were due to the impact of two separate safety incidents at Sibanye's Driefontein and Kloof operations that resulted in the death of 12 employees, operational disruptions including power disruption to the Beatrix operations, and seismic damage to infrastructure at the Driefontein and Kloof Mines (Sibanye Gold Ltd., 2019, p. 4, 24–27). Gold Fields Ltd.'s South Deep Mine produced 4,890 kg, 44% less than that in 2017 because of large-scale restructuring, operational difficulties, and a 6-week strike (Gold Fields Ltd., 2019, p. 58–59).

Outlook

Historically, investors have purchased gold as a safe-haven hedge against economic failures, as a portfolio diversifier, and to store wealth. In 2019, global gold consumption is expected to increase reflecting concerns regarding a worsening global economic and political climate. However, investment interest could be hindered by the strength of the U.S. dollar limiting an increase in gold price. Overall, worldwide gold-mine production is expected to decrease slightly owing, in part, to decreased production at the Grasberg Mine in Indonesia as it transitions from the high-grade open pit phase to underground operations affecting grades and throughput. U.S. gold production in 2019 is expected to decrease because of lower output from the Bald Mountain, Fort Knox, and Pogo Mines.

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TABLE 1
SALIENT GOLD STATISTICS[1]

		2014	2015	2016	2017	2018
United States:						
Production:						
Mine:						
Quantity	kilograms	210,000	214,000	232,000 r	237,000	226,000
Value	thousands	$8,570,000	$8,000,000	$9,350,000 r	$9,600,000	$9,220,000
Gold recovered by cyanidation, leached in open heaps or dumps[2]	kilograms	173,000	192,000	200,000	222,000	212,000
Refinery:						
From ore concentrates and dore	do.	298,000 r	244,000 r	242,000 r	207,000 r	205,000
From recycled materials (new and old scrap)	do.	223,000 r	238,000 r	220,000 r	119,000 r	117,000
Exports, refined bullion	do.	370,000	352,000	241,000	281,000	299,000
Imports for consumption, refined bullion	do.	121,000	89,800	177,000	99,900	81,500
Stocks, December 31:						
Industry[3]	do.	7,450 r	7,250 r	4,030 r	1,680 r	3,380
Gold exchange traded funds holdings[4]	do.	1,660,000	1,530,000	2,070,000	2,260,000 r	2,320,000
COMEX inventories	do.	325,000	198,000	285,000	284,000	262,000
U.S. Department of the Treasury	do.	8,140,000	8,140,000	8,140,000	8,140,000	8,140,000
Consumption:						
American Buffalo gold bullion coin[5]	do.	5,520	6,860	6,830	3,100	3,380
American Eagle gold bullion coin[5]	do.	16,300	24,900	30,600	9,410	7,640
Jewelry, industry, and the arts	do.	152,000	165,000	169,000	150,000 r, e	160,000 e
Price, average[6]	dollars per troy ounce	1,269.45	1,163.33	1,252.17	1,261.04 r	1,271.62
Employment, mine and mill only[7]		12,000	11,500 r	11,600 r	11,900 r	12,200
World:						
Production, mine	kilograms	3,040,000 r	3,110,000 r	3,190,000 r	3,270,000 r	3,310,000
Official bullion reserves[8]	do.	32,000,000	32,700,000	33,300,000	34,000,000 r	34,200,000

eEstimated. rRevised. do. Ditto.
[1]Table includes data available through March 11, 2020. Data are rounded to no more than three significant digits, except prices.
[2]May include tailings, waste-ore dumps, and previously mined ore at some inactive mines.
[3]Unfabricated refined gold held by refiners, fabricators, and dealers.
[4]Source: GFMS, Thomson Reuters.
[5]Source: U.S. Mint.
[6]Annual average daily Engelhard quotation.
[7]Source: U.S. Mine Safety and Health Administration.
[8]Held by central banks, governments, and international monetary organizations at the end of the year. Data from the World Gold Council.

TABLE 2
MINE PRODUCTION OF GOLD IN THE UNITED STATES, BY STATE[1]

(Kilograms)

State	2017	2018
Alaska	26,200	20,600
Nevada	173,000	173,000
Other States[2]	37,400	31,600
Total	237,000	226,000

[1]Table includes data available through March 11, 2020. Data are rounded to no more than three significant digits; may not add to totals shown.
[2]Includes Arizona, California, Colorado, Idaho, Michigan, Montana, New Mexico, South Carolina, South Dakota, Utah, and Washington (2017).

TABLE 3
LEADING GOLD-PRODUCING OPERATIONS IN THE UNITED STATES IN 2018, IN ORDER OF PUBLICLY AVAILABLE OUTPUT[1]

(Kilograms)

Rank	Operation	County and State[2]	Majority owner[3]	Quantity	
				2017	2018
1	Cortez Operations	Eureka and Lander, NV	Barrick Gold Corp.	45,000 r	39,300
2	Carlin Mines Operations[4]	Elko, Eureka, and Humboldt, NV	Newmont Mining Corp.	30,200	28,800
3	Goldstrike	Elko and Eureka, NV	Barrick Gold Corp.	22,500 r	24,300
4	Round Mountain	Nye, NV	Kinross Gold Corp.	13,600 [5]	12,000 [5]
5	Cripple Creek	Teller, CO	Newmont Mining Corp.	14,000	11,200
6	Twin Creeks	Humboldt, NV	do.	11,700	11,200
7	Turquoise Ridge	do.	Barrick Gold Corp. (75%) and Newmont Mining Corp. (25%)	8,750	11,100
8	Bald Mountain	White Pine, NV	Kinross Gold Corp.	8,790 [5]	8,850 [5]
9	Fort Knox	Eastern Interior Region, AK	do.	11,900 [5]	7,950 [5]
10	Phoenix	Lander, NV	Newmont Mining Corp.	7,430	7,500
11	Pogo	Eastern Interior Region, AK	Northern Star Resources Ltd.[6]	8,440 r	7,090
12	Marigold	Humboldt, NV	SSR Mining Inc.	6,290 [7]	6,380 [7]
13	Bingham Canyon	Salt Lake, UT	Rio Tinto Kennecott Corp.[8]	5,530	6,120
14	Long Canyon	Elko, NV	Newmont Mining Corp.	5,410	5,290
15	Jerritt Canyon	do.	Sprott Mining Inc.	4,030	4,510
16	Mesquite	Imperial, CA	Equinox Gold Corp.[9]	5,250	4,360
17	Haile	Lancaster, SC	OceanaGold Corp.	3,690	4,100
18	Kensington	Southeastern Region, AK	Coeur Mining, Inc.	3,580	3,540
19	Wharf	Lawrence, SD	do.	2,970	2,390
20	Fire Creek	Lander, NV	Hecla Mining Co.[10]	3,330	2,040
21	Rochester	Pershing, NV	Coeur Mining, Inc.	1,590	1,690
22	South Arturo	Elko, NV	Barrick Gold Corp. (60%) and Premier Gold Mines Ltd. (40%)	4,440	1,630
23	Greens Creek	Southeastern Region, AK	Hecla Mining Co.	1,580	1,600
24	Florida Canyon	Pershing, NV	Alio Gold Corp.[11]	870 r	1,470
25	Soledad Mountain	Kern, CA	Golden Queen Mining Co. Ltd. (50%), Jefferies Financial Group (37.73%), Auvergne, LLC (12.27%)	1,440 r	1,320
26	Pan	White Pine, NV	Fiore Gold Ltd.	505 r	1,160
27	Robinson	do.	KGHM International Ltd.	1,100 r	1,150
28	Golden Sunlight	Jefferson, MT	Barrick Gold Corp.	1,280	995
29	Hollister	Elko, NV	Hecla Mining Co.[10]	210 r	828
30	Rawhide	Mineral, NV	Coral Reef Capital L.L.C.	572	480
31	Midas	Elko, NV	Hecla Mining Co.[10]	1,070	422
32	Mineral Ridge	Esmeralda, NV	Scorpio Gold Corp. (70%) and Waterton Glol Resource Management, Inc. (30%)	592	242
33	Ruby Hill	Eureka, NV	Waterton Global Resource Management, Inc.	139	145
34	Aurora	Mineral, NV	Hecla Mining Co.[10]	29	115
35	Golden Chest	Shoshone, ID	New Jersey Mining Co.	106 r	79
36	Borealis	Mineral, NV	Waterton Global Resource Management, Inc. (64%) and Gryphon Gold Corp. (36%)	9	13
37	Sterling	Nye, NV	Coeur Mining, Inc.[12]	11 r	9
XX	Hycroft	Humboldt and Pershing, NV	Hycroft Mining Co.	58	--
XX	Kettle River-Buckhorn	Okanogan, WA	Kinross Gold Corp.	2,380 [5]	-- [13]
(14)	Bagdad	Yavapai, AZ	Freeport-McMoRan Inc.	NA	NA
(14)	Chino	Grant, NM	do.	NA	NA
(14)	Eagle	Marquette, MI	Lundin Mining Corp.	NA	NA
(14)	Morenci	Greenlee, AZ	Freeport-McMoRan Inc.	NA	NA
(14)	Stillwater	Stillwater, MT	Sibanye Gold Ltd.	NA	NA

See footnotes at end of table.

TABLE 3—Continued

LEADING GOLD-PRODUCING OPERATIONS IN THE UNITED STATES IN 2018, IN ORDER OF PUBLICLY AVAILABLE OUTPUT[1]

[r]Revised. do. Ditto. NA Not available from publicly available information. XX Not applicable. -- Zero.

[1]Table includes data available through March 11, 2020. Data are rounded to no more than three significant digits; the operations listed accounted for more than 99% of U.S. output in 2018. Data shown are from publicly available information and may differ from proprietary information used to generate the U.S. totals listed in tables 1, 2, and 8.

[2]For Alaska, mines are located by geographic region, as delineated by the Alaska Division of Geological & Geophysical Surveys in its Special Report 74, Alaska's mineral industry 2018.

[3]When multiple owners are listed, the operating owner is listed first, and when only one owner is listed, the company has full ownership. As of December 31, 2018.

[4]Includes four open pit operations and four underground operations. Does not include the Long Canyon, Phoenix, Twin Creeks, and joint-venture underground Turquoise Ridge Mines, which are listed separately.

[5]Quantity refers to the reported total gold equivalent of coproduct or byproduct metals recovered.

[6]On September 3, 2018, Northern Star Resources Ltd. purchased the Pogo Mine.

[7]Quantity refers to total quantity of gold content of concentrates produced.

[8]Wholly owned subsidiary of Rio Tinto plc.

[9]On October 30, 2018, Equinox Gold Corp. purchased New Gold Inc., which owned the Mesquite Mine.

[10]On July 23, 2018, Hecla Mining Co. purchased Klondex Mines Ltd., which owned the Aurora, Fire Creek, Hollister, and Midas Mines.

[11]On July 25, 2018, Alio Gold Inc. and Rye Patch Gold Corp. combined businesses and were renamed Alio Gold Corp.

[12]On October 30, 2018, Coeur Mining Inc. purchased Northern Empire Resources Corp., which owned the Sterling project.

[13]Mining was stopped in third quarter of 2017 and gold production continued until fourth quarter of 2017.

[14]The rank order is not shown to avoid disclosing company proprietary data.

Sources: Company annual reports, company 10–K reports submitted to the U.S. Securities and Exchange Commission, and State Geologists.

TABLE 4
U.S. EXPORTS OF REFINED GOLD, BY COUNTRY OR LOCALITY[1]

(Kilograms, gold content, and thousand dollars)

Year and country or locality	Ores and concentrates[2]		Dore and precipitates		Refined bullion[3]		Total	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
2017	3,610	137,000	176,000	7,180,000	281,000	11,300,000	461,000	18,600,000
2018:								
Australia	--	--	(4)	8	5	212	6	220
Bermuda	--	--	--	--	52	2,060	52	2,060
Bolivia	--	--	--	--	3	141	3	141
Bulgaria	77	3,200	--	--	--	--	77	3,200
Canada	(4)	9	10,300	396,000	5,740	245,000	16,000	641,000
Cayman Islands	--	--	--	--	13	538	13	538
China	2,580	111,000	9	371	21,600	922,000	24,200	1,030,000
Columbia	--	--	5	190	--	--	5	190
Germany	495	20,000	--	--	226	8,960	721	29,000
Guatemala	--	--	--	--	40	1,610	40	1,610
Hong Kong	12	459	15,300	671,000	36,100	1,540,000	51,500	2,210,000
India	(4)	5	41,300	1,690,000	4,820	203,000	46,100	1,890,000
Ireland	--	--	(4)	9	19	742	19	751
Israel	--	--	5	217	12	492	17	710
Italy	--	--	7,260	276,000	31	1,220	7,290	277,000
Japan	254	8,370	(4)	18	1,100	43,800	1,360	52,200
Korea, Republic of	24	925	7	277	25	954	55	2,160
Laos	--	--	--	--	5	202	5	202
Mexico	--	--	(4)	3	1,680	67,800	1,680	67,800
Netherlands	1,290	48,300	--	--	1	32	1,290	48,400
Oman	--	--	--	--	79	3,070	79	3,070
Pakistan	--	--	--	--	43	1,780	43	1,780
Panama	--	--	24	932	16	651	40	1,580
Peru	--	--	--	--	220	8,610	220	8,610
Poland	--	--	11	444	1	50	12	494
Singapore	--	--	21	729	2,110	81,900	2,130	82,600
South Africa	--	--	--	--	29	1,150	29	1,150
Switzerland	(4)	3	89,600	3,660,000	71,300	2,800,000	161,000	6,460,000
Thailand	(4)	4	--	--	3,010	117,000	3,010	117,000
Turkey	--	--	--	--	72	2,910	72	2,910
United Arab Emirates	--	--	6,830	280,000	1,950	78,500	8,780	359,000
United Kingdom	(4)	4	3	109	149,000	6,100,000	149,000	6,100,000
Vietnam	--	--	--	--	32	1,320	32	1,320
Other	(4)	6	3	112	9	347	12	466
Total	4,740	192,000	171,000	6,970,000	299,000	12,200,000	474,000	19,400,000

-- Zero.

[1]Table includes data available through March 11, 2020. Data are rounded to no more than three significant digits; may not add to totals shown.

[2]Includes base-metal ores, concentrates, and matte destined for refining.

[3]Bullion also moves in both directions between U.S. markets and foreign stocks on deposit in the Federal Reserve Bank. Monetary gold is excluded.

[4]Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 5
U.S. EXPORTS OF GOLD-BEARING MATERIALS, BY COUNTRY OR LOCALITY[1]

(Kilograms, gross weight, and thousand dollars)

	Waste and scrap		Metal powder		Gold compounds	
Year and country or locality	Quantity	Value	Quantity	Value	Quantity	Value
2017	114,000	1,040,000	382	8,550	766,000	117,000
2018:						
Canada	69,600	875,000	3	29	1,600	11,800
China	198	1,530	5	114	810	10,400
Costa Rica	--	--	34	231	422	8,420
Ecuador	--	--	--	--	518	26
France	--	--	--	--	215	213
Germany	16,100	15,700	50	1,980	96	682
Hong Kong	1	29	25	648	58	587
India	51	419	197	6,960	98	1,000
Indonesia	--	--	33	1,280	--	--
Israel	--	--	13	589	1	4
Italy	1,220	1,860	13	510	--	--
Japan	373	5,940	22	668	1,470	80
Korea, Republic of	31,400	1,980	24	564	455,000	18,100
Malaysia	--	--	--	--	603	11,100
Mexico	(2)	3	(2)	3	3,720	26,500
Paraguay	--	--	--	--	532	4
Singapore	--	--	--	--	6,440	24,500
Slovenia	--	--	--	--	25	962
Switzerland	1	52	36	1,410	38	812
Taiwan	--	--	(2)	12	508	1,020
Turkey	11	111	18	721	--	--
United Kingdom	4,960	6,510	37	578	78	245
Other	57	42	14	122	253	494
Total	124,000	909,000	525	16,400	472,000	117,000

-- Zero.
[1]Table includes data available through March 11, 2020. Data are rounded to no more than three significant digits; may not add to totals shown.
[2]Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 6
U.S. IMPORTS FOR CONSUMPTION OF REFINED GOLD, BY COUNTRY OR LOCALITY[1]

(Kilograms, gold content, and thousand dollars)

Year and country or locality	Ores and concentrates[2]		Dore and precipitates		Refined bullion[3]		Total	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
2017	342	9,110 r	154,000	6,500,000	99,900	4,050,000	255,000	10,600,000
2018:								
Antigua and Barbuda	--	--	(4)	11	12	469	13	479
Argentina	--	--	3,010	148,000	--	--	3,010	148,000
Aruba	--	--	9	350	--	--	9	350
Australia	--	--	24	951	828	35,200	852	36,100
Bahamas, The	--	--	2	89	2	79	4	168
Barbados	--	--	19	815	--	--	19	815
Bolivia	--	--	563	22,800	--	--	563	22,800
Brazil	--	--	3,930	159,000	5,240	211,000	9,170	369,000
Canada	19	678	9,240	375,000	26,600	1,100,000	35,900	1,470,000
Cayman Islands	--	--	--	--	10	391	10	391
Chile	--	--	5,700	276,000	--	--	5,700	276,000
China	--	--	(4)	17	5	200	5	217
Colombia	--	--	7,580	306,000	980	39,100	8,560	345,000
Costa Rica	--	--	8	328	268	10,600	276	10,900
Curacao	--	--	568	24,600	9	337	577	24,900
Dominican Republic	--	--	1,460	57,900	--	--	1,460	57,900
Ecuador	--	--	3,400	137,000	--	--	3,400	137,000
France	--	--	--	--	414	16,900	414	16,900
Germany	--	--	21	838	668	28,800	688	29,600
Ghana	--	--	76	3,330	21	878	97	4,200
Greece	60	2,400	--	--	--	--	60	2,400
Guatemala	--	--	132	5,030	--	--	132	5,030
Guinea	--	--	4	169	22	837	26	1,010
Guyana	--	--	250	10,800	2,610	105,000	2,860	116,000
Honduras	--	--	2,030	84,600	--	--	2,030	84,600
Hong Kong	--	--	--	--	118	5,020	118	5,020
Japan	--	--	5	202	57	2,430	62	2,630
Mexico	--	--	64,700	2,800,000	8,380	345,000	73,100	3,150,000
Nicaragua	--	--	3,920	165,000	3,600	149,000	7,520	314,000
Panama	--	--	89	3,630	484	19,600	573	23,200
Paraguay	--	--	29	1,140	227	8,690	256	9,830
Peru	--	--	21,400	972,000	20,000	818,000	41,400	1,790,000
Senegal	--	--	20	801	--	--	20	801
Sierra Leone	--	--	(4)	6	4	137	4	143
South Africa	--	--	2	83	6,430	253,000	6,440	253,000
Switzerland	--	--	3,000	121,000	2,810	113,000	5,810	234,000
Uganda	--	--	--	--	5	180	5	180
United Arab Emirates	--	--	80	3,220	690	27,900	770	31,200
United Kingdom	--	--	(4)	4	897	35,800	897	35,800
Uruguay	--	--	156	6,420	--	--	156	6,420
Venezuela	--	--	246	9,890	73	2,740	318	12,600
Other	--	--	8	310	8	332	15	642
Total	79	3,080	132,000	5,700,000	81,500	3,330,000	213,000	9,030,000

r Revised. -- Zero.
[1] Table includes data available through March 11, 2020. Data are rounded to no more than three significant digits; may not add to totals shown.
[2] Includes base metal ores, concentrates, and matte destined for refining.
[3] Bullion also moves in both directions between U.S. markets and foreign stocks on deposit in the Federal Reserve Bank. Monetary gold is excluded.
[4] Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 7
U.S. IMPORTS OF GOLD-BEARING MATERIALS, BY COUNTRY OR LOCALITY[1]

(Kilograms, gross weight, and thousand dollars)

Year and country or locality	Waste and scrap		Metal powder		Gold compounds	
	Quantity	Value	Quantity	Value	Quantity	Value
2017	18,300	395,000	216	8,260	1,980	3,550
2018:						
Aruba	46	738	--	--	--	--
Bahamas, The	35	764	--	--	--	--
Barbados	20	303	--	--	--	--
Canada	5,930	129,000	9	353	2	2
Chile	214	5,730	--	--	--	--
China	43	888	(2)	10	2	7
Colombia	41	1,120	--	--	--	--
Costa Rica	1,190	26,000	--	--	--	--
Dominican Republic	844	16,200	--	--	--	--
Ecuador	447	7,110	--	--	--	--
El Salvador	209	3,640	--	--	--	--
French Polynesia	12	138	--	--	--	--
Germany	228	4,800	176	6,810	176	1,150
Grenada	8	145	--	--	--	--
Guatemala	385	6,550	--	--	--	--
Honduras	765	21,100	--	--	--	--
Italy	3	73	2	13	150	212
Jamaica	303	5,530	--	--	--	--
Japan	1	18	(2)	16	2,650	1,960
Malaysia	411	1,060	(2)	7	--	--
Martinique	11	256	--	--	--	--
Mexico	1,990	37,600	90	3,280	--	--
Netherlands	20	620	--	--	--	--
Nicaragua	1,140	31,000	--	--	--	--
Panama	458	9,200	8	137	--	--
Philippines	39	1,010	--	--	--	--
Spain	45	920	--	--	--	--
St. Vincent and the Grenadines	13	236	--	--	--	--
Switzerland	--	--	178	6,880	152	125
Trinidad and Tobago	35	543	--	--	--	--
United Kingdom	22	324	--	--	241	657
Other	78	907	2	84	40	63
Total	15,000	313,000	465	17,600	3,410	4,170

-- Zero.

[1]Table includes data available through March 11, 2020. Data are rounded to no more than three significant digits; may not add to totals shown.

[2]Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 8
GOLD: WORLD MINE PRODUCTION, BY COUNTRY OR LOCALITY[1]

(Kilograms)

Country or locality[2]	2014	2015	2016	2017	2018
Algeria	85	106	102	137 r	286
Argentina	60,162	61,310	56,998	71,908 r	72,000 e
Armenia	3,994	3,100 e	3,732	4,270 e	4,200 e
Australia	269,138 r	275,160 r	290,800 r	294,171 r	315,100
Azerbaijan	1,873	2,229	1,895	3,667 r	3,476
Bolivia	24,803 r	12,810 r	12,811	29,254 r	29,976
Botswana	958	756	833	920	1,106
Brazil	81,038	84,814	77,845	85,000 r, e	85,000 e
Bulgaria, concentrate	7,889	7,914	7,918	9,449	9,544
Burkina Faso[3]	36,199	35,223	38,100	46,200	36,000 e
Burundi	650	549	396	953 r	576
Cameroon[e]	1,000 r	1,000 r	1,000 r	1,000 r	1,000
Canada	151,742	160,751	161,497	168,072 r	183,047
Chile	46,031	42,501	46,333	37,911 r	37,066
China	451,000 e	450,000 e	453,500	426,142	401,119
Colombia	57,015	59,202	61,805	42,100 r	33,000 e
Congo (Kinshasa)[e]	36,000 r	40,000 r	39,000 r	39,000 r	46,000
Costa Rica[e]	100	100	100	100	100
Côte d'Ivoire	17,350	19,441	20,827	20,318	20,000 e
Cyprus	--	--	--	48	47
Dominican Republic	35,081	30,454	37,933	33,910	31,633
Ecuador	7,322	7,723	6,761 r	6,176 r	6,180
Egypt	11,733	13,653	17,139	16,951 r	14,680
Eritrea	905	1,390	1,400 e	2,700 e	3,700 e
Eswatini[4]	--	--	-- r	30	12
Ethiopia[5]	11,970	9,040	8,577	5,390 r	4,000 e
Fiji	1,196	1,290	1,500	1,425	1,281
Finland	9,385	8,342	8,865	9,102	8,732
French Guiana	1,689	1,460	1,600 e	1,300 r, e	1,300 e
Gabon	1,012	1,301	1,020	1,000 e	--
Georgia[e]	2,600	3,100	3,600	3,000	3,000
Ghana	137,090	125,325	124,196	127,573	127,000 e
Greece	503	465	109	822	2,839
Guatemala	5,928	5,641	3,826	1,646 r	1,656
Guinea	11,987 r	16,071 r	15,561 r	18,388 r	18,000 e
Guyana	12,053	14,029	22,168	20,334	19,069
Honduras	2,762	2,598	2,607	2,657	2,064
India[e]	1,600	2,000	1,700	1,400	1,500
Indonesia[6]	69,023 r	92,171 r	80,868 r	101,000 r, e	135,000 e
Iran[e, 7]	3,300	3,500	3,700	3,700	3,700
Japan	7,115	7,700	6,455	6,372	6,453
Kazakhstan	50,339	63,614	74,737	85,339 r	100,288
Kenya	200	134	160	503	500 e
Korea, North[e]	2,000	2,000	1,000	1,000	1,000
Korea, Republic of	282 r	269	205 r	361 r	238
Kyrgyzstan[e]	18,000	18,000	19,000	27,900	27,400
Laos	5,265	6,893	6,764	5,988	5,579
Liberia	620	883	5,135 r	6,071 r	7,096
Madagascar	--	--	587	2,700 e	2,000 e
Malaysia	4,308	4,732	2,249	2,124	2,520
Mali	39,692	40,889	41,356	46,483	55,029
Mauritania	9,625	8,804	7,127	9,096	9,235
Mexico	117,771	134,758	132,413	130,470 r	117,323
Mongolia	11,504	14,556	18,436 r	19,847	20,655
Morocco	212	292 r	174 r	220 r	200 e
Mozambique	197	242	201 r	166 r	507
Namibia	2,140	6,009	6,604	7,272	6,458
New Zealand	11,989	12,687	9,866	10,288	10,500 e
Nicaragua	8,648	6,814	8,391	7,377	7,746

See footnotes at end of table.

TABLE 8—Continued
GOLD: WORLD MINE PRODUCTION, BY COUNTRY OR LOCALITY[1]

(Kilograms)

Country or locality[2]	2014	2015	2016	2017	2018
Niger	732	1,220	999	1,000 e	1,000 e
Nigeria	16	21 r	23	10 r	39
Oman	165	102	67	3	--
Panama	2,954	2,000 e	400 e	400 e	400 e
Papua New Guinea	57,939	60,046	62,293	64,000 e	67,000 e
Peru	140,088	146,822	152,990	151,964 r	142,642
Philippines	18,423	21,314	23,053	22,699	20,765
Poland, metal	2,575	2,703	3,539	3,648 r	2,587
Russia	246,904 r	248,945 r	253,579	270,300 r	311,000 e
Rwanda	160	319	336	300 e	300 e
Senegal	6,588	5,670	6,874	6,732	7,628
Sierra Leone	43	107	188	140 r	446
Slovakia	582	603 r	492 r	500 e	500 e
Solomon Islands	531 r	--	--	--	--
South Africa	151,622	144,504	142,202 r	137,133 r	117,200
Spain	2,020 r	1,800 r	1,260 r	1,591 r	1,992
Sudan[8]	73,300 e	82,400 e	93,400 e	107,300 r	93,600
Suriname	27,900	23,800 r, e	25,500	25,349 r	25,536
Sweden	6,849	6,030	6,463	7,858	7,866
Tajikistan	3,477	4,200	5,000 r, e	5,500 e	6,400
Tanzania	40,964	43,725	45,816	43,490	36,300 e
Thailand	4,514	3,305	4,293	--	--
Togo[9]	20,583	15,568	14,000 e	20,000 r, e	20,000 e
Turkey	31,260	27,800	24,500	23,090 r	27,100
Uganda[e]	3,000	3,000	3,000	1,800	1,800
United States	210,000	214,000	232,000	237,000	226,000
Uruguay[10]	1,875	1,664	1,113	1,100	860
Uzbekistan[e]	100,000	100,000	102,000	104,000	104,000
Venezuela	1,056	558	558	480	480 e
Vietnam	564 r	539 r	584 r	557 r	560 e
Zambia	4,803	4,238	4,610	4,373	3,899
Zimbabwe	15,385	20,023	22,747	23,929	35,100
Total	3,040,000 r	3,110,000 r	3,190,000 r	3,270,000 r	3,310,000

[e]Estimated. [r]Revised. -- Zero.

[1]Table includes data available through September 18, 2019. All data are reported unless otherwise noted. Totals, U.S. data, and estimated data are rounded to no more than three significant digits; may not add to totals shown.

[2]In addition to the countries and (or) localities listed, Benin, Cambodia, Chad, Cuba, El Salvador, Equatorial Guinea, Haiti, Macedonia, Malawi, Pakistan, Paraguay, Portugal, and South Sudan may have produced gold (either as undocumented artisanal or byproduct production), but available information was inadequate to make reliable estimates of output.

[3]Does not include artisanal or byproduct production.

[4]Formerly Swaziland. The country was officially renamed Eswatini on April 19, 2018.

[5]Production is based on fiscal year, with a starting date of July 8 of the year shown.

[6]Does not include production from so-called people's mines, which may be as much as 20,000 kilograms per year, but includes gold recovered as byproduct of copper mining.

[7]Includes gold recovered from the Mouteh gold mine and from the Sarcheshmeh copper complex.

[8]Reported exports.

[9]Data reported by the Government of Togo as exports predominately include artisanal gold mine production transiting Togo from neighboring countries and, to a lesser extent, domestic artisanal mine production. Data may include gold from other artisanal sources.

[10]Production is based on fiscal year, with a starting date of April 1 of the year shown.