

Goldletter INTERNATIONAL

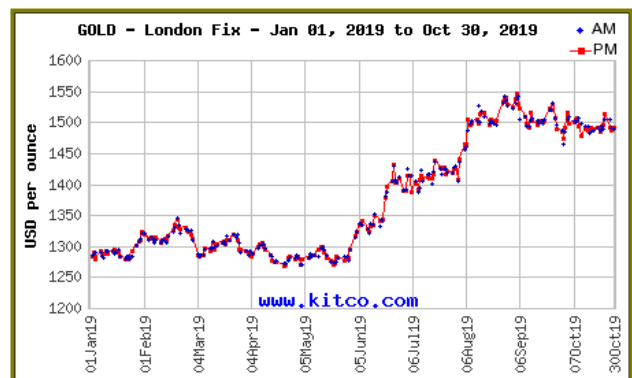
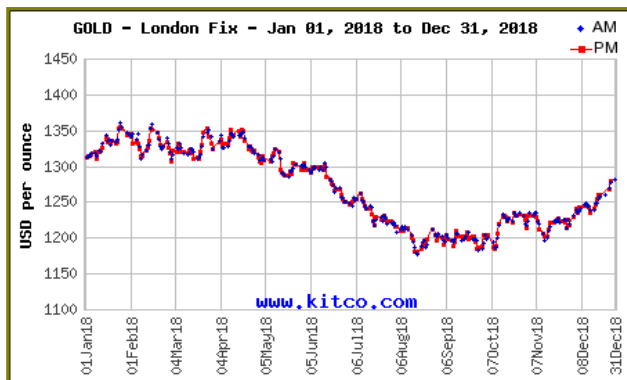
the international independent information and advice bulletin for gold and related investments

Overviews as at October 31, 2019



Marino G. Pieterse, publisher and editor

- Gold price continues to stabilize around \$ 1,500 after two Fed funds rate decreases of 25% since September



Precious and base metal/ oil and uranium prices (in US\$) - period 2019 - 2012 gold price related to total metal market complex

	Oct. 31 2019	Year-end 2018	Change %	Year-end 2017	Year-end 2016	Year-to-Year 2017/2016 change %	Year-end 2015	Year-to-Year 2016/2015 change %	Year-end 2014	Year-end 2013	Year-end 2012
Gold	1,511	1,282	18	1,297	1,159	12	1,062	9	1,199	1,202	1,664
Silver	18.06	15.46	17	16.87	16.24	4	13.82	18	15.97	19.50	29.95
Palladium	1,794	1,263	42	1,057	670	58	547	22	798	711	705
Platinum	936	794	18	925	898	3	872	3	1,210	1,358	1,533
Copper	5,825	5,965	-2	7,157	5,501	30	4,702	17	6,359	7,395	7,915
Lead	2,210	2,009	10	2,495	1,985	26	1,802	10	1,853	2,206	2,035
Nickel	16,835	10,595	59	12,260	10,010	22	8,665	16	14,935	13,970	17,085
Zinc	2,543	2,511	1	3,309	2,563	29	1,600	60	2,167	2,086	2,035
Brent oil	59.62	54.16	10	66.63	56.82	17	37.28	52	57.55	110.80	111.25
12-month price range:											
H \$ 86.74 (03/10/2018)											
L \$ 49.93 (25/12/2018)											
2008:											
H \$ 147.00 (7/7)											
L \$ 39.23 (5/12)											
Uranium (U3O8) spot	24.85	28.70	-13	22.32	20.25	10	34.25	-41	35.50	34.50	43.50
12-month price range:											
H \$ 29.10 (30/11/2018)											
L \$ 25.25 (end of August 2,2019)											
Long-term pre-Fukushima 2011 (H)	31.50	31.25	1	30.67	30.00	2	44.00	-32	49.00	50.00	56.50
				73.00							

World official gold holdings and total monetary reserves

Top 10 Western countries

<i>September 2019</i>	Gold reserves in tonnes	Gold as % total foreign reserves	Total monetary reserves in US\$ billion (gold price of US\$ 1,500)
United States	8,133.5	78.0	503
Germany	3,366.8	71.9	226
Italy	2,451.8	67.4	175
France	2,436.1	60.8	193
Switzerland	1,040.0	5.7	880
Netherlands	612.5	67.7	44
Portugal	382.5	64.7	29
United Kingdom	310.3	8.5	176
Spain	281.6	17.6	77
Austria	280.0	52.1	26
Total	19,295.1		2,329

Top 10 emerging countries

Russian Federation	2,219.2	19.6	546
China	1,936.5	2.8	3,100
India	618.2	6.5	459
Kazakhstan	380.0	63.0	29
Uzbekistan	327.8	54.3	29
Turkey	320.7	16.3	95
Poland	228.2	8.9	124
Philippines	197.9	10.6	90
Thailand	154.0	3.2	232
South Africa	125.3	11.7	52
Total	6,507.8		4,756

Source: IMF/World Gold Council

► China passes new law on October 29, 2019 to launch own cryptocurrency affecting gold as a monetary instrument

On October 29, 2019, China's central bank announced a state-backed cryptocurrency and issue it to 7 institutions in the coming months. Independent researcher Paul Schulte, who worked as global head of financial strategy for China Construction Bank until 2012, says the largest bank in the world, the Industrial and Commercial Bank of China, the second largest bank in the world, the Bank of China, the Agricultural Bank of China; the two of China's largest financial technology companies Alibaba and Tencent; and Union Pay, an association of Chinese banks, will receive the cryptocurrency.

A separate source, who is involved in the development of the cryptocurrency dubbed **DC/EP (Digital Currency/Electronic)**, 7 institutions would be receiving the new asset

The technology behind the cryptocurrency has already been ready since last year.

The plan to use a diverse set of China's trusted institutions to disperse the cryptocurrency is reminiscent of a number of other ideas currently percolating around the world. For instance, **Facebook's** planned **Libra cryptocurrency** will be backed by a basket of currencies issued by central banks with support from companies like Mastercard and Uber in the United States, Vodafone in England.

Bank of England governor Marc Carney recently floated the idea of a new currency backed by a number of central banks to replace the US dollar as the global reserve currency.

What sets China's **DC/EP** part from libra and Carney's synthetic hegemonic currency ("**SHC**") according to Schulte, is that while libra is little more than early-stage computer code and the HSC doesn't appear to have gone much further than Carney's mind, the Chinese cryptocurrency is ready to launch and China's central bank will be the first to do so.

Whether anyone outside China would actually use a digital renminbi for transaction in their own country is unclear. As the Bank of England governor's comments about replacing the U.S. dollar indicate, much of the world is tired of having their financial stability tied to the United States' monetary system.

In this respect, the escalating trade war between the United States and China and President Trump having accused China of being a "currency manipulator" could play a crucial role. While China has denied the charge and called the U.S. "protectionist" in a press statement, the perception of manipulation could be harmful to broaden adaption of a digital currency linked to the renminbi.

On the other hand, the introduction of Chinese cryptocurrencies will affect gold as an optional financial not only for China, but also other emerging countries in Asia to strengthen the position of the renminbi against the US dollar and other official exchange reserves as part of China's Belt an Road Initiative to pass the United States as the world's leading economy in the next twenty years, supported by its goal to lead the G5-artificial intelligence revolution.

► India studying transformative potential of blockchain to digitize its economy

The **Reserve Bank of India ("RBI")**, the central bank, in April 2018 ordered bank and other financial institutions to stop dealing with anyone involved in cryptocurrencies. That cut-off access to the country's financial system, forcing some of the largest crypto exchanges to shut down.

The cryptocurrency industry is now hoping for respite as a long-running Supreme Court case comes to a head. A final judgement is expected shortly.

However, RBI itself noted the risk that digital currency trading will shift from exchanges to private forums and offshore apparently increasing the changes that they will be used for illicit activities.

Under prime minister Narendra Modi, **India** has embarked on a project to embrace technologies that can help digitize the economy, promoting mobile payments and raving about the transformative potential of blockchain. Government policies have led large numbers of Indians to begin investing in financial markets for the first time.

► US dollar dominates compensation of foreign exchange reserves (COFER)

The currency compensation of official foreign exchange reserves (**COFER**) is dominated by the US dollar holding US\$ 26,341 billion or 57.4% of a total of the latest available calculation of US\$ 45,927 billion, compared to only US\$ 735 million or 1.7% of Chinese renminbi.

► Course of US dollar Index (USDX)

The US dollar Index (USDX) started in March 1973 and today us a basket of 6 currencies, including **Euros** (57.6%), **Japanese yen** (13.6%), **British pounds** (11.9%), **Canadian dollars** (9.1%), **Swedish crones** (4.2%) and **Swiss francs** (3.6%).

Since the USDX went up in 1995 from a long-term resistance level of 80 to a high of 120 in 2001.

At the time the Euro was introduced (January 1, 2001), it dropped to a low of 72 in March 2008, but was then followed by a strong upward correction to \$ 87 well above the historic resistance level.

After a new correction to 74 in early December 2009, from the second half of 2011 into 2012 there was another strong recovery to above the 80 level and reaching a high of 84 in August 2012. Since then, the index moved in a relatively stable range before moving up strongly in the course of the second half of 2014.

In the last week of January 2002 the index reached a high of 121 during the high-tech boom and a low of 71 just prior to the great recession of 2008-2009. Since then, the USD Index has moved up again to a level of 102,53 in August 2019.

Meanwhile, a make-up of the basket is overdue for revision, as China has emerged to the world's second trading partner since it became a member of the World Trade Organization in late 2001.



Measuring the gold market as a safe haven

	London trading in US\$	Change in %	Period of change
December 1, 2003	400.00		
December 2, 2005	500.00	+25	(2 years)
April 14, 2006	600.00	+20	(3½ months)
May 10, 2006	700.00	+17	(- 1 month)
October 6, 2006	560.75	-23	(5 months)
► Year-end 2006	635.75	+14	(3 months)
April 20, 2007	691.40	+9	(4 months)
June 27, 2007	642.10	-7	(2 months)
September 18, 2007	714.75	+12	(2½ months)
► Year-end 2007	836.50	+17	(3½ months)
March 17, 2008 (H)	1,030.80	+24	(2½ months)
May 1, 2008	853.00	-16	(1½ months)
July 16, 2008	977.50	+15	(2½ months)
September 11, 2008	740.75	-24	(2 months)
October 10, 2008	918.00	+24	(1 month)
October 24, 2008 (L)	692.50	-25	(2 weeks)
► Year-end 2008	865.00	25	(2 months)
February 20, 2009	989.00	14	(-2 months)
(Interim high New York \$ 1,006.30)			
April 20, 2009	870.00	-12	(2 months)
June 1, 2009	987.00	+13	(-1½ month)
July 13, 2009	908.50	-8	(+1½ month)
September 17, 2009	1,020.50	12	(2 months)
December 3, 2009 (H)	1,226.10	20	(2½ months)
► Year-end 2009	1,104.00	-10	(1 month)
January 29, 2010	1,078.50	-3	(1 month)
December 7, 2010 (H)	1,426.00	+32	(11 months)
► Year-end 2010	1,410.25	+28	(12 months)
January 31, 2011	1,327.00	-6	(1 month)
May 3, 2011 (H)	1,546.50	17	(3 months)
June 30, 2011	1,505.50	-3	(2 months)
September 6, 2011 (H)	1,920.00	+28	(2 months)
September 30, 2011	1,619.77	-15	(1 month)
► Year-end 2011	1,571.50	-18	(4 months)
May 16, 2012 (L)	1,537.50	-2	(3½ months)
October 4, 2012 (H)	1,791.75	+17	(9 months)
► Year-end 2012	1,664.00	+6	(12 months)
April 15, 2013	1,352.60	-19	(3½ months)
May 3, 2013	1,469.25	+9	(1 month)
June 30, 2013 (L)	1,192.00	-19	(1½ months)
► Year-end 2013	1,201.50	+1	(6 months)
March 14, 2014 (H)	1,385.00	+15	(2½ months)
► Year-end 2014	1,199.25	-13	(12 months)
January 21, 2015 (H)	1,298.00	+8	(1 month)
December 3, 2015 (L)	1,050.60	-13	(11 months)
► Year-end 2015	1,062.25	-12	(12 months)
June 30, 2016	1,320.75	+24	(6 months)
July 6, 2016 (H)	1,370.00	+14	(1 week)
November 8, 2016	1,282.35	-6	(4 months)
December 20, 2016 (L)	1,125.70	-12	(1½ months)
► Year-end 2016	1,159.10	+3	(1½ week)
June 30, 2017	1,242.00	-3	(2 weeks)
September 8, 2017 (H)	1,351.00	+9	(2 months)
► Year-end 2017	1,296.50	-5	(3¼ months)
January 24, 2018 (H)	1,360.25	+5	(1 month)
August 17, 2018 (L)	1,176.70	-9	(7 months)
► Year-end 2018	1,281.65	+9	(4½ months)
September 4 (H)	1,546.10	+20	(8 months)
October 31, 2019	1,510.95	-2%	(2 months)

Gold runs its own course against dollar and oil price

		Gold (\$)	€/\$	Brent Oil \$/barrel	Gold/Oil ratio
Year-end 2001		276.50	0.88	19.80	14.0
Year-end 2002		342.75	1.05	28.13	12.2
Year-end 2003		417.25	1.26	30.17	13.8
Year-end 2004		438.00	1.36	40.25	10.9
Year-end 2005		513.00	1.18	58.87	8.7
May 12, 2006	1)	725.75	1.29	68.05	10.7
October 6, 2006	2)	560.75	1.27	58.86	9.5
▶ Year-end 2006		635.70	1.32	60.14	10.6
June 30, 2007		650.50	1.35	72.82	8.9
September 18, 2007	3)	714.75	1.39	77.58	9.2
▶ Year-end 2007		836.50	1.47	93.89	8.9
March 17, 2008 (High)		1,030.80	1.58	102.82	10.0
April 30, 2008	4)	853.00	1.55	109.78	7.8
June 30, 2008		930.25	1.58	139.30	6.7
July 9, 2008	5)	927.50	1.57	141.70	6.5
July 16, 2008		977.50	1.58	134.54	7.3
September 15, 2008		775.00	1.43	90.38	8.6
October 8, 2008	6)	903.50	1.37	83.18	10.9
October 24, 2008 (Low)		692.50	1.26	60.41	11.5
November 24, 2008		822.50	1.28	52.19	15.8
December 5, 2008	7)	749.00	1.27	39.23	19.1
December 16, 2008	8)	838.25	1.37	44.11	19.0
▶ Year-end 2008		865.00	1.40	41.76	20.7
January 15, 2009	9)	810.00	1.31	44.50	18.2
March 5, 2009	10)	913.00	1.26	44.16	20.7
April 2, 2009	11)	897.75	1.34	53.14	16.9
May 13, 2009	12)	924.00	1.36	57.26	16.1
June 30, 2009		934.50	1.41	68.21	13.7
September 30, 2009		995.75	1.46	67.72	14.7
December 3, 2009 (High)		1,226.10	1.51	77.56	15.7
▶ Year-end 2009		1,104.00	1.43	77.20	14.3
May 10, 2010	13)	1,196.50	1.28	80.04	15.0
June 28, 2010		1,261.00	1.23	77.64	16.2
September 30, 2010		1,307.00	1.36	81.01	16.1
▶ Year-end 2010		1,410.25	1.33	92.59	15.2
April 13, 2011	14)	1,457.50	1.44	122.63	11.9
July 13, 2011	15)	1,579.00	1.43	118.57	13.3
September 6, 2011 (High)		1,920.00	1.44	108.70	17.7
September 30, 2011		1,619.77	1.35	102.42	15.8
November 9, 2011	16)	1,784.00	1.36	113.21	15.8
December 14, 2011	17)	1,603.00	1.30	104.10	15.4
▶ Year-end 2011		1,571.50	1.29	108.58	14.5
July 5, 2012	18)	1,604.00	1.24	100.70	15.9
July 26, 2012	19)	1,618.00	1.23	106.38	15.2
▶ Year-end 2012		1,664.00	1.32	111.25	15.0
May 8, 2013	20)	1,469.00	1.32	102.37	14.3
June 30, 2013 (Low)		1,192.00	1.30	102.16	11.7
November 11, 2013	21)	1,282.50	1.36	106.40	12.1
▶ Year-end 2013		1,201.25	1.38	110.80	10.8
June 12, 2014	22)	1,265.75	1.35	106.53	11.9
September 11, 2014	23)	1,241.25	1.29	92.83	13.4
▶ Year-end 2014		1,199.25	1.21	57.55	20.8
January 22, 2015	24)	1,295.75	1.15	49.69	26.1
December 16, 2015	25)	1,075.25	1.09	38.64	27.8
▶ Year-end 2015		1,062.25	1.09	37.28	28.5
July 6, 2016 (High)		1,370.00	1.10	48.80	28.1
November 8, 2016	26)	1,282.35	1.10	46.04	27.9
December 15, 2016	27)	1,126.95	1.04	54.02	20.9
▶ Year-end 2016		1,159.10	1.05	56.82	20.4

Gold runs its own course against dollar and oil price

▶ Year-end 2016		1,159.10	1.05	56.82	20.4
March 15, 2017	28)	1,198.80	1.07	51.81	23.1
June 14, 2017	29)	1,275.50	1.12	47.00	27.1
▶ September 30, 2017		1,283.10	1.18	57.54	22.3
December 14, 2017	30)	1,251.00	1.18	62.01	20.2
Year-end 2017		1,296.50	1.19	66.63	19.5
March 21, 2018	31)	1,321.35	1.23	69.47	19.0
June 13, 2018	32)	1,296.15	1.17	76.74	16.9
▶ September 26, 2018	33)	1,185.40	1.17	81.34	14.6
December 19, 2018	34)	1,255.00	1.14	57.24	21.9
Year-end 2018		1,281.65	1.14	54.16	23.7
July 31, 2019	35)	1,427.55	1.11	64.36	22.2
September 19, 2019	36)	1,500.70	1.10	64.40	23.3
September 30, 2019		1,485.30	1.09	61.04	24.3
October 30, 2019	37)	1,492.10	1.11	60.24	24.8
October 31, 2019		1,510.95	1.11	59.62	25.3

- 1) 2006 high of gold price
- 2) 2006 second half low of gold price after correction oil price
- 3) Fed funds rate lowered for the first time (0.50% to 4.75%)
- 4) Fed funds rate lowered (0.25% to 4.50%)
- 5) Fed rate lowered (0.25% to 4.25%)
- 6) Fed funds rates lowered 0.50% to 3.75%
- 7) 2008 low of oil price
- 8) Fed funds rate lowered (0.75-1.00% to 0.00-0.25%) for the last time in 10 stages from 5.25% to 0.00-0.025% in the period of June 29, 2007 - December 18, 2008
- 9) ECB rate lowered 0.50% to 2.00%
- 10) ECB rate lowered 0.50% to 1.50%
- 11) ECB rate lowered 0.25% to 1.25%
- 12) ECB rate lowered 0.25% to 1.00%
- 13) Euro salvation package announced
- 14) ECB rate increased 0.25% to 1.25%
- 15) ECB rate increased 0.25% to 1.50%
- 16) ECB rate lowered 0.25% to 1.25%
- 17) ECB rate lowered 0.25% to 1.00%
- 18) ECB rate lowered 0.25% to 0.75%
- 19) ECB: whatever it takes to save Euro
- 20) ECB rate lowered 0.25% to 0.50%
- 21) ECB rate lowered 0.25% to 0.25%
- 22) ECB rate lowered 0.10% to 0.15%
- 23) ECB rate lowered 0.10% to 0.05%
- 24) ECB announces quantitative easing program
- 25) Fed funds rate increase of 0.25% to 0.25%-0.50% range
- 26) Donald Trump elected as next US President
- 27) Fed funds rate increase of 0.25% to 0.50%-0.75% range
- 28) Fed funds rate increase of 0.25% to 0.75%-1.00% range
- 29) Fed funds rate increase of 0.25% to 1.00 - 1.25% range
- 30) Fed funds rate increase of 0.25% to 1.25 - 1.50% range
- 31) Fed funds rate increase of 0.25% to 1.50 - 1.75% range
- 32) Fed funds rate increase of 0.25% to 1.75 - 2.00% range
- 33) Fed funds rate increase of 0.25% to 2.00 - 2.25% range
- 34) Fed funds rate increase of 0.25% to 2.25 - 2.50% range
- 35) Fed funds rate decrease of 0.25% to 2.00 - 2.25% range
- 36) Fed funds rate decrease of 0.25% to 1.75 - 2.00% range
- 37) Fed funds rate decrease of 0.25% to 1.50 - 1.75% range

The crisis resistance of dollar compared to gold price

	Euro/US\$	gold price
March 17, 2008	1.58	1,030.80 2008 high
June 30, 2008	1.58	930.20
September 15, 2008	1.46	996.00
October 24, 2008	1.26	692.50 2008 low
December 16, 2008 1)	1.37	838.25
▶ Year-end 2008	1.40	865.00
February 27, 2009	1.26 2009 high	952.00
June 30, 2009	1.41	934.50
May 13, 2009 2)	1.36	924.00
December 3, 2009	1.51 2009 low	1,226.10 2009 high
▶ Year-end 2009	1.43	1,104.00
March 31, 2010	1.35	1,115.50
April 30, 2010	1.33	1,179.25
May 14, 2010 3)	1.24	1,248.95
June 8, 2010	1.19 2010 high	1,246.00
September 30, 2010	1.36	1,307.00
▶ Year-end 2010	1.33	1,410.25
January 28, 2011	1.36	1,319.00 2011 low
April 13, 2011 4)	1.44	1,457.50
April 29, 2011	1.48 2011 low	1,535.50
July 13, 2011 5)	1.41	1,579.00
September 6, 2011	1.44	1,920.00 2011 high
September 30, 2011	1.35	1,619.77
November 9, 2011 6)	1.36	1,784.00
December 14, 2011 7)	1.30	1,603.00
▶ Year-end 2011	1.29 2011 high	1,571.50
July 5, 2012 8)	1.24	1,604.00
May 23, 2012	1.26	1,537.50 2012 low
July 26, 2012 9)	1.23	1,618.00
October 4, 2012	1.30	1,791.75 2012 high
▶ Year-end 2012	1.32	1,664.00
January 2, 2013	1.32	1,693.75 2013 high
February 20, 2012	1.34 2012 low	1,733.00
March 25, 2013	1.28 2013 high	1,599.25
April 15, 2013	1.31	1,352.60
May 8, 2013 10)	1.32	1,469.00
June 30, 2013	1.30	1,192.00 2013 low
September 30, 2013	1.35	1,326.50
November 11, 2013 11)	1.36	1,253.00
▶ Year-end 2013	1.38 2013 low	1,201.50
March 14, 2014	1.39 2014 low	1,385.00 2014 high
June 12, 2014 12)	1.35	1,265.75
June 30, 2014	1.37	1,315.00
September 13, 2014 13)	1.29	1,241.25
September 30, 2014	1.26	1,216.50
October 31, 2014	1.25	1,164.25 2014 low
▶ Year-end 2014	1.21 2014 high	1,199.25
January 2, 2015	1.21 2015 low	1,172.00
January 21, 2015	1.15	1,298.00 2015 high
March 16, 2015	1.05 2015 high	1,150.75
September 30, 2015	1.12	1,114.00
December 3, 2015	1.06	1,050.60 2015 low
December 16, 2015 14)	1.09	1,075.25
▶ Year-end 2015	1.09	1,062.25
July 6, 2016	1.10	1,370.00 2016 high
September 30, 2016	1.12	1,322.50
November 8, 2016 15)	1.10	1,282.35
December 15, 2016 16)	1.04	1,126.95
December 20, 2016	1.04 2016 high	1,125.70 2016 low
▶ Year-end 2016	1.05	1,159.10

The crisis resistance of dollar compared to gold price

		Euro/US\$	gold price
►	Year-end 2016	1.05	1,159.10
	March 15, 2017 17)	1.07 2017 high	1,198.80
	June 14, 2017 18)	1.12	1,275.50
	June 30, 2017	1.14	1,242.25
	September 8, 2017	1.21 2017 low	1,350.90 2017 high
	September 30, 2017	1.18	1,283.10
	December 14, 2017 19)	1.18	1,251.00
►	Year-end 2017	1.19	1,296.50
	January 24, 2018	1.24	1,360.25 2018 high
	February 16, 2018	1.25 2018 low	1,352.10
	March 21, 2018 20)	1.23	1,321.35
	April 30, 2018	1.17	1,305.35
	June 13, 2018 21)	1.17	1,296.15
	June 30, 2018	1.16	1,250.45
	August 17, 2018	1.14	1,176.70 2018 low
	September 26, 2018 22)	1.17	1,185.40
	November 12, 2018	1.12 2018 high	1,205.55
	December 19, 2018 23)	1.14	1,255.00
►	Year-end 2018	1.14	1,281.65
	January 10, 2019	1.15 2019 low	1,291.90
	April 25, 2019	1.11	1,280.80
	July 31, 2019 24)	1.11	1,427.55
	September 4, 2019	1.10	1,546.10 2019 high
	September 30, 2019	1.09 2019 high	1,485.30
	October 30, 2019 26)	1.11	1,492.10
	October 31, 2019	1.11	1,510.95

- 1) Fed funds rate lowered 0.75%-1.00% to 0.00-0.25% (ECB 2.50%)
- 2) ECB rate lowered 0.25% to 1.00%
- 3) Euro salvation package of € 750 billion (\$ 955 billion) announced
- 4) ECB rate increased 0.25% to 1.25%
- 5) ECB rate increased 0.25% to 1.50%
- 6) ECB rate lowered 0.25% to 1.25%
- 7) ECB rate lowered 0.25% to 1.00%
- 8) ECB rate lowered 0.25% to 0.75%
- 9) ECB: whatever it takes to save Euro
- 10) ECB rate lowered 0.25% to 0.50%
- 11) ECB rate lowered 0.25% to 0.25%
- 12) ECB rate lowered 0.10% to 0.15%
- 13) ECB rate lowered 0.10% to 0.05%
- 14) Fed funds rate increase of 0.25% to 0.25%-0.50% range
- 15) Donald Trump elected as next US President
- 16) Fed funds rate increase of 0.25% to 0.50%-0.75% range
- 17) Fed funds rate increase of 0.25% to 0.75%-1.00% range
- 18) Fed funds rate increase of 0.25% to 1.00%-1.25% range
- 19) Fed funds rate increase of 0.25% to 1.25%-1.50% range
- 20) Fed funds rate increase of 0.25% to 1.50%-1.75% range
- 21) Fed funds rate increase of 0.25% to 1.75%-2.00% range
- 22) Fed funds rate increase of 0.25% to 2.00%-2.25% range
- 23) Fed funds rate increase of 0.25% to 2.25%-2.50% range
- 24) Fed funds rate decrease of 0.25% to 2.00%-2.25% range
- 25) Fed funds rate decrease of 0.25% to 1.75%-2.00% range
- 26) Fed funds rate decrease of 0.25% to 1.50%-1.75% range

THE COURSE OF THE DOLLAR AGAINST OTHER CURRENCIES

	1 US\$ =	Euro	Yen (00)	RMB	Rupee (00)	C\$	A\$	SA Rand
Year-end 2007		0.68	112	7.31	39.43	0.98	1.14	6.85
June 30, 2008		0.63	106	6.87	42.85	1.01	1.04	7.96
September 30, 2008		0.69	106	6.86	47.35	1.04	1.22	8.20
Year-end 2008		0.71	90	6.85	49.72	1.22	1.45	9.46
March 31, 2009		0.76	97	6.85	52.17	1.25	1.46	9.72
June 30, 2009		0.71	96	6.84	48.64	1.16	1.24	7.88
September 30, 2009		0.68	90	6.84	48.34	1.09	1.15	7.43
Year-end 2009		0.69	92	6.82	46.75	1.05	1.10	7.40
March 31, 2010		0.74	93	6.82	45.00	1.02	1.09	7.37
June 30, 2010		0.82	89	6.79	46.46	1.05	1.17	7.63
September 30, 2010		0.73	84	6.68	44.87	1.03	1.03	6.95
Year-end 2010		0.75	82	6.59	45.32	1.00	0.98	6.63
June 30, 2011		0.69	81	6.46	45.33	0.98	0.94	6.83
September 30, 2011		0.74	77	6.39	49.62	1.03	1.02	7.90
Year-end 2011		0.77	77	6.35	54.28	1.02	0.98	8.12
March 30, 2012		0.75	82	6.32	52.10	1.00	0.97	7.70
Year-end 2012		0.76	86	6.30	54.69	1.00	0.96	8.47
June 30, 2013		0.77	99	6.17	59.59	1.05	1.09	9.87
September 30, 2013		0.74	98	6.14	62.70	1.03	1.07	10.06
Year-end 2013		0.73	105	6.11	61.77	1.07	1.13	10.49
June 30, 2014		0.73	101	6.16	59.94	1.06	1.06	10.58
September 30, 2014		0.79	109	6.15	61.48	1.12	1.15	11.26
Year-end 2014		0.82	120	6.14	63.59	1.16	1.23	11.60
September 30, 2015		0.89	120	6.35	66.13	1.34	1.43	14.02
Year-end 2015		0.92	120	6.49	66.20	1.39	1.37	15.39
September 30, 2016		0.89	101	6.67	66.46	1.31	1.30	13.69
Year-end 2016		0.95	116	6.95	67.84	1.35	1.38	13.65
June 30, 2017		0.88	112	6.78	64.55	1.30	1.30	12.95
September 30, 2017		0.85	113	6.66	65.42	1.25	1.28	13.52
Year-end 2017		0.84	113	6.54	63.91	1.26	1.28	12.32
June 30, 2018		0.86	111	6.62	68.44	1.32	1.35	13.73
September 30, 2018		0.86	113	6.88	72.41	1.30	1.38	14.12
Year-end 2018		0.87	110	6.88	69.44	1.36	1.42	14.38
January 31, 2019		0.87	109	6.71	71.05	1.32	1.39	13.54
February 28, 2019		0.88	111	6.68	71.11	1.32	1.40	13.88
March 31, 2019		0.89	111	6.71	69.32	1.33	1.40	14.47
July 31, 2019		0.90	109	6.88	68.65	1.32	1.45	14.19
August 30, 2019		0.90	106	7.15	71.69	1.33	1.48	15.34
September 30, 2019		0.91	108	7.12	70.34	1.32	1.48	15.09
October 31, 2019		0.90	108	7.04	70.48	1.32	1.45	15.06
		Euro	Yen	RMB	Rupee	C\$	A\$	SA Rand
September 16, 2019		0.90	108	7.07	70.90	1.33	1.45	14.56
year-to-year 2008 / 2009		-3	2	0	-6	-14	-24	-22
year-to-year 2009 / 2010		9	-11	-3	-3	-5	-11	-10
year-to-year 2010 / 2011		3	-6	-4	20	2	0	22
year-to-year 2011 / 2012		-2	12	-1	1	-2	-2	4
year-to-year 2012 / 2013		-4	22	-3	13	7	17	24
year-to-year 2013 / 2014		13	14	0	3	9	9	11
year-to-year 2014 / 2015		12	0	6	4	20	12	33
year-to-year 2015 / 2016		4	-3	7	2	-3	1	-11
year-to-year 2016 / 2017		-12	-3	-6	-6	-7	-7	-10
year-to-year 2017 / 2018		4	-3	5	9	8	11	17
October 31, 2019 / year-end 2018		3	-4	4	3	-2	5	7
► Year-end 2013 to October 31, 2019		23	3	15	14	23	29	44

► **Gold price** compared to US\$: Year-end 2013 (\$ 1,201.50) to October 31, 2019 (\$ 1,510.95) : 26 %

Course of gold price versus HUI-Index

		Gold price	Change in %	HUI index	Change in %
2019					
October 31		1,511	2	220.17	8
September 30		1,485	-3	203.27	-11
August 30		1,528	8	228.24	18
June 28		1,409	9	194.12	24
May 31		1,296	1	157.08	2
April 30		1,282	-1	153.76	-10
March 31		1,295	-2	169.95	1
February 28		1,319	0	168.27	-1
January 31		1,323	3	170.39	6
Year-end 2018		1,282	5	160.58	12
November 30, 2018		1,218	3	145.04	3
October 31		1,215	2	142.82	1
September 28		1,187	-1	141.07	-2
August 31		1,202	-4	143.23	-18
July 31		1,221	-6	166.36	-8
June 30		1,250	-4	174.52	-3
May 31		1,305	-1	180.04	1
April 30		1,313	-1	178.47	2
March 30		1,324	0	175.41	2
February 28		1,318	-2	171.87	-13
January 31		1,345	4	196.44	2
Year-end 2017	2017	1,297	-4	192.31	-11
September 8 (high)	2017	1,351	2	216.70	3
August 29	2017	1,319	6	210.49	13
June 30	2017	1,242	0	185.71	-6
March 31	2017	1,245	3	197.23	-5
January 31	2017	1,213	5	207.45	14
Year-end 2016	2016	1,159		182.31	
Year-to-year	2017	1,297	12	192.31	5
	2016	1,159	9	182.31	64
	2015	1,062	-11	111.18	-32
	2014	1,199	0	164.03	-17
	2013	1,202	-28	197.70	-55
	2012	1,664	6	444.20	-11
	2011	1,572	11	498.73	-13
	2010	1,410	28	573.32	33
	2009	1,104	28	429.91	42
	2008	865		302.41	

Market valuation of the world's top 20 listed gold producers

October 31, 2019	Trading symbol	Share price		Change in %	High 12 month	Low	Shares issued million	Market capitalization local currency (billion) US\$ billion	
		Oct. 31 2019	year-end 2018						
► Traditional countries (12):									
Canada (4) TSX - in Cdn\$									
Barrick Gold	1) ABX	22.88	18.43	24	26.69	15.37	1,780.0	40.7	31.0
Agnico-Eagle Mines	AEM	80.95	55.10	47	86.39	44.21	239.6	19.4	14.7
Kinross Gold	K	6.40	4.40	45	7.24	3.15	1,253.4	8.0	6.1
Detour Gold	DGC	21.87	11.53	90	25.45	9.55	177.4	3.9	2.9
Subtotal								54.7	
South Africa (3) JSE - in Rand									
AngloGold Ashanti	ANG	33.04	18.18	82	36.72	13.40	415.3	137.2	9.6
Gold Fields	GFI	92.94	49.34	88	95.79	37.60	828.6	77.0	5.4
NYSE - in US\$									
Sibanye Stillwater	2) SBGL	7.65	2.83	170	7.69	2.25	667.5	5.1	5.1
Subtotal								20.1	
USA (2) NYSE - in US\$									
Newmont Goldcorp	3) NEM	39.73	34.65	15	41.23	29.77	819.9	32.6	32.6
Novagold Resources (also Canada)	NG	7.28	3.95	84	7.95	3.42	326.8	2.4	2.4
Subtotal								35.0	
Australia (3) ASX - in A\$									
Newcrest Mining	NCM	31.30	21.80	44	38.87	20.18	768.8	24.1	16.6
Evolution Mining	EVN	4.13	3.69	12	5.59	2.94	1,700.0	7.0	4.8
Northern Star Resources	NST	9.79	9.24	6	14.06	7.63	648.9	6.4	4.4
Subtotal								25.8	
Subtotal traditional countries									
1) on <u>January 2, 2019</u> \$ 6 billion takeover of <u>Randgold Resources</u> by <u>Barrick Gold</u> completed									
2) largest individual producer of gold from South Africa; and among the world's top 10 gold producers; globally the third largest producer of palladium and platinum									
3) on <u>April 18, 2019</u> , \$ 10 billion acquisition of <u>Goldcorp</u> concluded									
► Emerging countries (8) :									
Russia (2) OTC US in US\$									
Polyus Gold International	1) OPYGY:US	59.23	39.20	51	60.99	31.10	267.1	15.8	15.8
LSE - in £									
Polymetal International	2) POLY:LN	1.26	0.82	54	1.28	0.69	470.2	5.9	7.6
Subtotal								23.4	
China (1) Hong Kong / Shanghai - in HK\$									
Zijin Mining	3) 2899 / 601899	2.71	2.97	-9	3.60	2.62	23,030.0	62.4	7.9
Peru (1) NYSE - in US\$									
Minas Buenaventura	BVN	15.34	16.22	-5	17.85	13.46	274.9	4.2	4.2
Brasil (1) TSX - in Cdn\$									
Yamana Gold	YRI	4.81	3.21	50	5.04	2.41	950.4	4.6	3.5
Nicaragua (1) NYSE - in US\$									
B2Gold	BTG	3.51	2.92	20	4.02	2.40	1,030.0	3.6	3.6
Mexico (1) TSX - in C\$									
Alamos Gold	AGI	7.17	4.91	46	10.12	3.88	391.2	2.8	2.1
Mongolia (1) TSX - in C\$									
Centerra Gold (also Kyrgyzstan)	CG	11.23	5.86	92	13.00	4.83	293.0	3.3	2.5
Subtotal Emerging countries								47.3	
Subtotal Traditional countries								135.6	
Subtotal Emerging countries								47.2	
Total								182.8	

1) combination of KazakhGold with PolyusGold

2) also producing gold mine in Kazakhstan

3) integrated mining company; 1,729 billion domestic A-shares + 5.74 billion H-shares

source: Goldletter International

Market valuation of the world's listed gold companies (\$ 500 million plus)

October 31, 2019

	Trading symbol	Share price		Change in %	High 12 month	Low	Shares issued	Market capitalization	
		Oct. 31 2019	year-end 2018					local currency (billion)	US\$ billion
► Traditional countries (8) :									
Canada (5)								TSX - in C\$	
Pretium Resources	PVG	13.27	11.57	15	18.29	8.85	185.3	2.5	1.9
IAM Gold	IMG	4.95	5.01	-1	5.55	3.08	468.0	2.3	1.8
Osisko Mining	OSK	2.79	3.07	-9	3.90	2.19	273.9	0.8	0.6
McEwen Mining	1) MUX	2.20	2.50	-12	2.84	1.67	362.5	0.8	0.6
Subtotal									4.9
United States (1)								NASDAQ - in US\$	
SSR Mining	2) SSRM	14.79	12.09	22	17.56	9.65	123.0	1.8	1.8
Australia (3)								ASX - in A\$	
Regis Resources	RRL	4.90	4.83	1	6.72	4.03	508.2	2.5	1.7
St. Barbara	3) SBM	2.79	4.55	-39	5.15	2.47	699.2	2.0	1.3
Subtotal									3.0
► Emerging countries (4):									
Turkey (1)								TSX - in C\$	
Eldorado Gold	4) ELD	11.09	4.00	177	13.34	3.36	158.8	1.8	1.3
Mexico (1)								TSX - in C\$	
Torex Gold	TXG	19.27	12.99	48	21.91	9.83	85.3	1.6	1.2
West Africa (1)								TSX - in C\$	
Endeavour Mining	5) EDV	23.85	22.34	7	28.98	16.34	109.9	2.6	2.0
Subtotal									4.5
Total valuation in US\$ billion									14.2

1) also gold projects in the United States, Mexico and Argentina

2) also silver producer in Argentina

3) acquisition of Atlantic Gold by St. Barbara for C\$ 802 million completed on July 19,

4) also gold producer in Greece and China

5) operating four West African mines in Côte d'Ivoire, Mali, Burkina Faso and Ghana

source: Goldletter International

CALENDAR OF MINING EVENTS



Media Partners 2019

November	5 – 6	The Mining Show - Dubai
November	6 – 7	Mining Investment Latin America Summit – Lima, Peru
November	8 – 9	Int. Edelmetall & Rohstoffmesse – Frankfurt, Germany
November	25 – 27	Mines and Money - London
December na	5 – 6	NISLA Nuclear Industry Summit Latin America – Buenos Aires, Argenti- na

Media Partners 2020

January	19 – 20	Vancouver Resource Investment Conference – Vancouver, Canada
January	20 – 21	6th Central & Eastern Europe Nuclear Industry Congress – Prague, Czech Republic
February	17 - 19	Argus Metals Week – London
March	1 - 4	PDAC – Toronto, Canada
July	7 - 8	ARAB & AFRICAN MINING - London

The
MINING
 Show

Middle East | Africa | Central Asia | South Asia

5-6 November 2019 | Festival Arena, Dubai



Mining & Investment
LATIN AMERICA SUMMIT
 6th & 7th November 2019, The Westin, Lima



BESUCHEN SIE UNS:
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 MVG Museum München – Stand 52.



17th Annual
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- ✓ Exploring New Nuclear Power Capacity Potentials in **Bulgaria, Czech Republic, Romania, Poland, Slovenia, Ukraine** and more
- ✓ Highlight Hot New Build Projects in CEE Countries: **New NPP Dukovany, Kozloduy NPP Unit 7, Hanhikivi 1, Paks NPP Unit 5-6, Mochovce Units 3-4, Ostrovets 1-2**
- ✓ Joining Discussions on **Nuclear Technology Innovation Trends and Application Potentials** in CEE Market

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Reply to vivienm@szwgroup.com to see what opportunities are available and explore how we can highlight your organization at **6th Central & Eastern Europe Nuclear Industry (New Build/ Life Extension/ Decommissioning/WM) Congress 2020** on **Jan. 20-21, Prague, Czech Republic**.

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