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METALS & MINING

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The outlook for gold and gold equities

A GOLDEN FUTURE

Since the COVID-19 crisis hit, the Federal Reserve has returned to bond-buying with a vengeance. After cutting interest rates to (effectively) zero and initially saying it would buy US$700bn in bonds, on 23 March it removed the brakes stating it will 'purchase Treasury securities and agency mortgage-backed securities in the amounts needed to support smooth market functioning and effective transmission of monetary policy to broader financial conditions and the economy'. With the total US monetary base now at US$5.1tn (and given the close historical correlation between the two), the gold price could very reasonably be expected to rise to US$1,892/oz and potentially as high as US$3,000/oz.

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REAL AND NOMINAL INTEREST RATES ECHO 1979

While the total US monetary base has expanded 58% in eight months, real interest rates remain solidly negative. That may change. However, there is potential for some material volatility, including the possibility that the consumer price index (CPI) could go negative or very much more positive in short order. In this respect, there may be a historical precedent in that there was similar volatility in both inflation and interest rates between September 1979 and October 1980 in gold's first great bull run in the period of fiat money. Then, a large part of the reason for the volatility in inflation was the oil price and Middle Eastern politics. Today, it is a potent combination of money printing, bond buying, national lockdowns and economic crisis. Nevertheless, it is worth observing that in the previous case, gold did not top out until real interest rates were over 4% for a sustainable period of time.

EQUITIES ALMOST NEVER CHEAPER CF THE PRICE OF METAL

To date, moves in the gold price have resulted in a rapid (and geared) response from large-cap producing gold equities, which is in sharp contrast to the performance of smaller-cap exploration juniors, the share prices of which are much more dependent on financing conditions in global financial markets than the unique characteristics of the projects they are trying to finance. History would suggest the share prices of the juniors will catch up with those of their larger brethren over 2.5–5.5 years. However, since 2002 the prices of gold mining and mining equities in general have almost never been cheaper relative to the price of gold than at the current time.

THE ONE BRIGHT SPOT ON THE HORIZON

If the coronavirus crisis proves protracted and the Fed's balance sheet stabilises or continues to increase, we would expect the gold price to rise to at least US$1,892/oz. The share prices of existing producers will take immediate advantage of this situation. In theory, companies with higher levels of financial and operational gearing should benefit the most in percentage terms, while the share prices of junior exploration companies will outperform slowly over the longer term. With the rest of the global economy in the doldrums, however, this scenario will also create the opportunity for existing producers to provide financing to the junior sector and potentially usher in an era of wholesale consolidation within the industry.

A GOLDEN FUTURE

GOLD

There is a certain irony in the oft-quoted Chinese curse, ‘May you live in interesting times’, given that it was China, more than anywhere else, that seems largely responsible for those times now. To be fair, the Federal Reserve has done its bit as well, although, in this respect, what it has done is far more in keeping with circumstances on the ground than China’s epoch-defining black swan. Nevertheless, the speed and extent of the Fed’s volte-face has been dizzying.

Fed monetary roller coaster

To put recent changes in monetary policy into context, in November 2017 the Federal Reserve had just instigated a plan to reduce its balance sheet by an unprecedented US$1.48tn, or 33%, from US$4.5tn to US$3.0tn, in a process that was essentially designed to at least partly reverse the quantitative easing of 2008–2014 over a period of five (but effectively three) years, from 2018 to 2020. After an initial running-in period, the pace of contraction was to be US$50bn per month, which compared with a rate of expansion of US$85bn per month in the final phase of quantitative easing (QE3). As recently as November 2018, indications from Fed chairman, Jerome Powell, were that it would be some time before the Fed stopped reducing the balance sheet as the asset reduction programme was deemed to be on ‘auto-pilot’. However, as fears of a US slowdown mounted in early 2019 and the US yield curve flattened, the Fed materially altered its stance, saying it would begin to taper the amount of proceeds that it was allowing to roll off in May 2019 and would begin to reinvest the proceeds from the mortgage-backed securities’ roll off in September – thus effectively keeping the total US monetary base on a flat, rather than declining, trajectory. Then, in July, it brought forward the date of the end of the asset reduction programme to July from September (albeit this essentially dovish move was somewhat offset by its decision to simultaneously increase interest rates for the first time in a decade).

Fed volte-face and COVID-19 response

Then came the unexpected. In response to signs of stress in the repo market, in late autumn 2019 the Fed returned to its bond buying programme, buying US$60bn in T-bills per month until April 2020. At a stroke, this left the total US monetary base c 17%, or US$490bn, larger than had originally been expected at the end of 2019. To put that in context, in 2007 immediately before the global financial crisis, the total US monetary base stood at just US$836bn. More importantly, it drew a line in the sand and Federal Reserve balance sheet expansions were once again on the cards.

GOLD cont.

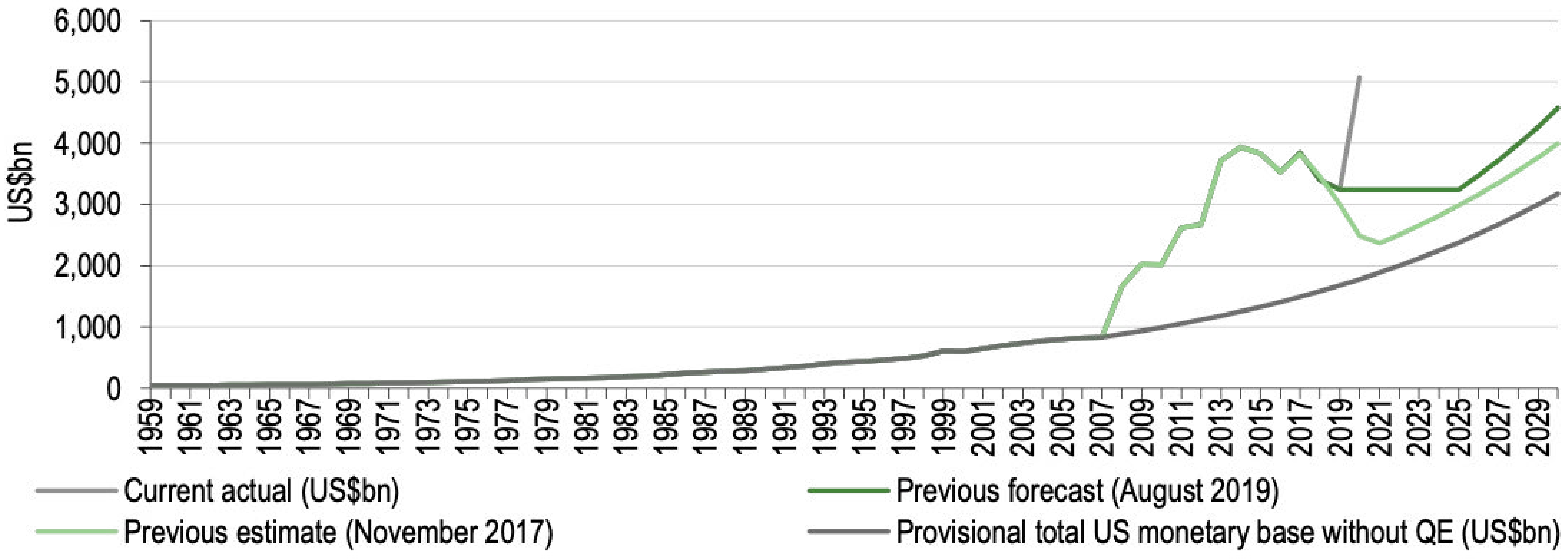
Then when the COVID-19 crisis hit, the Federal Reserve returned to bond buying with a vengeance. After cutting interest rates to (effectively) zero and initially saying it would buy US$700bn in bonds, on 23 March it took off all the brakes and made the programme open-ended saying it will 'purchase Treasury securities and agency mortgage-backed securities in the amounts needed to support smooth market functioning and effective transmission of monetary policy to broader financial conditions and the economy'.

Historical gold price correlation with total US monetary base

The reason this is significant is because, since 1967, the price of gold has shown an extremely strong (0.909) correlation with the total US monetary base (see our report, Gold: Portents of economic weakness, Doves in the ascendant, published in August 2019). For the number of data points in the analysis, the level of the correlation suggests there is much less than a 5% chance that the observed relationship between the two occurred by chance. Stated alternatively, the more dollars that either are, or could be, in circulation, the higher the expected gold price. Applying the strict mathematical historical relationship between the two, a total US monetary base of US$3,260bn at the end of July 2019 (ie at the end of the asset reduction programme) implied a gold price of US$1,291/oz. Given the extent to which the gold price has diverged from its strict empirical relationship in the past, it could have been expected to reach as high as US$1,543/oz (in a bullish gold environment).

Exhibit 1: Total US monetary base

Source: US Federal Reserve, Edison Investment Research



GOLD cont.

In the event, reality reflected the theory extremely well with the gold price rising from US$1,270/oz in May 2019 to US$1,540/oz in August 2019. With the Federal Reserve's balance sheet expanding once again, by the end of 2019 the gold price implied by its correlation with the total US monetary base had increased to US$1,346/oz and, with a bit of positive speculation, could have been expected to reach US$1,609/oz. In fact, gold closed 2019 at a price of US$1,514/oz and rising. An extra three months of bond-buying increased the predicted number for the price of gold to US$1,406/oz, or US$2,279/oz with a bit of positive speculation. However, with an additional US$700bn from the coronavirus stimulus response taking the total US monetary base to a record US$4.2tn, the implied gold price has rocketed – initially to US$1,619/oz, with an upper level way in excess of US$2,000/oz.

But with unlimited bond buying, the sky is the limit. For every US$100bn by which the total US monetary base exceeds US$4.2tn, the gold price may be expected to be US$33/oz higher than US$1,619/oz. Anecdotally, there is some evidence to suggest the Fed has already spent close to US$2tn buying bonds to date, which, all other things being equal, should take the total US monetary base to a record US$5.5tn and the gold price to over US$2,000/oz and potentially as high as US$3,281/oz. At its current level of US$5.1tn (source: Federal Reserve, 13 May 2020), the gold price should be expected to be US$1,892/oz, with the potential to rise to as much as US$3,067/oz.

Alternative futures

The fact that the gold price is not yet over US$2,000/oz could suggest the market is discounting future reductions in the total US monetary base. However, 2019 has already shown how difficult that can be, especially in periods of either actual, or predicted, economic weakness. In this respect, much will depend on the evolution of the coronavirus crisis. The rapid development of a vaccine and equally rapid economic bounce back could allow the Fed to reverse course and contract its asset base. At the moment, this is what the gold price appears to be discounting. The longer the crisis continues, however, the more entrenched its asset base will become and the more gold should tend towards its predicted level as the Fed's scope for manoeuvre reduces.

GOLD cont.

Real US interest rates – comparison with 1979

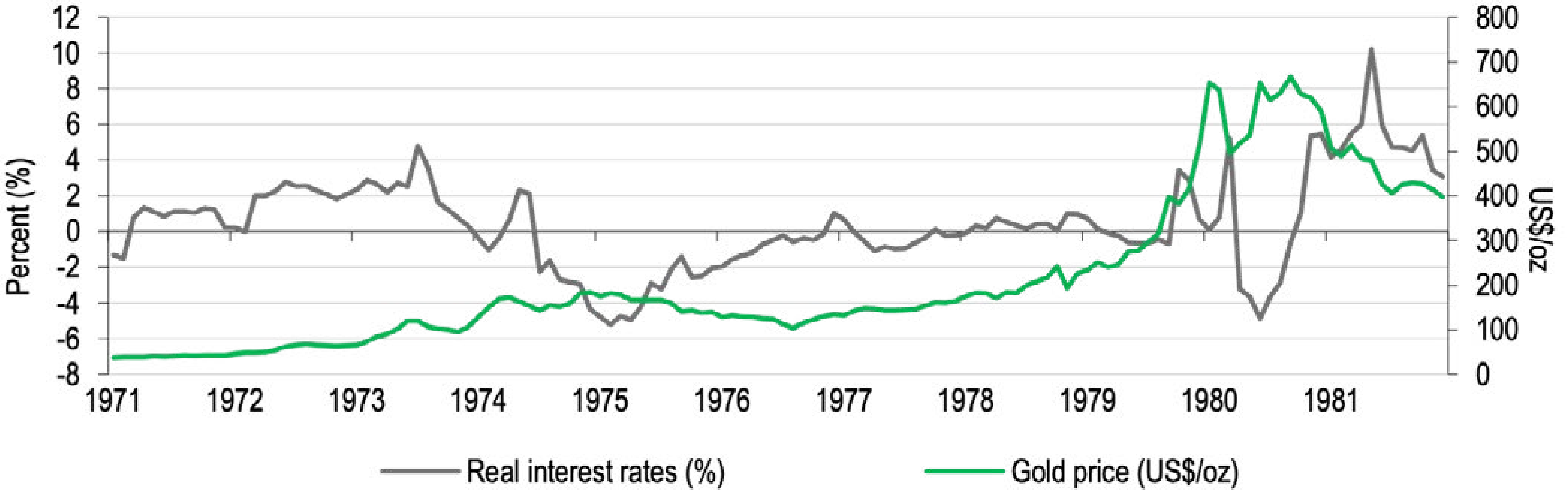
In the meantime, real interest rates (defined as the Fed funds rate minus the CPI inflation rate) remain solidly negative. That may change. Although the Fed funds rate appears unlikely to rise from near zero in the immediately foreseeable future, there is certainly potential for some significant volatility in inflation, as measured by the CPI including the possibility that it may go negative (in which case real interest rates could become positive once again in very short order). In this respect, there may be an historical precedent, in that there was similar volatility in both inflation and interest rates in the period between September 1979 and October 1980 in gold's first great bull run in the period of fiat money.

Then, of course, a large part of the reason for the volatility in inflation was the oil price and Middle Eastern politics. Today, it is a potent combination of money printing, bond buying, national lockdowns and economic crisis.

Nevertheless, it is worth observing that, in the previous case, gold did not top out until real interest rates reached over 4% for a sustainable period of time.

Exhibit 2: Gold vs real US interest rates (Fed funds minus CPI), 1971–1981

Source: Bloomberg, Edison Investment Research



GOLD cont.

Gold equities by type

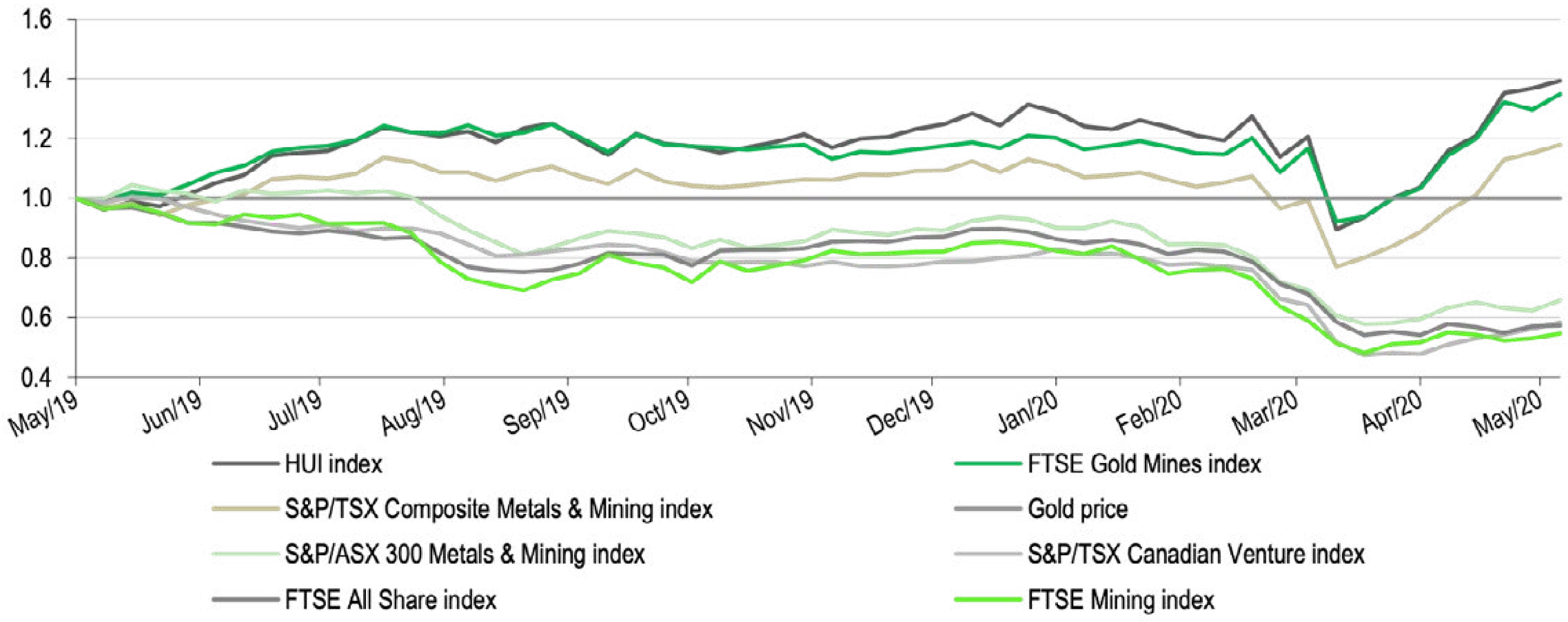
While the experience of gold bullion has, to all intents and purposes, proved 'one way' since the start of the coronavirus outbreak, the experience of gold equities has proved to be widely divergent. Within the past 12 months, there could be said to have been two major movements by the gold price. The first was in Q319, in response to the re-expansion of the US total monetary base. The second was in Q120 in response to the coronavirus crisis.

The graph opposite (Exhibit 3) shows the performance of seven equity indices (six mining or near mining and one general) relative to the gold price (the horizontal line across the middle of the graph) over the course of the past twelve months. As can be seen, the rising gold price in both Q319 and Q120 resulted in a rapid (and geared) response from large-cap producing gold equities (as represented by the HUI and FTSE Gold Mines indices).

In Q120 there was an equally rapid (and geared) downward reaction when gold fell c US$181/oz (11%) in response to portfolio liquidations to meet margin calls in other areas of investors' portfolios in mid-March. As the gold price recovered afterwards, however, so the HUI and the FTSE Gold Mines index also recovered.

Exhibit 3: Gold vs a selection of mining and general indices (-1yr)

Source: Refinitiv, Edison Investment Research



GOLD cont.

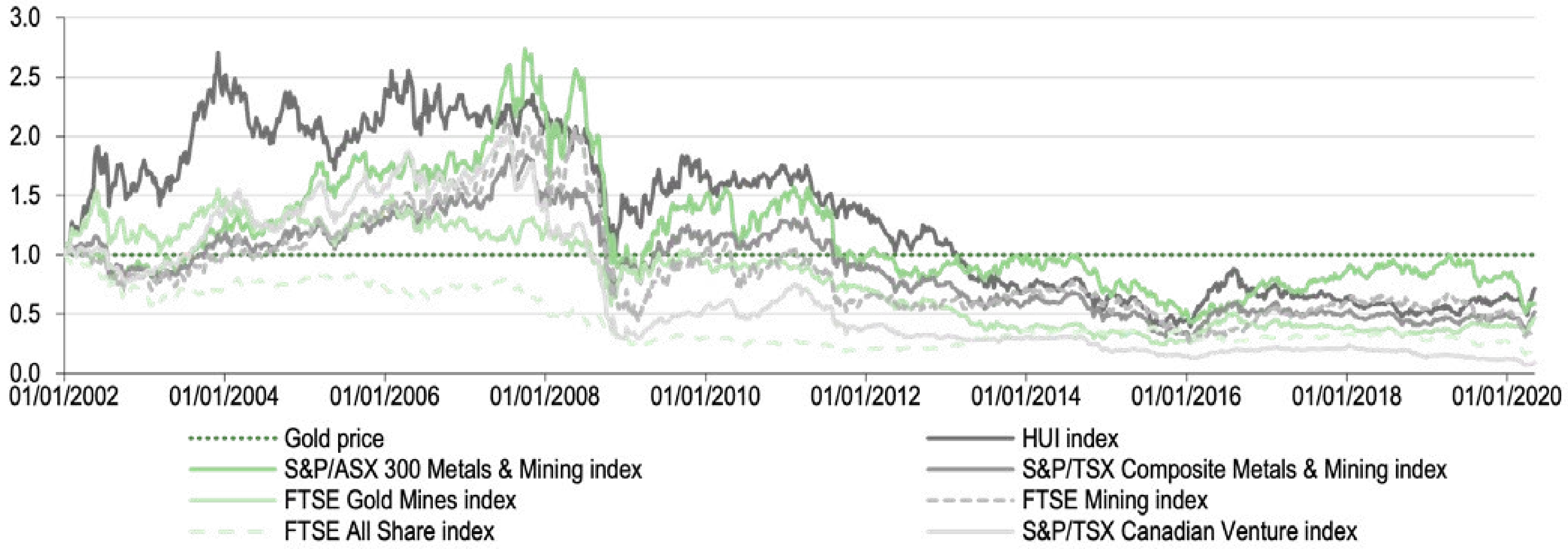
Divergent trends – majors vs juniors

This performance by large-cap producing gold mines is in sharp contrast to the performance of both smaller-cap exploration juniors (as represented by the S&P/TSX Canadian Venture index) and general (the FTSE All Share index) and general mining (the FTSE Mining index) indices. As the gold price rose in H219, there was very little reaction from smaller-cap junior exploration equities, with the result that the performance of the S&P/TSX Canadian Venture index (used as a proxy for junior mining equities) declined relative to the gold price. When the gold price rose again in Q120, there was again very little reaction from the junior exploration companies. However, they did decline sharply when the gold price fell in March 2020 indicating, among other things, that the share price performances of junior exploration companies are probably more dependent on perceived financing conditions in global financial markets than the unique characteristics of the projects they are trying to finance.

Although the share prices of junior mining equities have since begun to recover, the pace of the recovery has been slow relative to that of the majors. Nevertheless, this pattern, however surprising, has parallels with recent history. Over 2001–2007, when the gold price was also strong (albeit more under the influence of low real interest rates than changes in the US total monetary base), it was similarly the HUI and the FTSE Gold Mines index that responded first (see graph below). The juniors eventually caught up, although it took 2.5–5.5 years to do so. In this case, however, once they had recovered, they were hit by the onset of the global financial crisis, which (more than anything as far as they were concerned) represented a constraint on available funding.

Exhibit 4: Gold vs a selection of mining and general indices (2002 to present)

Source: Refinitiv, Edison Investment Research



GOLD cont.

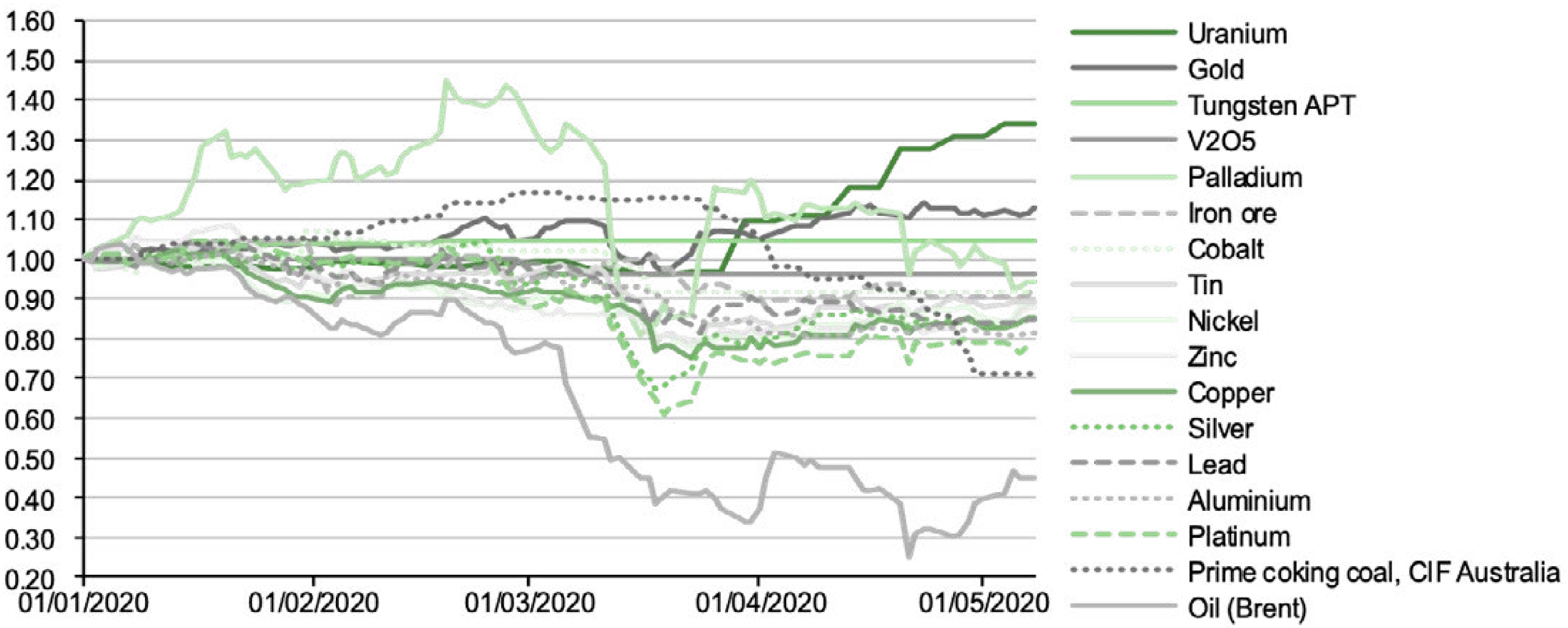
Consequently, the plunge in the S&P/TSX Canadian Venture Exchange index was more pronounced than for any of the other mining indices – a descent from which, arguably, the sector has not recovered. Readers should note that, at least one of the implications of the graph below is that gold and mining equities of all types have almost never been cheaper relative to the price of gold in the period 2002 to the present.

The performances of general and general mining indices have been similar since May 2019. Both were hit by concerns of economic slowdown in H219 and, although both have since recovered some ground, they were again hit by fears of a coronavirus-induced slowdown in H120, which has seen the value of industrial metals decline relative to those of precious metals (with the single exception of uranium – see Exhibit 5).

Of note within the context of the above chart is the relative underperformance of oil compared with all other major commodities so far in 2020. While it varies, energy-related and petrochemical costs can account for much as 50% of a miner's cost base. Hence the decline in oil prices so far in 2020 could still presage a widening of existing producers' margins under current conditions.

Exhibit 5: Metals' relative price performances (2020 year to date)

Source: Refinitiv, Edison Investment Research



GOLD EQUITIES BY LISTING JURISDICTION

An analysis of gold equities' total return performances since the start of the year (roughly corresponding to the period of the coronavirus crisis) in US dollar terms shows a number of features of interest (note that a market cap cut off of US$15m has been applied to exclude a long tail – approximately 2,500 – of small companies):

- Over the first 4.5 months of the year, the average performance of a gold equity was 46.4%.
- This compares with the performance of gold over the same period of 14.5%; in general, therefore, gold equities are showing a geared relationship to the price of gold, which is as expected.
- Nevertheless, of the 434 counters analysed, the share price prices of only 233 have risen, while the share prices of 201 have fallen.

Within the context of this analysis, there is also a general outperformance of precious metals' companies listed in London. Thirteen out of 25 companies (52%) listed in London outperformed the gold price in the period in question, compared with 168 out of 434 (39%) for the sample as a whole. At the same time, 17 out of 25 London companies (68%) generated a positive total return for shareholders during the period, compared with 233 out of 434 (54%) for the sample as a whole.

A number of theories could be advanced to explain this observation. The most obvious conclusion would be that London-listed companies are more successful (or more successfully marketed) than their counterparts elsewhere in the world. Alternatively, London is perceived as attracting (or supporting) mining companies at more advanced stages of development than elsewhere in the world (in Exhibit 6, below, for example, it is notable that, as a percentage of the total, London has proportionately more companies listed that are over US$100m in size) and hence proportionately more of its stocks are more likely to be in production compared with other centres of mining finance. However, it may also be explained by the fact that the absolute number for companies listed in London, across all market capitalisation ranges, is much smaller than the number of companies listed in other major centres of mining finance such as Canada and Australia (eg in the US$1-5bn range in Exhibit 6), and that the phenomenon is therefore merely a consequence of the exaggerated effect of a small number of outlying performances within a smaller absolute population size.

GOLD EQUITIES BY LISTING JURISDICTION cont.

Exhibit 6: Number of gold mining companies listed in London, Canada and Australia by market capitalisation

Source: According to data provided by London Stock Exchange.

	Number of companies			Percentage of total number of companies		
Market cap range	London	Canada	Australia	London	Canada	Australia
US$0-5m	11	110	36	27.5	39.9	22.6
US$5-10m	5	30	28	12.5	10.9	17.6
US$10-50m	6	62	58	15.0	22.5	36.5
US$50-100m	3	14	15	7.5	5.1	9.4
US$100-500m	7	28	5	17.5	10.1	3.1
US$500m-$1bn	2	6	5	5.0	2.2	3.1
US$1-5bn	3	20	7	7.5	7.2	4.4
US$5-10bn	2	2	2	5.0	0.7	1.3
US$10bn+	1	4	3	2.5	1.4	1.9
Total	**40**	**276**	**159**	**100.0**	**100.0**	**100.0**

OUTLOOK

Several potential scenarios present themselves for the future outlook for gold and mining equities, including:

- There is a rapid conclusion to the coronavirus crisis and the Fed is able to quickly contract its asset base and return to a policy of normalising interest rates. The current gold price of US$1,700/oz discounts a total US monetary base of US$4.5tn (cf US$5.1tn currently). Reductions below this should lead to a gold price below US$1,700/oz. Anything above this level still provides scope for the gold price to increase. At a stable price of US$1,700/oz, we would expect the share prices of existing producers to stabilise (or decline in the event that this scenario is also attended by a concurrent increase in the oil price) and the share prices of juniors to continue to outperform over the longer term (eg 2.5–5.5 years) to reflect both the 'new normal' (albeit probably somewhat balanced by 'new normal' costs in the form of a recovery in the oil price) and improved financing conditions.
- The coronavirus crisis proves protracted and the Fed's balance sheet stabilises or continues to increase. In this scenario, we would expect the gold price to rise to at least US$1,892/oz or higher. The share prices of existing producers will take immediate advantage of this situation (especially if the oil price remains low). In percentage terms, companies with higher levels of financial and operational gearing should outperform those with lower costs and lower operational gearing. In the meantime, the share prices of junior exploration companies should, all other things being equal, continue to outperform slowly over the longer term, but will be constrained by funding conditions. However, this scenario will also create the opportunity for existing producers to provide financing to the junior sector and potentially usher in an era of wholesale consolidation within the industry and much increased merger and acquisition activity.
- Within the context of the point above, one immediate beneficiary of the current situation should be the streaming and royalty companies that provide alternative finance to the industry and will be able to respond immediately to the current dearth of financing alternatives for the juniors, in particular. Streaming companies that focus on the precious metal by-products of base metal mines should be in a particularly strong position as general miners look to shore up their balance sheets by selling precious metal by-product streams on advantageous terms.

OUTLOOK cont.

- Deflation. Almost all of the above scenarios may be considered to be either inflationary or potentially inflationary – one of the reasons that gold, as a real asset, may be considered likely to outperform alternative asset classes. Nevertheless, it is possible the global economy tips into deflation. In the first instance, we would expect central banks to attempt to counter this trend with additional monetary largesse. If they are unable to contain it, however, then it is possible that prices will begin a prolonged period of contraction. In this case, gold may not be able to resist deflationary forces bearing on all other parts of the economy and its price too may fall. Despite any declines, in line with historical precedent, we would expect the gold price to nevertheless outperform most other asset classes in this scenario as it did in the 1930s (the gold price actually rose from US$20.67/oz to US$35/oz during the 1930s).

Existing producers should benefit in this scenario in relative, if not absolute, terms – especially if that cost deflation (not least in the form of oil price deflation) is greater than gold price deflation. Inasmuch as this scenario will present headwinds to the juniors in the sector in the form of a constrained funding environment, there will nevertheless continue to be the possibility that enhanced funding will be provided by the producers in the sector, as in the second point above.

REACH OUT

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