The Covid-19 Precious & Base Metal Update

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GLOBAL BANKING AND MARKETS

Scotiabank™

Precious & Base Metal Outlook

Macro Backdrop:

- Corona Virus, not trade, now a new global economic threat

Outlook for Gold:

- Entered a new cyclical bull market in 2019; how bullish is the trajectory in 2020?

Outlook for Silver:

- Slightly bullish due to spill over effects from gold; fundamentally oversupplied

Outlook for Copper:

- Soft floors around cyclical lows set at $5500 (low conviction), all else equal.

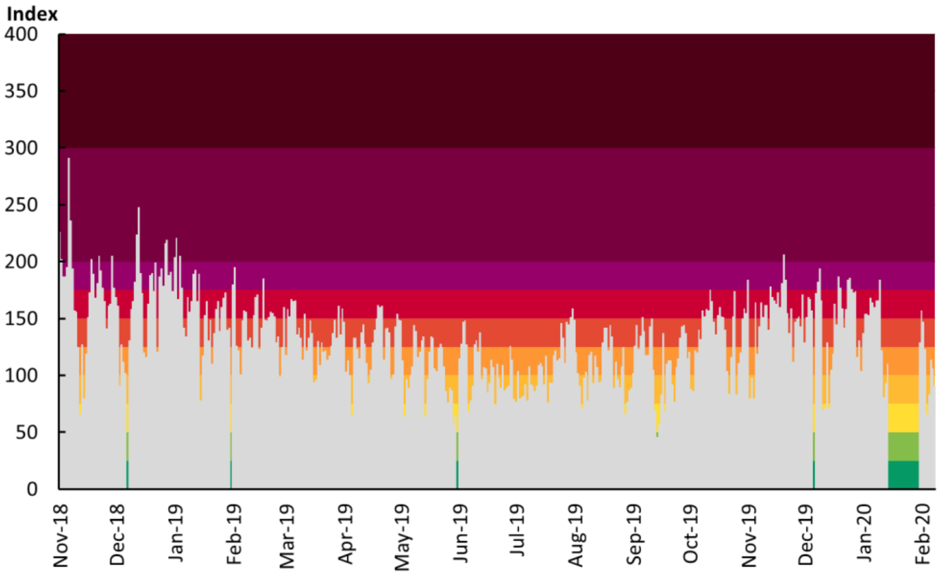
Outlook for PGMs:

- Structurally bullish PGM basket; some have overshot in the short-term

New 2020 Threat: COVID-19

- A black swan deflationary demand shock for commodities; it forced China to “unplug”
- Hubei is “China’s Detroit”; the Asian economic ‘sudden stop’ is causing major supply chain disruptions
- The virus’ economic impact doesn’t stem from the deaths, but from the quarantining / restrictive measures.
- Was demand “lost” vs “delayed”? “V, U or L” shaped recovery?

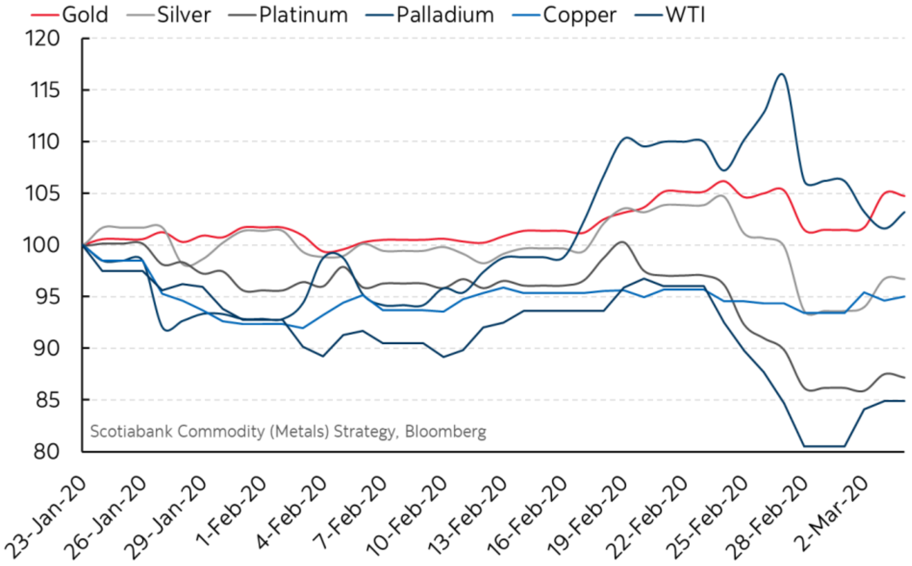
Wuhan PM 2.5 Air Quality Index



Note: Air pollution index level between 0 - 50 is good, 51 - 100 is moderate, 101 - 150 is unhealthy for sensitive groups, 151 - 200 is unhealthy for everyone, 201 - 300 is very unhealthy, 300+ is hazardous.

Scotiabank Commodity (Metals) Strategy and The World Air Quality Project

Index Price Performance of Majour Metals



Scotiabank Commodity (Metals) Strategy, Bloomberg

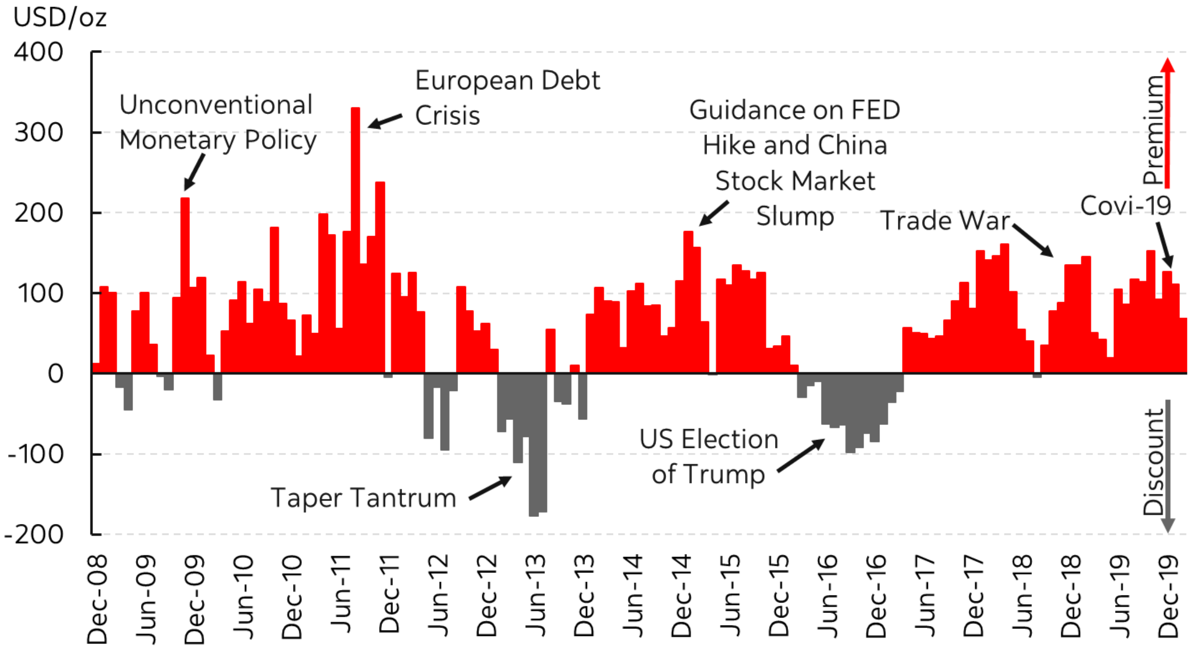
Notes: All metals are indexed as of Jan 23, 2020

Gold: Covid-19 and The Flight To Safety

- Gold responds to global monetary policy and fear drivers such as trade/virus, geopolitical and growth risks re-emerging.

- Golds current ‘fear premium’ of~$76 (vs $165 last week) is still rather underweight vs its historical peak-trough fear ranges from +/- $200
- Gold remains underpriced vs unprecedented moves in US rates

Gold Trades at a Fear Premium of $76



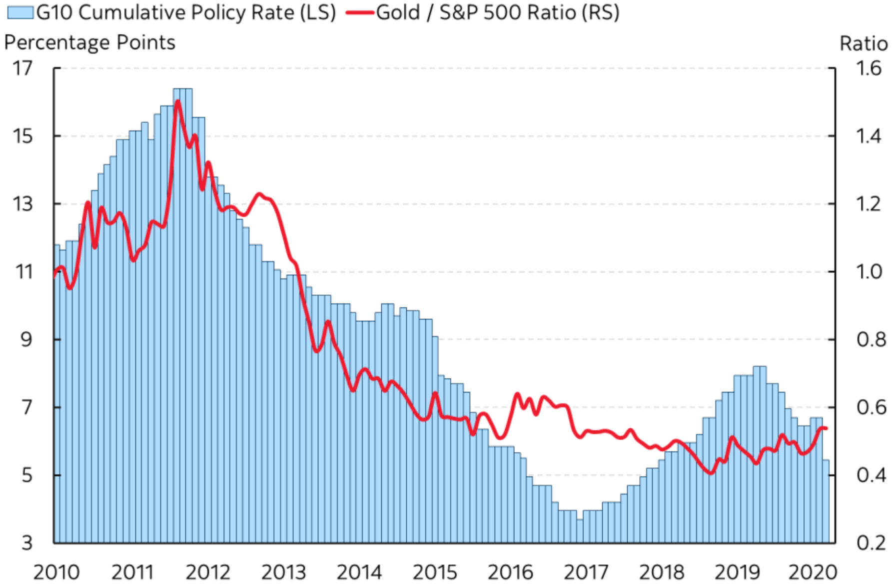
Source: Scotiabank Commodity Strategy (Metals) Calculations, Bloomberg

Note: Premium/discount is estimated using a multi variate OLS robust regression using a 10 year rolloing window approach. Endogenous features include safe haven currencies and real interests. Our model is able to explain 95% of the variation in gold since 1999. A positive number indicates gold is trading at a premium due to safe haven inflows. A negative number illustrates gold is trading at a discount.

Gold: Covid-19 and Monetary Policy Response

- G-7 “stand-ready-to-act”
- Correlated but not coordinated policy response
- Global Central Bank easing: G-10 CBs have collectively cut 125bps (Fed, BoC, RBA) with the BOJs unscheduled JGB and ETF purchases
- Economic stimulus packages launched in Asia (China, HK, Singapore, South Korea) & Italy, which transcended to Central Banks

G-10 Central Bank Cumulative Interest Rate & Gold Equity Ratio



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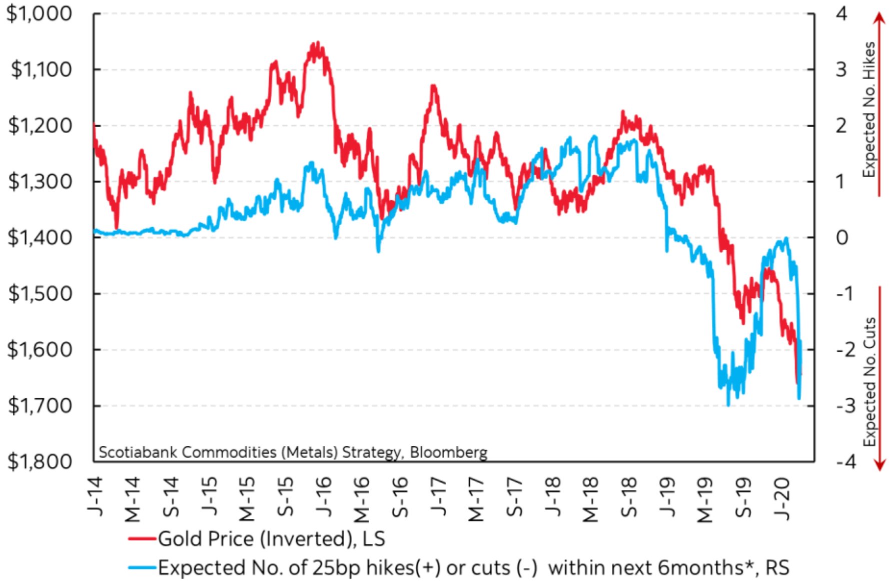
Short Tem US Interest Rate Outlook vs Gold

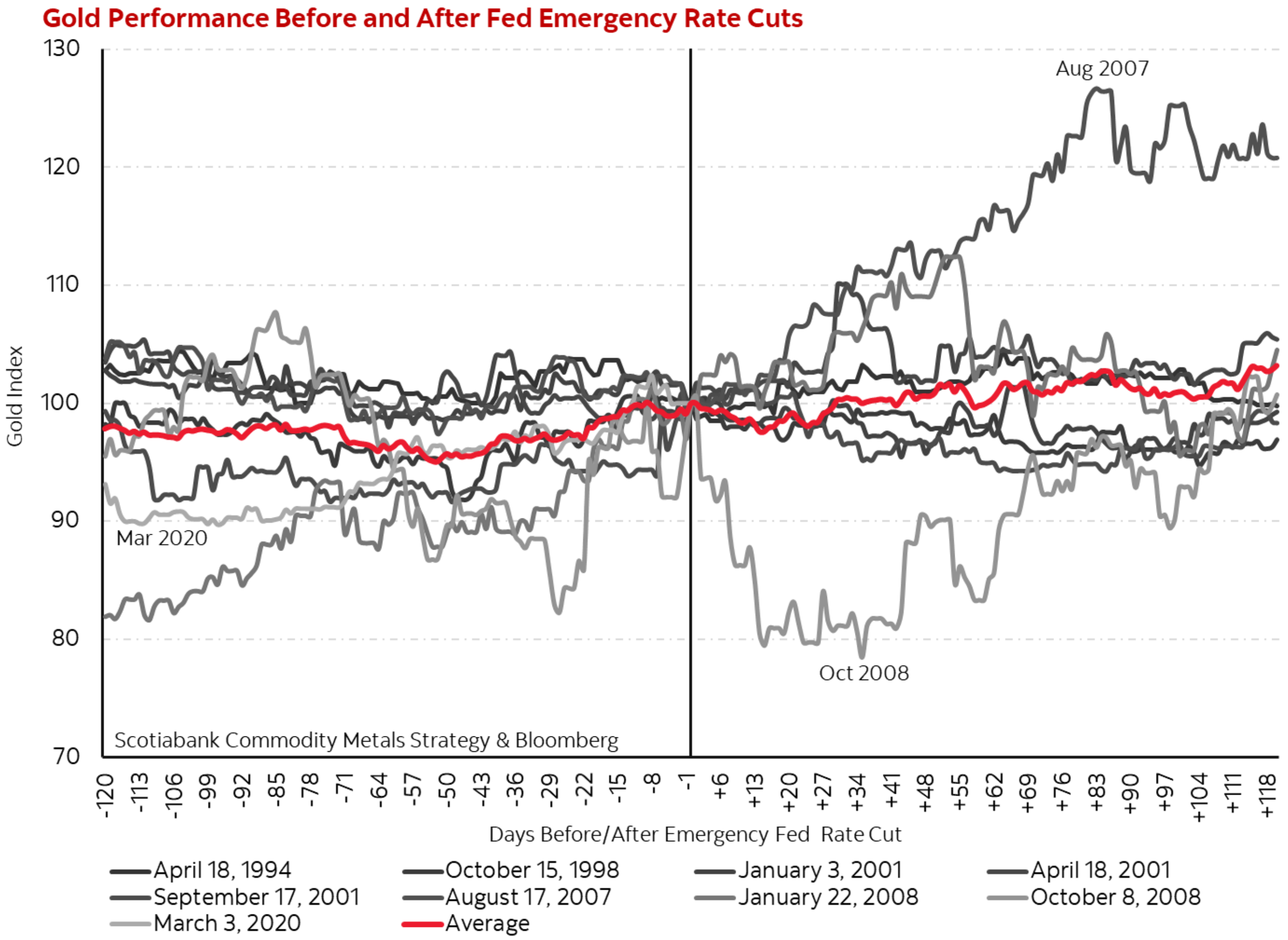


Scotiabank Commodities (Metals) Strategy, Bloomberg

* The implied expected number of policy adjustments is taken using the 6 month Fed Funds Futures minus the 1th month futures contract

Gold: Performance During Emergency Rate Cuts

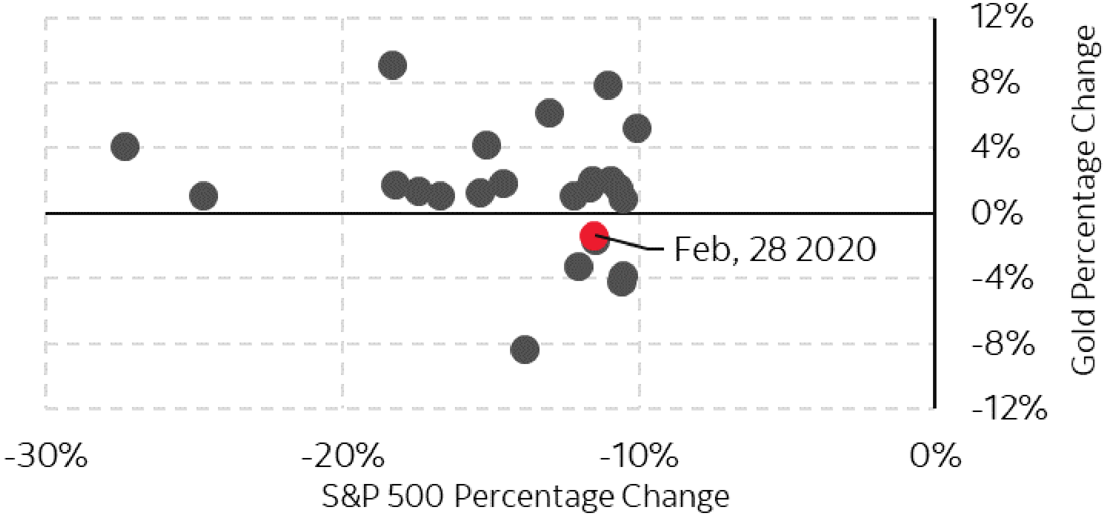
- From 9 emergency Fed cuts since 1990, gold is on average up 2.7% in 3 months and 3.2% in 4 months following the intermeeting Fed announcement.



Gold: Flight to Quality, Most (But Not All) Of The Time

- Limited flight to quality Gold flows last week, given renewed extreme equity market volatility
- Investors deleverage out of all assets, including overweight havens like Gold, in order to meet margin calls
- Opportunistic producer or CB related flows, the persistency of ultimate US$ strength, a deflationary backdrop given energy & FI prices, and paper positioning rotation amongst havens, also contributes to short-lived rallies or surprising flushouts on equity weakness

Gold: 5 Day Change When S&P500 is Down More Than 10%, Since 1980



Scotiabank Commodity (Metal) Strategy, Bloomberg

Gold: Outlook Summary

- Remain tilted bullish as markets price in U or L shaped growth recovery that's fought with aggressive Central Bank action.

- Physical Gold demand likely actually lost (Asian consumers unlikely to overcompensate and buy more jewelry in Q2) and *extreme* equity market volatility both pose a risk.

- However, core tailwinds → lower global growth profile, US election/Sanders, absurdly lower rates for longer, unsustainable US debt/fiscal path and US$ losing its haven status - is driving Western/investment & CB inflows which should overcompensate for the risks & physical void.

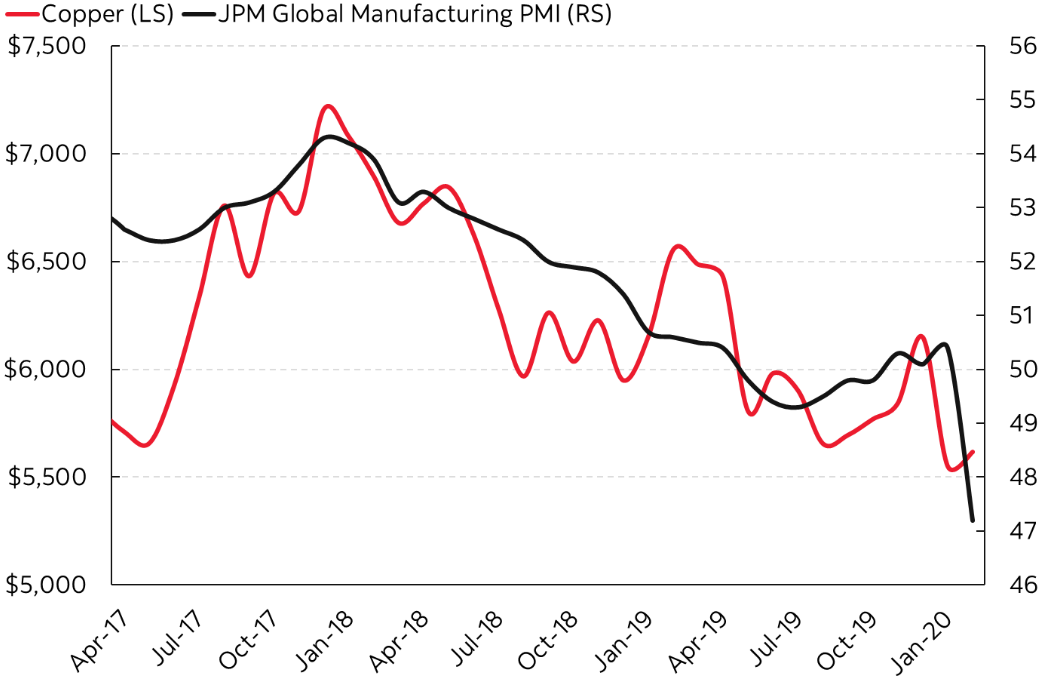
- Continue to buy dips as rallies are short-lived.

Copper: Macroeconomic Outlook

- A soft floor around cyclical lows at $5500, but conviction is low as the virus containment remains fluid & headline risk remains high.
- Some demand will be lost, but most should be delayed until 2H and ‘triggered’ on any major Chinese simulative efforts.
- Factories are only operating at ~60-80% capacity, inventories continue to grow, and risk sentiment remains fragile.

- On the contrary, upside price risk includes:
    - Weaker USD
    - Flat-lower supply
    - Risk of short covering on any major simulative efforts by China targeting infrastructure

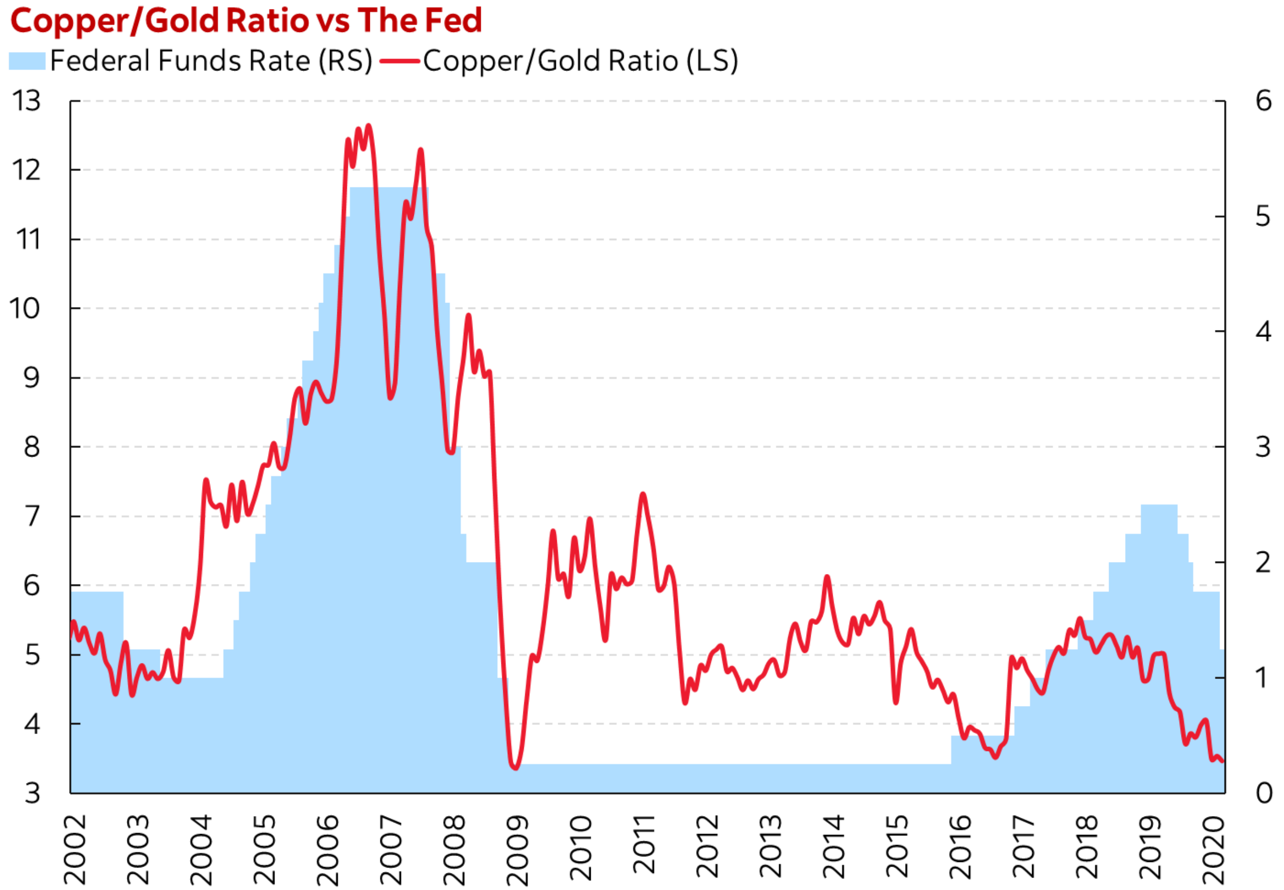
Copper Prices and Global PMI



Scotiabank Commodity (Metals) Strategy, Bloomberg

Copper: Copper/Gold Ratio Vs The Fed

- Gold/Copper Ratio is back down and hovering near 2008 lows, and perhaps pre-emptively pricing in further rate cuts.



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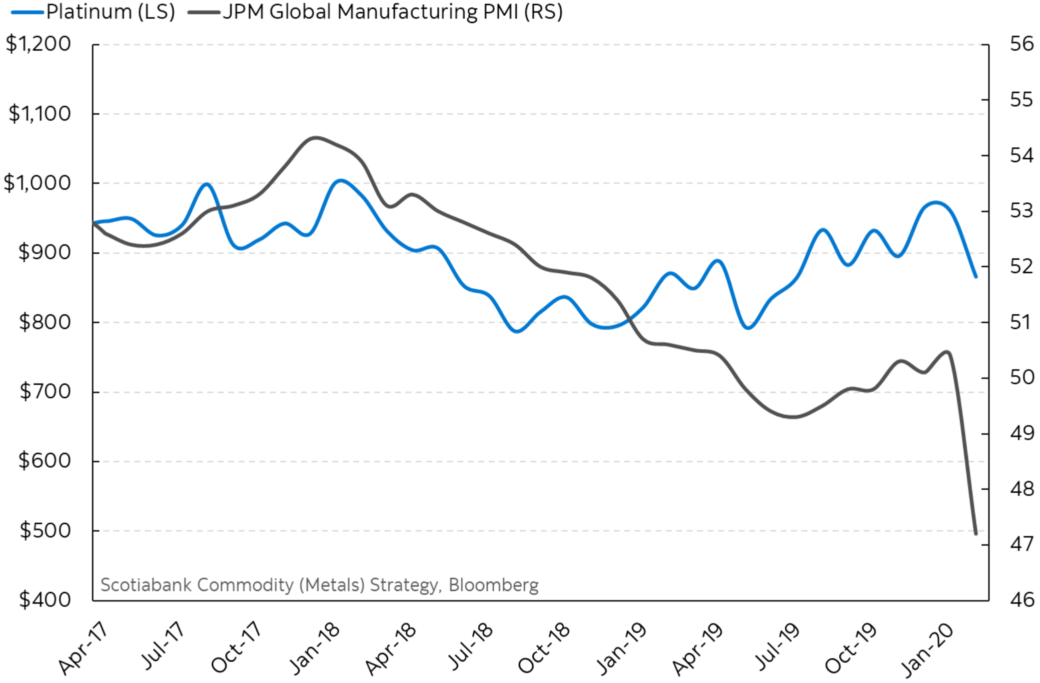
PGMs: Platinum

Platinum:

- The worst precious performer, year to date down 9% (vs Gold +8% and Palladium +30%)
- Limited *sustained* substitution, global growth uncertainty hitting already thin jewelry & auto demand and EM / ZAR weakness with by-product strength incentivizing production, was a key driver of capitalization.
- ~$800 is at risk if ETFs inflows - which are in danger of being disappointed, once again – begin to unwind, given very limited physical support

Platinum and Global Manufacturing PMI



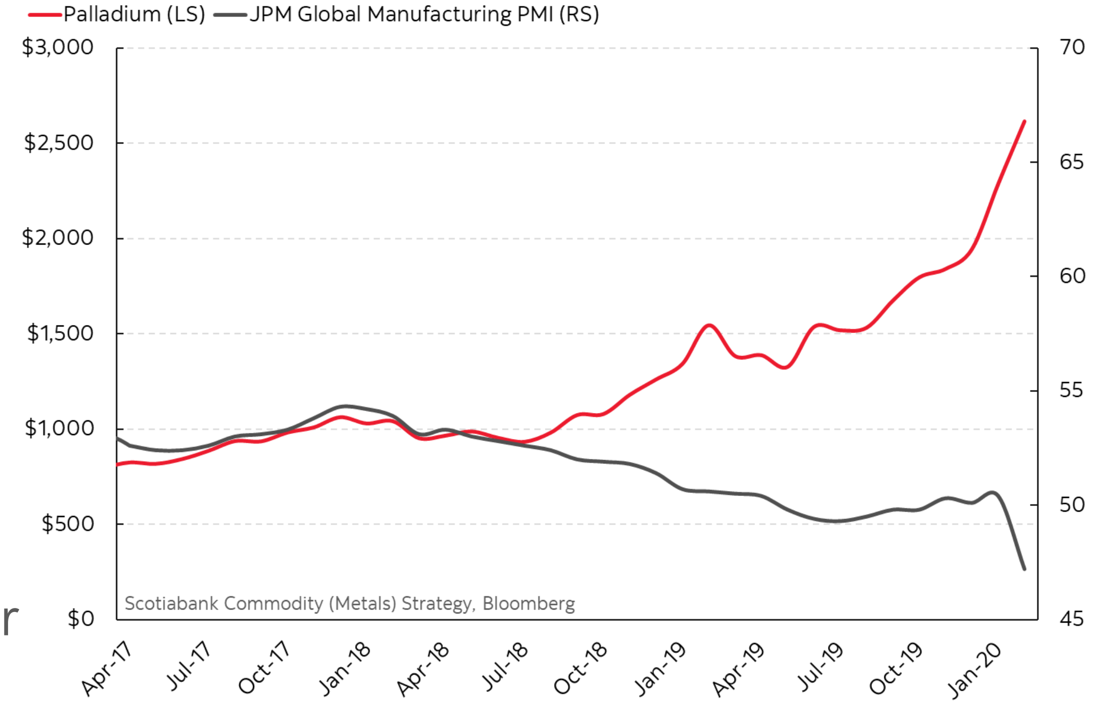
Scotiabank Commodity (Metals) Strategy, Bloomberg

PGM: Palladium

Palladium:

- Prices diverged from risk/SPX and forwards (which have loosened), as it continued to factor in:
  - Supply fears (threat of supply disruptions/Eskom, current lack of availability) AND
  - Technical changes (emission regulations that won't alter on demand slowdown)
  - OVER demand fears (reduced or temporary demand stall because of the auto closures).
  - Howver, Chinese car sales dropped a record 80% in February, as consumers stayed home and output at factories remain disrupted, amongst other
- Deficits can't persist in at major economic slowdown.

Palladium and Global Manufacturing PMI



Scotiabank Commodity (Metals) Strategy, Bloomberg

Appendix 1: Gold Bull & Bear Summary Table

GOLD: SUMMARY TABLE

	⬆Tailwinds	➡Neutral	⬇Headwinds	
MORE BULLISH	Increasing risk of **correlated dovish global Central Bank action** and/or fiscal policy in addressing global growth concerns due to the Corona Virus, especially after the Feds emergency rate cut	**Renewed macro fear/equity volatility** (VIX >20) upends super complacent risk regime; margin-related Gold selling is offset by haven inflows	**Positioning and sentiment:** fast money (COT + ETF & perhaps OTC) is well ITM, with positioning saturation leading to quick downsizing; however the generalist (FI, Equity) investor remains largely underweight or unengaged	MORE BEARISH
	Increasing frequency of **'macro wobbles'** and derisking episodes due to geopolitical or off-calendar events; extreme and fast shifts in risk sentiment (from recession fears to exuberance) indicative of **late business cycle**	**Trade, Geopolitics**: de-escalation of US/China trade with Phase 1 deal. Any formal comprehensive US/China trade deal or Phase 2 very unlikely before US 2020 elections as focus shifts to containment measures. However, backdrop of increasing frequency of "off-calendar" geopolitical events/risks (Iran/Middle East/North Korea)	**Extremely muted physical support** from India & China as higher prices in local currency terms & Impact of virus on Asian consumer sentiment defers or deters purchases & jewelry consumption (XAUINR & XAUCNH at new ATHs!). Q1 physical demand likely "lost", not "delayed".	
	Underlying **growth fears** persists, especially the fragile recovery in global **manufacturing** now likely to stumble given Coronavirus impact on Chinese demand**. "U-or -L" shaped recovery likely, not "V"**	Despite recent weakness, **US$** remains structurally stubbornly perky**.** Outlook on whether the $ extends into cyclical weakness is mixed, given its reserve currency status & historical resilience into a late cycle	Large **dishoarding** from traditional physical Gold countries given price surge	
	Pushback on negative yielding debt securities short-lived (peak level of $17tn likely again); structurally **lower for longer global bond yields** remain defining force in financial markets	Higher pace of **Central Bank** gold buying, diversifying against fiat/US$ and slower global growth in 2019; small risk of CB demand slowing in 2020 due to significantly higher local prices & renewed risks (Coronavirus)	**Higher yielding Gold 'detractors'** like alternative currencies (XBT), assets or relatively underweight havens (e.g.: JPY, CHF) compete for similar flows,	
LESS BULLISH	**US election risk** remains underpriced with little Gold premium on a progressive Democratic nominee; path to election will get messy. Consensus hinging on expectation Trump is reelected no matter what, now questioned given market volatility & Biden resurgence. A **pickup in socialist rhetoric** and policies with social pendulum swinging left in US and abroad	**Portfolio asset allocation** potentially reconsidered given dramatic shift lower in yields offering little-no diversification benefits. Gold, REITs, alternative assets reconsidered as portfolios shifts away from traditional stocks and especially bonds split	**2020 reflation risk** on short-lived & **contained global virus spread;** sustained US data outperformance and Global stimulus drives a 2H'20 V-shaped shift in inflation and a more hawkish Fed, inducing largescale unwinding of Bonds & Gold	LESS BEARISH
	Growing talk around **alternative CB tools** more relevant as monetary policy reaches its limits; The **independence of CBs** increasingly under threat from populist governments; skepticism growing around power of CBs to remove volatility & pump up asset prices amidst renewed risks	Gold Producer consolidation / M&A driving **"peak gold"** supply calls		
	Fiat currencies re-politicized with markets in a **cold currency war as last of monetary policy tools redeployed**; risk of US currency intervention to weaken the $ and reduce the dollar dominance (and dependence on it) in financial system			
	Unsustainable US **debt/fiscal** path with swelling twin deficits. A structural theme, but one which has taken a backseat to trade/politics & growth fears			

Source: Scotiabank Commodities (Metals) Strategy

Appendix 2: Copper Bull & Bear Summary Table

COPPER: SUMMARY TABLE

	⬆ Tailwinds	➡ Neutral / supportive	⬇ Headwinds	
SHORT-TERM	**Chinese stimulus:** bets on **fiscal response** through infrastructure spending on virus hit sectors grows & is likely given recent data, *despite* the overcapacity and debt concerns. **Monetary policy** (loan prime rate guided lower, cut in RRR) reignited due to virus/growth fears, but a cautious stance taken. Other Asian nations (South Korea, Japan) to follow suite	**The Fed** surprisingly cut rates in 2020 due to renewed growth risks; correlated **Global Central Bank** policies to follow which should support manufacturing PMIs in time	Off-calendar event risks re-emerge with **Coronavirus** a large hit to demand potentially causing **Chinese GDP to fall** toward to 4% (or even lower) vs 6% in Q1'20, disrupting supply chains and negatively impacting manufacturing. Global refined Cu demand revised lower from ~2%, closer to 0.5% (with downside risks still pertinent given evolving state around both Asian & Global demand	SHORT-TERM
	Extreme negative sentiment reflected in outsized **short paper positioning** near peak levels; HG investors are short 1.1m mt, 85% of record short positioning (Aug '19)	**Reduction in Chinese smelter utilization rates,** driven by transportation restrictions / collapse in demand for sulphuric acid (putting constraints in storage), creating bottlenecks to refined Cu production. Chinese **smelter maintenance** has also been brought forward	A stubbornly perky **US$ and overall weak EM/FX & yuan.** Outlook on whether the $ extends into cyclical weakness is mixed, given its reserve currency status & historical resilience. EMFX weakness & **softer EM growth profiles** negatively impact purchasing power	
	The **decarbonisation** of stationary power (wind technology) and **electrification** of transport (Electric Vehicles) should progress.	**Fundamental balances** shifting from period of surpluses to deficits due to recently negative supply growth (highlighted by large downward trend in TCRCs indicating a structurally tightening path) - that has now been delayed to 2H'20 or 2021 due to the impact of the Coronavirus.	Unpredictable multi-front **trade/economic war.** Despite phase 1 deal, 25% tariffs remain on most imported Chinese goods ($250bn), with Phase 2 and/or any comprehensive US/China trade deal unlikely before US 2020 elections or until there's virus containment	
LONG-TERM	**Grade declines, rising input costs,** a scarcity of high-quality future developments and **ESG** should constrain the ability to meet growing demand at low cost and with limited political risk	**Exchange inventories** swelling from cyclical lows and now at 10 year average; LME + SHFE + CME holding ~550k mt	Scrap supply and **aluminum substitution** (given low availability risk and relatively lower prices) are constraints to upside Copper pricing	LONG-TERM
	Emerging Asia (China, India, ASEAN), China's **Belt and Road** initiative, population growth, rising living standards and the continuation of **urbanization** are opportunities for rising demand growth	**2H'20 reflation risk** on virus containment & collective CB efforts, driving a global data rebound, Chinese manufacturing improvement driven & unleashing pent-up demand; that will promote inflows into growth-sensitive commodities	**Late business cycle** & late **super commodity** cycle, provide structural headwinds	

Source: Scotiabank Commodities Strategy

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