

Metals Strategy: Copper: How to think about Demand vs Supply risks

The crippling virus spread and the sudden economic stops it triggered around the world has ushered in a range of required responses - from policymakers resorting to unprecedented monetary & fiscal stimulus efforts (to ensure financial markets don't seize up), to airlines cutting capacity (in response to the overnight demand shock) to metal production closures (to protect employees and help flatten the curve in those affected countries). OPEC+ remains the outlier, in which their supply 'response' perversely is one of market share, at a time when demand is fragile and falling.

The below outlines how to think about these demand shocks which are being followed by supply ones, for Copper.

PRICE ACTION: Copper extended its major losses overnight, falling ~ \$1000 in 3 days and through \$4500. At one point it was down 8% DoD, with the SHFE contract hitting exchange daily limits. High single digit intraday swings are not unusual, given the extreme volatility in Oil and stock market (swinging 10% several days in a row now). What should be surprising was base metals relative silence, holding above short-term support as it attempted to price in China's return to work, the return of pent-up demand and aggressive PBOC stimulus measures (an [East "V"-recovery](#)). That narrative has changed as China's reliance on trade with the ROW (Europe and the US) is looking increasingly fragile (ex-China demand persistently weakening) while PBOC is hesitant to replicate largescale 2009-like stimulus measures. US\$ strength/EMFX weakness, liquidity issues and cost deflation (from energy costs) is contributing to the asymmetric price response to supply/demand shocks.

ASYMMETRIC RESPONSES to SUPPLY vs DEMAND SHOCKS: Despite the shutdowns (shut-in) of mining operations in Latam (see Research note [here](#) highlighting specific operations impacted in Chile & Peru and estimate that ~325k mt of Cu production could be lost), the following explains why the impact on demand more than offsets any supply disruptions in this current environment (or put another way, the emergence of supply cuts ensures the expected swing to a surplus is not as great as it could have been).

- **The immediate demand hit from the virus, and the FEAR of future demand crumbling.** In bear risk markets, there is an asymmetric response to the *fear* of demand, over the *fear* of supply. We witnessed that last year in 2H'2018, where large-scale Chilean protests did not lead to any relief in downside Cu pricing; at the time investors were more deterred by the fear of demand destruction due to the US / China trade war which led to a positioning setup of being either sidelined or short. The same setup in sentiment is occurring wrt to COVID-19 demand & supply risks.

CONTACTS

Nicky Shiels
Commodity Strategist (Metals)
212-225-6724
Commodities Derivatives
nicky.shiels@scotiabank.com

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Chart 1:

Demand Shock Event Study: Copper

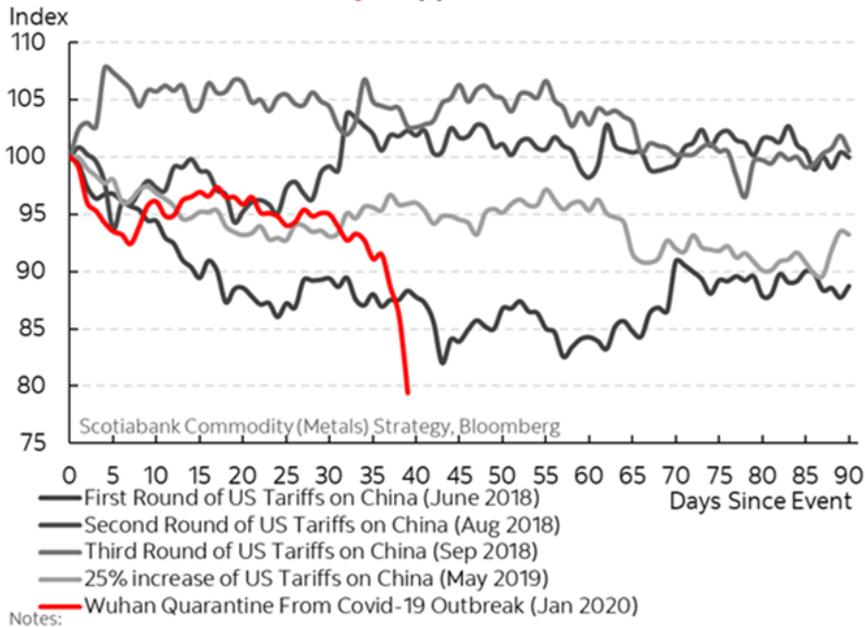
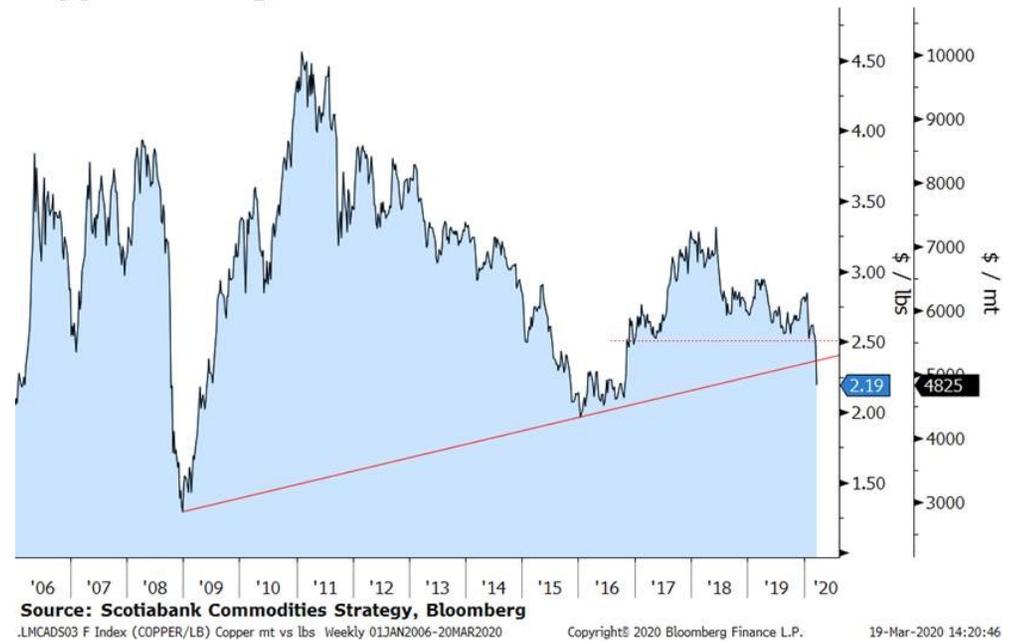


Chart 2:

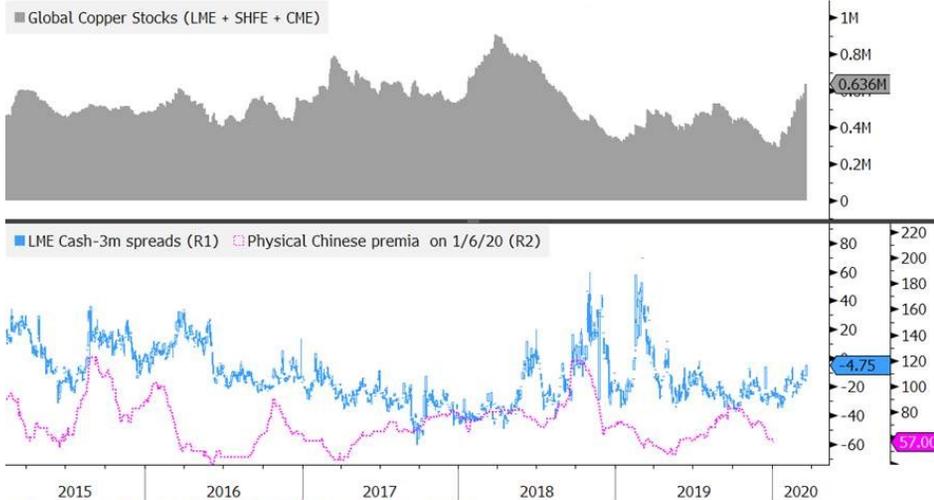
Copper Pricing



- The negative feedback loop of a stronger US\$.** This affects metals in two ways. Firstly, because of funding issues in US\$, broad lack of market liquidity and seizing of credit markets, any inventories of metal (including Copper and usually more so precious metals) come under pressure as they're simply a source of liquidity. Secondly, the subsequent weaker EMFX negatively impacts the purchasing power of local consumers for metals, leading to less actual demand. Indirectly, weak Latam currencies could bring forward metals sales, in a bid to shore up US\$, creating additional headwinds for pricing.

Chart 3:
Global Copper exchange stocks & spreads

Sustained drawdown in stocks reversed with COVID-19, but still not super elevated by historical levels

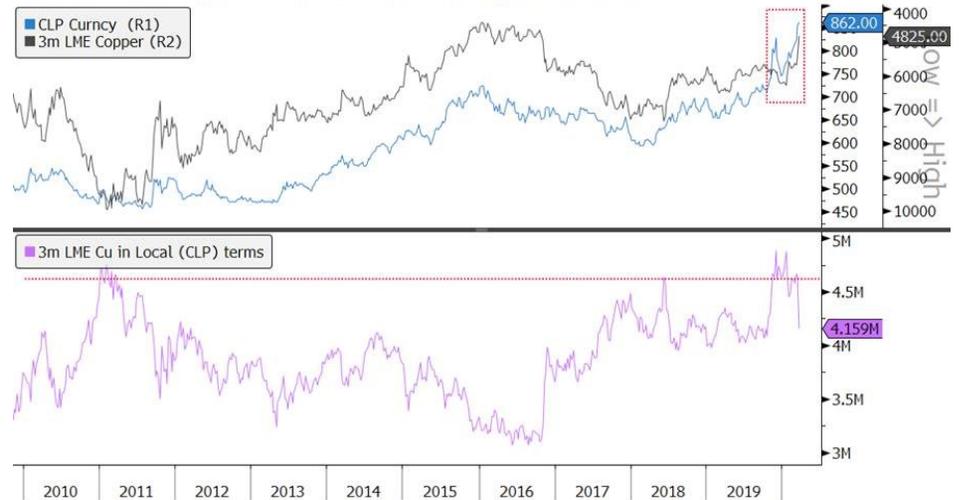


Source: Scotiabank Commodities Strategy, LME, Bloomberg

.CUSTOCKS U Index (LME+SHFE+CME, onlydeliverable,) Coppe vs Global Stocks Dail Copyright© 2020 Bloomberg Finance L.P. 19-Mar-2020 14:21:51

Chart 4:
Copper vs CLP

A weak local currency is usually a boon for Latam producers...



Source: Scotiabank Commodities Strategy, Bloomberg

CLP Curncy (Chilean Peso Spot) Copper CLP Weekly 09NOV2009-20MAR2020 Copyright© 2020 Bloomberg Finance L.P. 19-Mar-2020 14:22:41

Chart 5:

 SUPPLY RISKS	DEMAND RISKS 
<p>LATAM: current and expected mine closures due to COVID-19, putting potentially >300K mt (1.5% of global supply) at risk</p>	<p>GLOBAL: COVID-19 and subsequent sudden economic stops negatively impacts transportation demand, trade & manufacturing</p>
<p>CHILE: Climate change: Heavy rains & Mega drought. Crippling civil unrest (Q4'19). SLTO (Escondida strike 2017 and threat of repeat in 2018)</p>	<p>US / CHINA: Trade war & Geopolitical Instability; impact on trade flows and manufacturing</p>
<p>MONGOLIA: Resource nationalism (Oyu Tolgoi uncertainty)</p>	
<p>PERU: SLTO (Las Bambas protests & Matarani port blockade over Tia Maria). Climate change (extreme rainfall in 2017)</p>	
<p>ZAMBIA: Resource nationalism (KCM expropriation)</p>	
<p>INDONESIA: Resource nationalism (New divestment & export rules introduced in January 2017) and SLTO (Grasberg strike 2017).</p>	
<p>DR CONGO: Resource nationalism (New mining code in 2018)</p>	
<p>*SLTO = Social License to Operate Source: Woodmac, Scotiabank Commodities Strategy, Scotiabank GBM Equity Research</p>	

- Cost deflation due to major oil/energy repricing.** That's a hard hit to the commodity brand (from an investor perspective), but it also simply lowers the cost floor across all metals. The table below simulates all metals prices at various WTI prices. Given that WTI is very decent in explaining (66%) of Coppers pricing the past 10years, a new energy era - a \$20-\$25 asset - puts the model-implied Copper price in a \$4360 to \$4500 range, levels that were carved out today.

Chart 6:

- STRATEGY OUTLOOK:** Copper has simply repriced from a V-shaped Chinese economic rebound (on hopes of aggressive stimulus) to a long "U" or "L" shaped recovery in ROW; the 2020 fundamental balance now likely shifts from deficit to a surplus, but with subsequent supply cuts, a runway surplus is unlikely. Last year, its expected deficit was a missed opportunity due to trade war uncertainty; this year, the relatively larger deficit (vs 2019) will once again be a missed opportunity as COVID-19 hits demand far quicker than supply, at a time when the PBOC is hesitant to aggressively stimulate (as in 2009, or even 2016). Copper historically will test the mettle (of producers); the cost of production levels* is around \$4800-\$4900, an area where it should've found support at, but didn't. \$4370 was today's low, vs \$4320 (in 2016), which is clearly a buying opportunity IF ones post-virus recovery outlook is optimistic. However, given the fluid situation around Q2 growth (*estimates for US GDP ranges from -5 to -14% from US banks!*), investors aren't comfortable deploying capital; \$4500-\$5100 is its new comfort range (low conviction) IF inventories can halt any major inflows, energy finds a bottom, equity market risk stabilizes and US\$ bid erases. Overall, (tentative) floors are nearby, if the response in Copper to this demand shock (COVID-19) is similar to the multiple hits it took on any de-escalation in US/China trade, as depicted in chart 1....

Oil & Metal Simulation Results: Prices										
	Oil	Gold	Silver	Platinum	Palladium	Copper	Zinc	Aluminum	Nickel	
Current	\$ 22	\$ 1,468	\$ 12	\$ 589	\$ 1,578	\$ 4,730	\$ 1,828	\$ 1,626	\$ 11,319	
Simulation	\$ 45	\$ 1,247.42	\$ 15.16	\$ 908.96	\$ 970.64	\$ 5,503.40	\$ 2,409.21	\$ 1,770.35	\$ 11,120.88	
	\$ 44	\$ 1,243.34	\$ 14.94	\$ 896.79	\$ 974.81	\$ 5,457.76	\$ 2,414.27	\$ 1,764.20	\$ 10,970.44	
	\$ 43	\$ 1,239.25	\$ 14.72	\$ 884.61	\$ 978.98	\$ 5,412.11	\$ 2,419.33	\$ 1,758.06	\$ 10,820.00	
	\$ 42	\$ 1,235.17	\$ 14.49	\$ 872.44	\$ 983.16	\$ 5,366.46	\$ 2,424.39	\$ 1,751.91	\$ 10,669.56	
	\$ 41	\$ 1,231.08	\$ 14.27	\$ 860.26	\$ 987.33	\$ 5,320.82	\$ 2,429.45	\$ 1,745.77	\$ 10,519.12	
	\$ 40	\$ 1,227.00	\$ 14.05	\$ 848.09	\$ 991.51	\$ 5,275.17	\$ 2,434.51	\$ 1,739.63	\$ 10,368.68	
	\$ 39	\$ 1,222.91	\$ 13.83	\$ 835.91	\$ 995.68	\$ 5,229.52	\$ 2,439.58	\$ 1,733.48	\$ 10,218.23	
	\$ 38	\$ 1,218.83	\$ 13.60	\$ 823.74	\$ 999.85	\$ 5,183.87	\$ 2,444.64	\$ 1,727.34	\$ 10,067.79	
	\$ 37	\$ 1,214.75	\$ 13.38	\$ 811.56	\$ 1,004.03	\$ 5,138.23	\$ 2,449.70	\$ 1,721.19	\$ 9,917.35	
	\$ 36	\$ 1,210.66	\$ 13.16	\$ 799.39	\$ 1,008.20	\$ 5,092.58	\$ 2,454.76	\$ 1,715.05	\$ 9,766.91	
	\$ 35	\$ 1,206.58	\$ 12.94	\$ 787.22	\$ 1,012.38	\$ 5,046.93	\$ 2,459.82	\$ 1,708.91	\$ 9,616.47	
	\$ 34	\$ 1,202.49	\$ 12.71	\$ 775.04	\$ 1,016.55	\$ 5,001.29	\$ 2,464.88	\$ 1,702.76	\$ 9,466.03	
	\$ 33	\$ 1,198.41	\$ 12.49	\$ 762.87	\$ 1,020.72	\$ 4,955.64	\$ 2,469.94	\$ 1,696.62	\$ 9,315.59	
	\$ 32	\$ 1,194.32	\$ 12.27	\$ 750.69	\$ 1,024.90	\$ 4,909.99	\$ 2,475.00	\$ 1,690.48	\$ 9,165.14	
	\$ 31	\$ 1,190.24	\$ 12.05	\$ 738.52	\$ 1,029.07	\$ 4,864.34	\$ 2,480.06	\$ 1,684.33	\$ 9,014.70	
	\$ 30	\$ 1,186.16	\$ 11.82	\$ 726.34	\$ 1,033.25	\$ 4,818.70	\$ 2,485.12	\$ 1,678.19	\$ 8,864.26	
	\$ 29	\$ 1,182.07	\$ 11.60	\$ 714.17	\$ 1,037.42	\$ 4,773.05	\$ 2,490.18	\$ 1,672.04	\$ 8,713.82	
	\$ 28	\$ 1,177.99	\$ 11.38	\$ 701.99	\$ 1,041.59	\$ 4,727.40	\$ 2,495.25	\$ 1,665.90	\$ 8,563.38	
	\$ 27	\$ 1,173.90	\$ 11.15	\$ 689.82	\$ 1,045.77	\$ 4,681.76	\$ 2,500.31	\$ 1,659.76	\$ 8,412.94	
	\$ 26	\$ 1,169.82	\$ 10.93	\$ 677.65	\$ 1,049.94	\$ 4,636.11	\$ 2,505.37	\$ 1,653.61	\$ 8,262.50	
\$ 25	\$ 1,165.73	\$ 10.71	\$ 665.47	\$ 1,054.11	\$ 4,590.46	\$ 2,510.43	\$ 1,647.47	\$ 8,112.05		
\$ 24	\$ 1,161.65	\$ 10.49	\$ 653.30	\$ 1,058.29	\$ 4,544.81	\$ 2,515.49	\$ 1,641.33	\$ 7,961.61		
\$ 23	\$ 1,157.57	\$ 10.26	\$ 641.12	\$ 1,062.46	\$ 4,499.17	\$ 2,520.55	\$ 1,635.18	\$ 7,811.17		
\$ 22	\$ 1,153.48	\$ 10.04	\$ 628.95	\$ 1,066.64	\$ 4,453.52	\$ 2,525.61	\$ 1,629.04	\$ 7,660.73		
\$ 21	\$ 1,149.40	\$ 9.82	\$ 616.77	\$ 1,070.81	\$ 4,407.87	\$ 2,530.67	\$ 1,622.89	\$ 7,510.29		
\$ 20	\$ 1,145.31	\$ 9.60	\$ 604.60	\$ 1,074.98	\$ 4,362.23	\$ 2,535.73	\$ 1,616.75	\$ 7,359.85		
\$ 19	\$ 1,141.23	\$ 9.37	\$ 592.43	\$ 1,079.16	\$ 4,316.58	\$ 2,540.79	\$ 1,610.61	\$ 7,209.41		
\$ 18	\$ 1,137.14	\$ 9.15	\$ 580.25	\$ 1,083.33	\$ 4,270.93	\$ 2,545.85	\$ 1,604.46	\$ 7,058.96		
\$ 17	\$ 1,133.06	\$ 8.93	\$ 568.08	\$ 1,087.51	\$ 4,225.28	\$ 2,550.92	\$ 1,598.32	\$ 6,908.52		
\$ 16	\$ 1,128.98	\$ 8.70	\$ 555.90	\$ 1,091.68	\$ 4,179.64	\$ 2,555.98	\$ 1,592.17	\$ 6,758.08		
\$ 15	\$ 1,124.89	\$ 8.48	\$ 543.73	\$ 1,095.85	\$ 4,133.99	\$ 2,561.04	\$ 1,586.03	\$ 6,607.64		
\$ 14	\$ 1,120.81	\$ 8.26	\$ 531.55	\$ 1,100.03	\$ 4,088.34	\$ 2,566.10	\$ 1,579.89	\$ 6,457.20		
\$ 13	\$ 1,116.72	\$ 8.04	\$ 519.38	\$ 1,104.20	\$ 4,042.70	\$ 2,571.16	\$ 1,573.74	\$ 6,306.76		
\$ 12	\$ 1,112.64	\$ 7.81	\$ 507.20	\$ 1,108.38	\$ 3,997.05	\$ 2,576.22	\$ 1,567.60	\$ 6,156.32		
\$ 11	\$ 1,108.55	\$ 7.59	\$ 495.03	\$ 1,112.55	\$ 3,951.40	\$ 2,581.28	\$ 1,561.46	\$ 6,005.88		
\$ 10	\$ 1,104.47	\$ 7.37	\$ 482.86	\$ 1,116.72	\$ 3,905.75	\$ 2,586.34	\$ 1,555.31	\$ 5,855.43		

Note: Current prices as of morning March 19

Source: Scotiabank Commodity (Metals) Strategy, Bloomberg

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