Commodity Price Report

Temporary Imbalances Are Driving the Commodity Rally

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Highlights

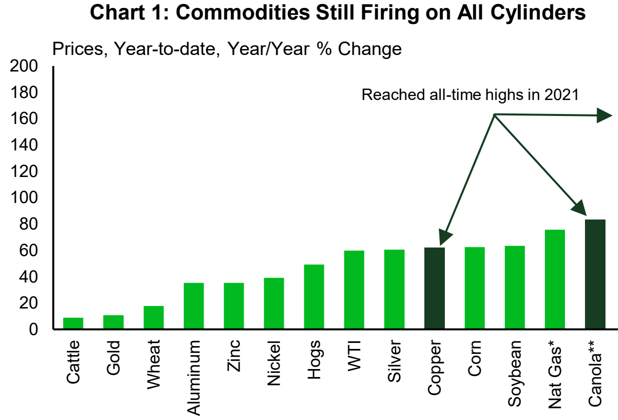
- Commodity prices have staged a remarkable rally following a short-lived slump last year. The upswing in prices has prompted speculation that the commodity complex is poised for a "supercycle".
- While it's early to conclude for sure, we doubt that the necessary conditions for a supercycle are in place. Rather, we suspect that recent price movements have primarily been driven by a temporary supply-demand mismatch for most commodities. The global economic rebound has been coming in better than expected. Meanwhile, pandemic-driven supply constraints continue to act as tailwinds to prices. These forces should wane as the recovery process gains more traction and spending across major economies shifts from goods to services.
- Having said that, some commodity areas – notably some base metals - may appear better-positioned to benefit from a more sustained period of price strength on the back of fiscal stimulus and efforts to address climate change.

You wouldn't know that the global economy is still recovering from a deep recession by looking at commodity prices (Chart 1). Part of this is due to base effects, but many commodities are also trending well above their pre-pandemic levels. Most recently, copper, the bellwether of global growth, joined lumber, canola, iron ore, and palladium in breaching all-time highs. This persistent upswing in prices has prompted speculation that a commodity supercycle may be forming. Sizeable monetary and fiscal stimulus and a synchronized move towards clean energy projects are viewed as the potential catalysts.

Like other areas of the economy, the pandemic has cast light on potential structural changes in the commodity complex. However, rather than a start of a multi-year bull run, we suspect that recent price movements have been largely a function of a temporary supply-demand mismatch as global economic activity recovers faster than expected. This was further amplified by a downtrend in the USD and an increased speculative interest in the commodities amid rising inflation expectations, which also in our view is transitory in nature.

Having said that, if there is one area that could enjoy a sustained period of strength in the foreseeable future it is base metals prices. Some of these metals have seen underinvestment in recent years. They would be particularly well-positioned to reap the benefits of a longer-term upcycle in infrastructure investment partly tied to global efforts to decarbonize. While early days, the same cannot yet be said for other parts of the complex, where productivity has improved in recent years and where project lead times are shorter.

Chart 1: Commodities Still Firing on All Cylinders



*Natural gas prices are Henry Hub cash prices ** Canola prices converted from C$ to US$.
Source: CME, Bloomberg, Random Lengths, WSJ, FT, EIA, ICE, FRB, TD Economics

A Walk Down Memory Lane

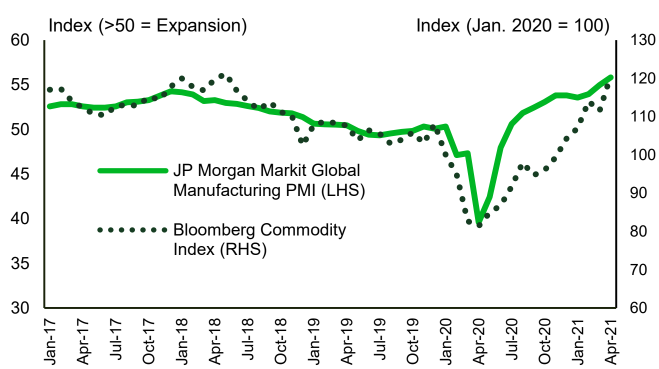
Historical context may help shed light on whether recent movements satisfy the preconditions for a supercycle. Commodity supercycles are far and few between. They can last for a decade or longer and are usually driven by a structural and persistent change in demand that is met with a lagged supply response. Even with the benefit of hindsight, there is disagreement on the definition and duration of previous commodity supercycles. The demand impetus from China's industrialization characterized the previous supercycle, which lasted from the mid-1990s to the late 2000s. Agricultural commodities benefited from an expansion in China's middle class. Base metals fired on all cylinders, with China's growth at the time fueled by elevated infrastructure spending. Likewise, WTI crude oil had famously breached the $100 mark. Contributions to demand growth from other emerging markets were also supportive, though still paled in comparison to that of China.

In contrast to that multi-year run, the current commodity upswing is in its relative infancy and the possibility of a supercycle remains highly uncertain. Still, what is clear is that the broad-based run-up in prices has impressed even the most bullish of commodity forecasters since prices hit their post pandemic lows in April of last year.

Recent Price Action Underpinned by Temporary Forces

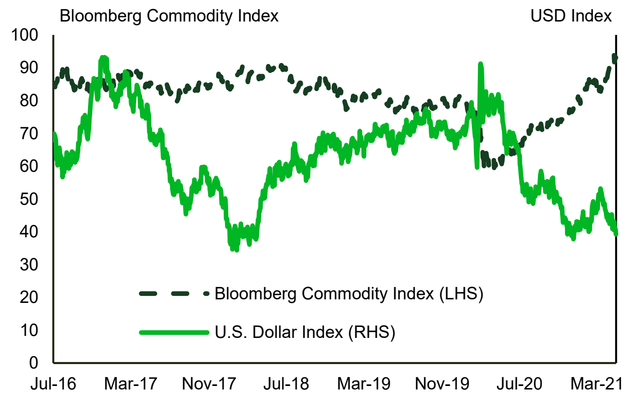
A closer look suggests that recent price movements are driven by forces that are largely temporary in nature. The rebound in global economic activity from a historic shock has been equally as unprecedented, boosted by fiscal stimulus and accelerating vaccination efforts. Importantly, the

Chart 2: A Swift and Goods-Oriented Recovery in Global Demand Was Supportive for Commodities



Source: JP Morgan, IHS Markit, TD Economics

Chart 3: A USD Downtrend Has Been Supportive for Commodities



Source: Bloomberg, TD Economics

recovery process has been tilted heavily towards the goods sector in which commodities are key inputs (Chart 2). Solid growth in manufacturing and industrial production have lent particular support to base metals. Lumber benefited from a heightened international appetite for renovations and single-family homes amid low interest rates, a pandemic-driven race for space and broadening supply shortages. Meanwhile, China, a front-runner in the economic recovery process, dramatically boosted its commodity imports – with reports of potential stockpiling emerging in the past year.

This unexpectedly swift recovery has been met with growing supply bottlenecks and capacity constraints across supply chains, including in commodities For instance, shipping costs had spiked amid rising capacity constraints.

In certain parts of the complex, constrained supply was key in tightening markets. Nowhere is this more evident than in oil markets. The demand outlook for oil has markedly improved since April of last year. However, it has not recovered yet to its pre-pandemic levels. In that vein, markets would not be where they are today had it not be for the significant cuts in supply in OPEC+ (coordinated) and the U.S. (market-driven).

Supply-side constraints – a number of them one-off in nature -- have also been evident elsewhere in the commodity complex, including:

- Natural Gas: Like oil, U.S. natural gas production has declined from its pre-pandemic peak. Additionally, a solid ramp up in LNG export capacity has helped partially alleviate the supply glut in North American markets.

- Base Metals: Pandemic-driven copper mine disruptions (or risks thereof) in Peru. More recently, a strike in chile's Escondida copper mine has added further to supply risks.
- Agriculture: La Nina, Latin American harvest concerns, and a lagged impact of a poor U.S. harvest in 2019 tightened soybean and corn markets. This coincided with a surge in Chinese feed demand in efforts to rebuild its hog herds. Elsewhere, export taxes on Russian wheat provided some support to prices.
- Forestry: Lumber sawmills curtailed production at the onset of the pandemic, anticipating that housing markets would face headwinds. The opposite happened, and producers were ill-equipped to meet an unprecedented surge in housing and renovation demand. In the U.S., labour shortages added salt to the wound.

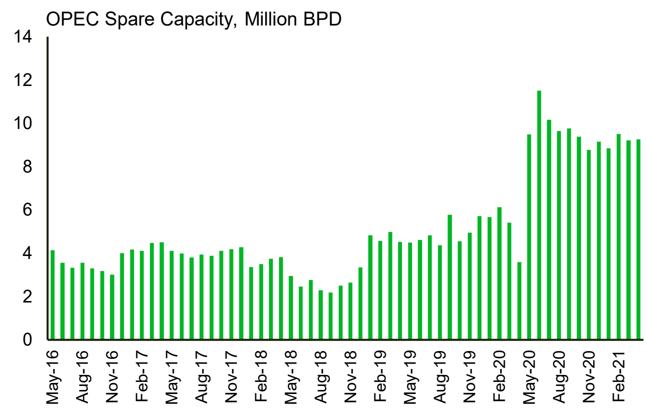
At the same time, financial forces have joined in to lift prospects for commodities in the past year. Earlier in the pandemic, precious metals prices had benefitted from falling bond yields and a dramatic loosening in monetary policy, while a downtrend in the USD has provided a more general lift to commodity prices quoted in US dollars (Chart 3). More recently, a number of commodities have gone on another leg up on the back of growing concerns around inflation. This narrative has created somewhat of a feedback loop: higher inflation expectations tends to drive up commodity prices which in turn leads to further upward adjustment in inflation expectations. All of this has lifted speculative appetite across the complex, with net long positioning elevated for some base metals and agriculture commodities.

These Short-Term Imbalances Should Wane

We expect that the commodity price rally may have some further room to run over the next few months and have even built in more strength in some areas in Q3-21. This includes WTI oil, which we expect could oscillate in the US$65-US$70. However, beyond some pockets of further near-term upside, we expect most commodities to start moderating in the second half of the year (see Forecast Tables). Indeed, we are already starting to witness signals that the rally may be losing steam in the agriculture and forestry groups. The wide gap in supply-demand conditions –a key driver of the rally – should narrow across many areas:

- **Demand Boost is Cyclical, Not Structural:** TD Economics expects a robust showing for global economic growth in this year. However, this should give way to somewhat more moderate growth over the next few years as recoveries mature, governments ease up on the stimulus accelerator, and bond yields gradually normalize. Importantly, some of this easing in demand will take place starting in the second half of 2021, as activity begins to shift away from goods-related spending to services. For instance, we anticipate that renovation and housing investment will lose some steam as yields continue to rise off their pandemic lows.

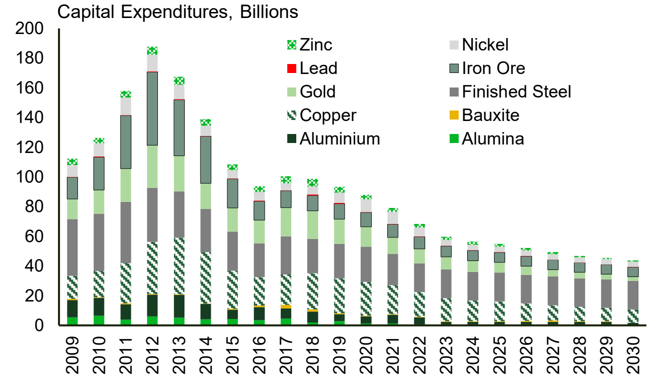
Chart 4: Plenty of OPEC+ Spare Capacity Remains



Source: OPEC, Bloomberg, TD Economics

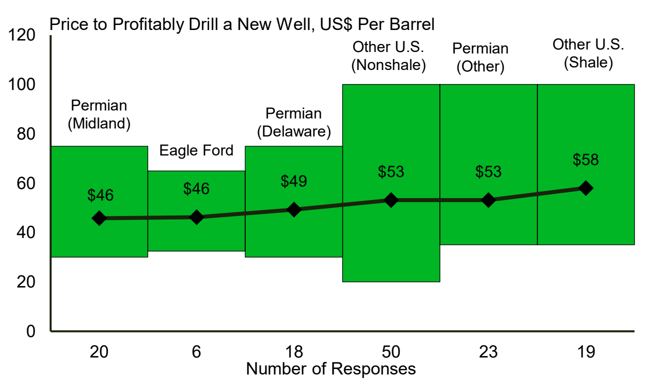
- **..With China First to Tighten Policy Levers:** Case in point, China appears to have already begun tightening its credit conditions, with credit growth already starting to downshift from last year's pace. A renewed focus on financial stability concerns may prevent a sustained infrastructure stimulus boom similar to that seen in the 2000s. Notably, China's cabinet recently raised concerns around elevated commodity prices and their impacts on inflation. In turn, a moderation in China's torrid pace of commodity imports seen last year should be expected. This should put a damper on some of the recent strength in base metals prices, where China is a key consumer. Elsewhere, some central banks (i.e., Canada) have already begun to scale back asset purchases and signal earlier-than-expected rate hikes, with the Federal Reserve likely to announce a plan to reduce its QE program by year-end.
- **Supply Conditions Should Improve:** Similarly, previous tailwinds from the supply side may turn into headwinds. OPEC+ has already started gradually tapering its production quotas (Chart 4). At the same time, concerns related to La Nina have faded, and planting progress in the U.S. appears to be on track. With prices

Chart 5: Subdued Capital Expenditures in Industrial Metals



Source: Wood Mackenzie, TDS Commodity Strategy, TD Economics

Chart 6: Survey Response Suggest that New U.S. Shale Wells Still Profitable in the US$50s



Source: Adapted From Federal Reserve Bank of Dallas (March 2021), TD Economics

elevated, planting intentions in the U.S. and Canada are likely to respond with higher production and increased acreage in tighter markets (oilseeds). This supply response should lessen some of the upward pressures on prices in these tight markets. Although more drawn out, new U.S. lumber sawmill projects/expansions should add to capacity in upcoming years, alleviating some of the pressures on prices going forward.

- **Financial Market Drivers Should Fade:** Recent data releases have sparked concern that we may be heading into an extended period of high inflation. We acknowledge growing upside risks around inflation, but remain of the view that any near-term jump in wages and price pressures will prove largely transitory. Central banks continue to emphasize the importance in maintaining moderate inflation, and officials at the Fed and other major central banks are likely to adjust their forward guidance accordingly in the coming months. Importantly, inflation expectations have been rising but remain well anchored. On a separate note, we suspect that the USD downtrend is levelling off, and this should become more apparent as the U.S. Federal Reserve starts to signal a scale back in asset purchases and rate hikes.

The Supercycle Question Remains Highly Uncertain, But Favours the Base Metals Group

Predicting the timing of a turning point is never easy. We may be too cautious and the forces underpinning prices may extend longer than anticipated partly as supply-chain bottlenecks take longer to dissipate. That would still make them temporary in nature.

However, this narrative doesn't necessarily preclude the possibility of an extended bull market or "supercycle" in certain parts of the complex in the coming decade. This time around, clean energy infrastructure efforts could be the culprit. The "Build Back Better" policy agenda in the United States has planned roughly $4 trillion in investments over the next ten years. These will include commitments to green energy infrastructure. Climate-driven fiscal policy is gaining traction elsewhere. For instance, the European Commission has also revealed its European Green Deal plan. The details of these plans are still subject to considerable uncertainty. Some still require political approval. Should these plans materialize, industrial metals may receive a meaningful boost from spending on revamping power grids, EV batteries, solar panels, wind turbines, among others. Electric vehicles sales are already growing at double-digit pace, and key manufacturers have pledged an overhaul of their fleet within the next decade.

Copper (and potentially some other base metals) could be the biggest beneficiary. Not only is the metal heavily utilized in infrastructure and electrification projects (with its favourable conductivity properties), it has also faced lackluster investment in recent years alongside other industrial metals (Chart 5). Recall that mining projects for base metals typically have long lead times. This suggests that a supply response may be lagged, should these infrastructure plans come to fruition. But even then, metals account for only 7% of global commodity consumption (as per World Bank estimates). By themselves, they may be insufficient to spur a broad commodity supercycle, unless there is a major switch in global commodity consumption patterns. The impetus from these infrastructure announcements also remains highly uncertain, and will likely take many years to materialize. In turn, we expect prices to moderate in the coming year in tandem with a moderation in China's growth, but acknowledge that a shortfall in copper is highly likely in the medium and long term.

What about other parts of the complex? Supply-side forces dictate agriculture markets, where productivity and yields per harvested area have improved significantly in recent years in the U.S., Latin America, and Eastern Europe.

Energy, and in particular, oil markets, face a more uncertain trajectory. In the medium term, OPEC+ has plenty of spare capacity to cushion against shortfalls. A potential for a new Iran deal would also result in an additional 1-2 million bpd on the market. On the other hand, U.S. shale production appears to have plateaued around 11 million bpd – 2 million bpd below its pre-pandemic peak. Still, productivity in the sector has improved in the past decade. For instance, respondents to the Dallas Fed energy survey suggest that they can still profitably drill a new well in the US$50s price range (Chart 6).

Zooming out a bit, demographics are one factor that may dampen the potential for a supercycle similar in scale to the previous one. World population growth, and in particular China's, have slowed in the past decade. China accounts for 50% or more of global demand for some base metals, and has been a major contributor to oil demand growth. Another sizeable economy would have to embark on an infrastructure-driven economic transformation to provide a similar boost to what was seen in the 2000s.

Bottom Line

Commodity markets have been in full swing this year. Evidence suggests that recent movements have been spurred by short-term demand and supply imbalances, lifted further by increases speculative appetite for the sector. It's still early days. While there don't appear to be the preconditions in place for an early-2000s-style supercycle yet, there is certainly scope for an extended run in some areas of the commodity complex in the next decade.

Table 1: Commodity Price Forecast Summary									
Commodity	Spot Price May 19	Q4				Annual Average			
		2019	2020	2021F	2022F	2019	2020	2021F	2022F
WTI Oil	63	57	42	65	63	57	39	64	64
Natural Gas***	2.88	2.39	2.53	3.00	3.15	2.57	2.03	3.05	2.99
Gold	1888	1482	1874	1700	1600	1392	1768	1765	1638
Silver	28.01	17.34	24.45	26.00	24.00	16.21	20.52	26.30	24.75
Aluminum	109	80	87	87	84	81	77	93	83
Copper	459	267	326	381	356	272	280	400	359
Nickel	8.02	6.99	7.24	7.37	7.03	6.30	6.24	7.66	7.20
Zinc	135	108	119	120	127	116	103	124	122
Lumber	1414	391	667	700	575	360	524	955	610
Wheat	8.22	6.77	6.84	8.00	7.60	6.59	6.57	8.05	7.70
Canola	853	362	467	550	475	361	393	625	510
Cattle	116	117	109	124	126	116	106	121	125
Hogs	111	65	68	85	80	70	60	90	85

Source: *Forecasts by TD Economics as of May 2021 ** forecasts by TD Securities and TD Economics as of May 2021

MEASURES & QUOTED PRICES
($ is US$ unless stated otherwise; C$ prices converted to US$ using daily C$/US$ exchange rate).

FORESTRY
Lumber: Random Lengths' Framing Lumber Composite ($/1000 Bd Ft)

ENERGY
Oil: Domestic Spot Market Price: West Texas Intermediate, Cushing ($/Barrel); Natural Gas: Henry Hub, LA ($/mmbtu)

PRECIOUS METALS
Silver: Cash price: Silver, Troy Oz, Handy & Harman Base Price ($/Troy oz); Gold: Cash Price: London Gold Bullion, PM Fix ($/Troy oz)

NON-PRECIOUS METALS & MINERALS
Aluminum: LME Aluminum, 99.7% Purity: Closing Cash Price (Cents/lb); Copper: LME Copper, Grade A: Closing Cash Price (Cents/lb); Nickel: LME Nickel: Closing Cash Price ($/lb); Zinc: LME Zinc: Closing Cash Price (Cents/lb)

AGRICULTURE
Wheat: Spring,14%Protein: Minneapolis ($/bu); Canola: Canada: Cash Pr: Canola: Instore Vancouver: Grade 1 Canada NCC (C$/mt); Cattle: Live Cattle Futures Price: 1st Expiring Contract Open (Cents/lb); Hogs: Lean Hogs Futures Price: 1st Expiring Contract Open (Cents/lb)
Sources: WSJ, FT, Random Lenghts, CME, FRBNY / Haver Analytics, Bloomberg.

Table 2: Commodity Price Forecast Summary % Change								
Commodity	Q4				Annual Average			
	2019	2020	2021F	2022F	2019	2020	2021F	2022F
Energy*								
WTI Oil	-3.6	-25.4	53.1	-3.1	-12.2	-31.2	63.7	-1.1
Natural Gas	-36.6	5.6	18.7	5.0	-18.5	-20.8	50.1	-2.1
Precious Metals*								
Gold	20.6	26.4	-9.3	-5.9	9.6	27.1	-0.2	-7.2
Silver	19.0	41.0	6.3	-7.7	3.1	26.5	28.2	-5.9
Non-Precious Metals**								
Aluminum	-10.9	9.4	0.0	-3.4	-15.1	-5.1	20.2	-10.8
Copper	-4.5	22.0	16.9	-6.6	-8.0	2.8	42.7	-10.1
Nickel	34.1	3.6	1.8	-4.6	5.9	-0.9	22.7	-6.0
Zinc	-9.3	10.0	0.8	5.8	-12.8	-11.3	21.0	-1.4
Agriculture & Forestry*								
Lumber	11.1	70.8	4.9	-17.9	-22.0	45.6	82.1	-36.1
Wheat	-1.2	1.1	17.0	-5.0	-7.4	-0.3	22.6	-4.4
Canola	-6.7	29.0	17.8	-13.6	-12.6	8.9	59.0	-18.4
Cattle	0.4	-6.7	13.8	1.6	1.2	-8.8	14.2	3.8
Hogs	9.4	4.9	25.0	-5.9	7.3	-14.7	50.8	-5.8

Source: * Forecasts by TD Economics as of May 2021 ** forecasts by TD Securities and TD Economics as of May 2021