By Chris Berry (@cberry1) **March 19, 2020**

Coronavirus and The Tipping Point For Globalization

As I wrote last week, this is the first of five posts on the rapidly changing nature of global supply chains.

One thing I have continued to tell my daughters (ages 8 and 12) in the wake of what we're all experiencing is to constantly pause and try to remember as much as you can about what's happening to the world right now. Though concepts as abstract as bond yields, trade flows and globalized supply chains are hard for an eight and twelve-year-old brain to grasp, it is clear that these macro factors are changing irreparably before our eyes due to the coronavirus outbreak. After this and things return to some semblance of "normal", the world my daughters grow up in will almost certainly be different than the one I thought they would grow up in and contribute to.

OPTIMIZATION AT ALL COSTS

The past decades have been spent by enterprising businesses optimizing supply chains in the interest of efficiency, specialization, and profitability while sacrificing self-sufficiency and resilience. The sudden stop in global economic activity is the result of simultaneous shocks in the oil, bond, and equity markets and has brought the force of globalization under scrutiny as the underlying cause of the liquidity crisis we now face. If globalization were as efficient as claimed, would there be a shortage of surgical masks or coronavirus testing kits in the United States? Would populist sentiment be on the rise globally? Would the US be at least 75% dependent on imports of 34 critical raw materials (and 100% dependent on imports of 17)?

FRAGILITY OF COMPLEX SYSTEMS

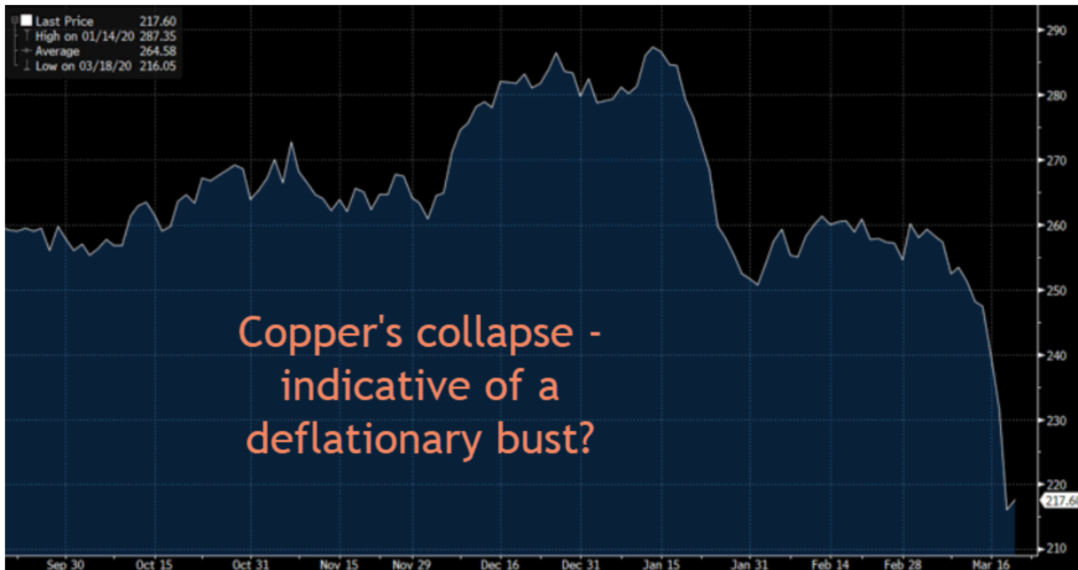
The sell-off in just about all financial asset classes (aside from the US Dollar) is an indication that excessive leverage, excessive valuation, and political disfunction are stressing a complex global trading system to its breaking point. President Trump's trade war rhetoric was the wakeup call around the fragility of globalization, and the coronavirus outbreak has definitively been the "straw that broke the camel's back". This will only accelerate the serious re-think about how to construct supply chains with resilience and antifragility, to steal a phrase from Nassim Nicholas Taleb.

Globalization has allowed for the increasing flow of goods and rising living standards *as well as* the spread of infectious disease. The coronavirus outbreak is a once-in-a-hundred-year event and

complex globalized supply chains have yet to be subjected to the current economic, financial and epidemiological stresses all at once so it’s unclear what lies ahead. An antifragile system “gains” from stress and disorder. Globalization has failed by this metric and is likely to be replaced by something else less efficient and higher cost, but easier to control.

Of immediate concern - a simultaneous supply AND demand shock in global trade flows will almost certainly wipe out global growth for the first half of this year and plunge the global economy into recession. Copper and oil are but two examples of commodities foreshadowing where the economy is headed.

Source: Bloomberg



Source: Bloomberg

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The three charts above are instructive in that they demonstrate what happens in a liquidity crisis. This demand shock is shaking financial markets to their core.

Can China and an increasingly indebted western consumer ride to the rescue here and consume at will? An already-weakening global economy beset with excess capacity and stagnant demand requires it.

Globalization and trade friction have proven to be inherently deflationary forces. Manufacturing capacity has migrated to lower-cost domiciles such as China and Viet Nam padding profit margins and this is at the root of the stagnant consumer demand and the overall deflationary bias with globalization. I'm not a proponent of government interference in markets, but we are at an extraordinary moment in financial and economic history. It is incumbent on governments and central banks (many of whom are looked at as the villains in the current predicament) to backstop the freefall in consumer spending and right this ship. Globalization has worked – up to a point. Import dependence and wage stagnation are two of the major nails in the coffin of the globalization thesis.

Globalization has been damaged, perhaps mortally, by the one-two punch of the US-China Trade War and coronavirus pandemic.

THE TRIFECTA FOR A REGIONAL SUPPLY CHAIN

The re-build of supply chains requires three things: willing capital markets, political will, and consumer demand. All three help determine the ultimate cost of capital and return profile of a project. Therein lies the major reason why much of the lithium ion supply chain, for example, resides in Asia.

First, almost all the capital that flooded into the lithium ion supply chain during the last lithium up cycle (2016-2018) in mining, cathode and battery production originated with Asian strategic players such as Ganfeng Lithium, Mitsui, or Wesfarmers. As much of the lithium supply chain already exists in Asia, it only made sense to increase productive capacity in the region.

Second, while ample political will is harder to demonstrate, the top-down SOE-led investment model in China is a good case study. You could make the argument that the cost of capital here is effectively zero – a cost which no company in the West could realistically match. I am not a proponent of Communism or the CCP and their business practices, for that matter, and think that this impedes price discovery and efficient capital allocation but we in the West do need to understand how globalization has allowed these supply chains to be built in such a seemingly one-sided fashion.

Third, and perhaps most pressing, is consumer demand. The size of the Asian consumer market is well known. Economist Gary Shilling has stated that China accounts for one third of global GDP growth up from 3% in 2000. Between 2000 and 2017, the world's economic exposure to China tripled. China has effectively become a bigger piece of a growing pie and her importance as a major commodity consumer (over 50% of all copper) can't be understated. The moderation of economic growth in China coupled with the lingering effects from the coronavirus bring this relationship into question and give supply chain managers, bureaucrats, and investors alike a chance to visualize and

ultimately build supply chains that minimize exposure to a fading Middle Kingdom.

The irony here is that you could build a lithium ion supply chain which doesn't "touch" China in the United States or Europe today for under $5 billion USD. This is a tiny sum relatively speaking for a foothold in a next-generation industry. All we need is the capital, political will, and consumer demand.

A brief note on battery metals demand….

With China as the consumer of roughly one third of the world's lithium, the current demand destruction in the lithium ion battery space could be a worrying sign. At best, a lithium price recovery has now been pushed to mid to late 2021, though when this market cycle turns upwards, it will do so violently, so keep your powder dry. This demand destruction narrative can provide cover for companies that (should be) actively reconfiguring supply chains to handle prolonged downturns and perhaps moderated long-term demand.

KEEPING YOUR NERVE

I had a reporter from a major South American newspaper call me yesterday and ask me what investors should do considering the current volatility ravaging financial markets and individual balance sheets. While I have no idea, I do think a microscopic virus could be the catalyst for enormous technological innovation and change (and ultimately wealth creation). Globalization appears to be on its deathbed thanks in part to the coronavirus. What takes its

place is the next great prize as the global economy re-orients itself around a more regionally focused set of resilient supply chains.

Part 2 of this series will look at exogenous shocks such as the oil price collapse and consider what it means for the cost structure of the lithium ion supply chain and rebuild. Thank you for taking the time to read this note and I welcome any and all feedback.

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