Market Commentary

Peruvian guano has become so desirable an article to the agricultural interest of the United States that it is the duty of the Government to employ all the means properly in its power for the purpose of causing that article to be imported into the country at a reasonable price – President Millard Fillmore, 1850 State of the Union Speech

During a volatile start to 2022, investment strategies that outperformed during the last few years struggled in a market where energy and mining stocks provided the only significant sources of return. Adding insult to injury, the bond market underperformed the S&P 500, delivering its worst calendar quarter on record, with a 6% decline for the Bloomberg Aggregate Index - which comprises the entire universe of dollar-denominated, investment grade bonds.

Russia's invasion of the Ukraine exacerbated already tight conditions in commodity markets. Russia and Ukraine are key suppliers of energy, agricultural commodities and minerals. The longer the war continues, the greater the risks to the global economy.

In 2011, extreme drought and wildfires destroyed most of Russia and Ukraine's wheat exports, their major customers, predominantly countries in the Middle East and North Africa, subsequently experienced a dramatic increase in food prices that ignited the series of uprisings now called the Arab Spring. Prices are again spiking across the Middle East. Food prices in Lebanon increased an astounding a 1000%. The loss of Ukrainian grain exports is a regional, rather than a global problem. While the press touts that Ukraine accounts for 25% of the wheat export market, this statistic can mislead readers as most wheat gets consumed within the country that grows it. This 25% wheat export deficit in reality accounts for a mere 0.9% of global wheat production and given good harvests, other producers can hopefully make up the slack.

President Milliard Fillmore devoted a section of his 1850 State of the Union Speech to the price of Peruvian bird droppings. Synthetic fertilizers were not invented until the first decade of the 20th century and farmers depended on imports of guano ("white gold" many called it) to maintain the productivity of their fields. Unfortunately, President Fillmore had no more success than today's politicians in controlling commodity prices. The real agricultural risk of the Ukraine war stems from Russia's importance as an exporter of fertilizer. The fertilizer necessary to support current agricultural yields comprises three basic categories: nitrogen, phosphorus and potassium. Russia is a major supplier of all three – accounting for 37% of nitrogen, 10% of phosphorus and 21% of potassium exports. Most farms can get by skipping applications of phosphorus and potassium for a year, but application of nitrogen is critical. Nitrogen fertilizer is manufactured by combining nitrogen in the air with natural gas to create ammonia. Russia's nitrogen export stem from its abundant natural gas resources. Nitrogen fertilizer prices, not surprisingly, recently reached record levels and will negatively impact farmers around the world. Fortunately the US is largely self-sufficient in nitrogen and phosphate fertilizers and gets over 80% of its potassium (potash) from Canada. Brazil, on the other hand, imports 95% of its nitrogen fertilizer, of which Russia supplies 21% [1]. Expensive fertilizer translates into reduced application and lower crop yields, which in turn leads to higher grain prices. This will put pressure on developing countries and potentially lead to political unrest.

Russian exports account for roughly 10% of global oil consumption. As oil trades globally, Russia can sell this oil to China, India or any other buyer not willing to honor Western sanctions. A barrel of Russian oil consumed by China translates to a barrel not imported from the Middle East and therefore made available on the global market. However, Russian oil production will suffer over the long term without Western expertise and equipment, much as Venezuela's production collapsed after Western companies fled. While increased output from US shale can provide some relief, other potential additional sources of supply named in the press such as Venezuela and Iran remain speculative. OPEC so far has rejected calls to increase its production.

The American Automobile Association's average retail gasoline price index hit a high of $4.22 in March. It last exceeded $4 in the summer of 2008 when crude oil spiked to over $140. Adjusted for the relatively modest inflation over the period, gasoline would need to increase to $5.20 before it would equate to the 2008 high. Likely the 2007-2008 spike in gasoline prices served as the pin that burst the real estate bubble, as highly indebted consumers could not digest the higher energy costs and this accelerated the rate of mortgage defaults.

Europe receives 40% its natural gas from Russia. Unlike petroleum, natural gas is more difficult to transport and trades in regional markets. The existing pipeline infrastructure keeps both parties economically tied to this exchange as this gas cannot be easily redirected by Russia to potential Asian customers (although Russia has a separate network that does supply Asia). The long term winner will be American and Middle Eastern liquefied natural gas (LNG), which can be produced at volumes sufficient to replace Russian exports, but building the necessary infrastructure will take years. In 2020, Europe consumed approximately 380 billion cubic meters (BCM) of natural gas. The US and Canada liquefaction capacity currently stands at just over 100 BCM and should grow to 155 BCM by 2026 [2]. Other natural gas producers are also building their export capacity, so a large part of Europe's Russian gas consumption could be replaced by LNG within a few years.

The oil and gas industry spent over $600 billion per year over the past decade developing new sources of production, most notable US shale and Canadian oil sands. While most of this investment proved a bust for investors, consumers benefited from the cheap oil and gas that resulted. Now with tighter supplies, a lower level of investment is required to increase production as US shales are now known quantities and production can be increased relatively quickly.

The mining industry experienced a steeper decline in new investment than the oil & gas industry, with capital spending peaking in 2012. Decarbonization will require massive amounts of minerals, most notably copper and cobalt. While a traditional auto uses 18-49 pounds of copper, a Tesla contains over 180 pounds [3]. Building renewable electricity generation and transmission likewise requires copper. A new mine requires over a decade of planning, permitting, environmental studies and construction before it can begin producing. This will put continued pressure on industrial metals prices as supply cannot respond to the increased demand. This supply imbalance existed before Russia's invasion of Ukraine and Russia's deserved pariah status will only exacerbate this issue.

Businesses engaged in the extraction of commodities require massive amounts of capital and possess no control over the price of their product. These factors translate into high risk for equity investors in commodity producers. Our equity managers instead tend to focus on businesses with the opposite characteristics: companies that require minimal amounts of additional capital and enjoy the ability to control the price of their products. These attributes remain in an inflationary environment - quality businesses can raise prices to pass inflation through to their customers. After a decade of above average US stock market performance, a reversion to averages may be in store. We remain focused on diversification and risk control in what may be a volatile environment over the near term.

[1] War in Ukraine and its Effect on Fertilizer Exports to Brazil and the US – Farmdocdaily.illinois.edu

[2] Source: Bloomberg New Energy Finance

[3] Copper Development Association: Copper Drives Electric Vehicles

- Stephen C. Browne, CFA
Chief Investment Officer
Chief Compliance Officer

Smart Investing Webinar:

Tuesday, April 12, 2022 at 11:30 Central on Zoom

We invite you to join Steve Browne, CFA, CIO and Alison Moss, CEO, for our Smart Investing Webinar.

Link to join the webinar:

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In Observance of Good Friday

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Smart Investing Webinar– Second Quarter Market Review

October 11th at 11:30 AM Central
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