

FEBRUARY 2022

The events of February 2022 mark a major geopolitical turning point, with the full-fledged Russian invasion of Ukraine inflicting a devastating humanitarian toll, along with widespread implications for commodities, the global economy, and financial markets.

Despite the buildup of 150,000 Russian troops along the eastern border of Ukraine and joint military exercises with Belarus in the months leading up to the incursion, along with repeated warnings from US intelligence officials, many observers (ourselves included) did not incorporate a base case assumption of a full-scale invasion of Ukraine, as the extreme costs of a military engagement were perceived as a deterrent that would give way to the pursuit of a diplomatic resolution.

To quickly recap the most notable economic responses by the G7 and Russian authorities:

- Russia's access to SWIFT has been blocked, with exemptions for certain transactions such as oil and gas.
- Sanctions prevent the Central Bank of Russia (CBR) from using foreign exchange reserves that are denominated in G7 currencies, which amounts to 65% of the country's \$643 billion in reserves.
- CBR raised interest rates from 9.5% to 20%.
- CBR banned brokers from executing foreign sell transactions.
- CBR ordered exporters to sell 80% of their export proceeds to local banks.

Clearly this remains a fluid situation. However, when thinking about second and third order impacts, we highlight the following considerations.

Multipolarity

For several years post the 2008 Global Financial Crisis, the world has been shifting toward multipolarity. This trend accelerated with the economic rise of China, the fraying of multilateral institutions, and the US-China trade war. The Russian invasion of Ukraine further underscores the multipolar world order, as nearly a quarter of African nations abstained from the UN vote condemning Russia's military action, while Brazil was the only one of the "BRICS" (Brazil, Russia, India, China, South Africa) countries to support the resolution. The world continues to gravitate away from the unipolar nature of the US as the sole superpower, to one that centers around three major spheres of influence: the US, Europe, and China.

The role of the US dollar is arguably the most important consideration within a multipolar world. The post-World War II hegemony of the dollar has increasingly been met with calls for de-dollarization, and the sanctioning of Russia's central bank may serve as an accelerant for this movement.

Following the late 1990s Asian Financial Crisis and the 2008 Global Financial Crisis, many countries sought to insulate themselves from further periods of economic turmoil by amassing large amounts of foreign exchange reserves, with the US dollar accounting for the majority of these reserves. The fact that the US has wielded the power to freeze the value of reserves that have been accumulated over time, may lead nations to take steps to diversify their reserve mix. Indeed, Russia itself had been on a structural path to reduce its dependence on the US dollar in both its trade and foreign exchange reserves.

In terms of investment implications from a multipolar world, we are likely to see divergent policies, risk premia, and economic developments across various regional markets. Financial markets may be more prone to volatility, but this goes hand in hand with widening dispersion. Security of supply chains, particularly in critical materials, components, and energy, is likely to be a top consideration for policymakers. We believe these conditions bring about a strong argument in favor of an active investment approach with the flexibility and nimbleness to capture opportunities within a rapidly changing world.

Commodity Implications

Russia plays a vast role across the commodity complex, encompassing not only oil and gas, but also agricultural commodities and metals, where the country maintains a strong export presence (Exhibit 1). Prior to the Russian invasion of Ukraine, the world was already facing a high degree of inflationary pressure from commodities, which has only been exacerbated since the conflict escalated.

Exhibit 1. Russia's Share in Commodity Production

Oil	12.1%
Gas	16.6%
Coal	5.2%
Copper	4.3%
Aluminum	6.1%
Nickel	6.1%
Zinc	1.5%
Gold	9.5%
Silver	5.4%
Platinum	14.1%
Palladium	43.9%
Wheat	11.0%

Source: JP Morgan

Russia's presence in commodity markets is most acutely felt in oil and gas, where it controls 12% and 16% of global supply, respectively, and serves as the primary exporter of gas to Europe. In the initial aftermath of the incursion, sanctions announced by the west largely included carve-outs to maintain the flow of oil and gas. However, shipping channels become impaired, as vessels suffered damage from the fighting, while insurance became prohibitively expensive, if it was even available. This gave way to voluntary, self-imposed embargoes of Russian oil by several major trading houses and integrated oil companies.

OPEC continues to only increase production gradually by 400kbd each month, under the view that geopolitics, not market fundamentals, have driven prices higher. Meanwhile, the key US hub of Cushing has experienced a rapid reduction in inventories to levels only observed a few times since the Global Financial Crisis (Exhibit 2). Adding to the supply woes, production was recently halted at Libya's biggest oil field, as protesters threatened to keep a key export terminal closed, representing a 290kbd hit to supply.

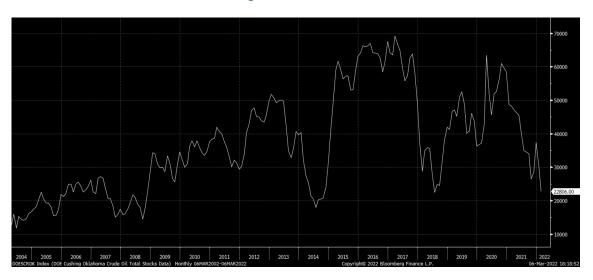


Exhibit 2. Cushing Crude Oil Inventories

Source: Bloomberg

These conditions have created a perfect storm, drawing a line in the sand between oil producers and oil consumers. Within EM, the largest pocket of vulnerability is in Asia, with oil representing more than 20% of Korea and India's total imports (Exhibit 3). Following strong performance in the Indian equity market over the past two years, valuations are demanding, and this exogenous shock generally bodes poorly for earnings and economic activity.

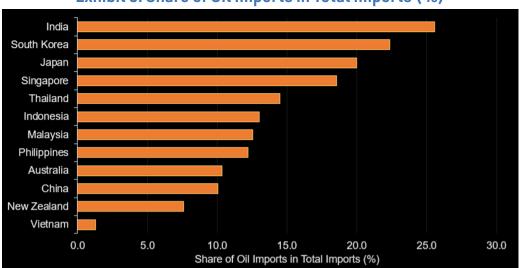


Exhibit 3. Share of Oil Imports in Total Imports (%)

Source: Bloomberg

Europe has already been reeling from an energy crunch felt last year, as gas supply was insufficient to meet recovering demand, while investments in renewable energy are still years away from scaling up. As tensions between Russia and Ukraine escalated in the days leading up to the invasion, Germany announced that the Nord Stream 2 pipeline, which would by-pass Ukraine, has been suspended. This comes at a time when France's nuclear power output is at 30-year lows, due to aging reactors, while Germany has largely turned away from nuclear power since the devastating Fukushima accident of 2011. Thus far, the Nord Stream 1 pipeline that runs through Ukraine and the Yamal Europe pipeline through Belarus have seen only minimal delays, and if anything, are seeing increasing flows of gas to Europe. However, European gas prices have spiked due to the heightened risk to these volumes (Exhibit 4). Liquefied natural gas (LNG) may serve as an offset to some degree, as Europe has spare regasification capacity, running at only 38% utilization. However, as a result of underinvestment, there is little new LNG supply reaching the market until 2025. Indeed, Russia itself was set to be one of the most important incremental suppliers of LNG in the next 15 years.



Exhibit 4. Dutch Title Transfer Facility (TTF) Natural Gas Futures (EUR/MWh)

Source: Bloomberg

Despite the Green Party's prominence as a major player in Germany's government coalition, the country may well find itself significantly increasing its reliance on coal-fired power over the course of the year. That said, seaborne coal markets have also been tight, as key producers Indonesia and Australia have failed to ramp up production due to COVID and weather-related disruptions, while Russia represents 20% of the seaborne market. Newcastle coal prices spiked to \$400/ton from \$200/ton at the beginning of the year, while freight costs have also spiked as Asian countries attempt to secure their energy supply. The shipping cost from Indonesia to China tripled in one week's time following the Russian incursion into Ukraine. India is also vulnerable here, given the country's low stockpiles and heavy dependence on coal within its energy matrix.

In a concerning development for many emerging economies, the UN Food & Agriculture Organization (FAO) World Food Price Index is up 24% in the last year, and has been on an accelerating trend, rising 4% in the last month alone. Russia and Ukraine together represent 28% of wheat exports and 30% of barley exports, while Ukraine is the 4th largest exporter of corn (Exhibit 5). Production and export flows could decline significantly, particularly from Ukraine where there have been port closures across the southern part of the country. Similar to oil, there has been an unwillingness by traders to buy Russian wheat. As with the oil price shock, the prevailing backdrop prior to the invasion could not have been worse, as dry weather throughout the US threatens wheat crops in North America, while China is also reporting poor conditions for its domestic wheat crop. Further, Russia's Ministry of Industry and Trade has recommended the suspension of all fertilizer exports, and Russia contributes 20-25% of exports across various fertilizers. This adds to the inflationary pressure across the agricultural commodity complex.



Exhibit 5.Top Importers of Ukrainian Wheat

Source: UN FAO, Bloomberg

Turning to metals, the price action in the days post the invasion has been eye-watering, as palladium prices have broken through \$3,200/ounce (representing an all-time high), aluminum touched \$4,000/ton (all-time high), copper rose through \$10,750/ton (all-time high), metallurgical coal reached \$560/ton (all-time high), thermal coal topped \$400/ton (all-time high), nickel prices experienced a one-day 40% increase to \$35,305/ton (highest since 2007), zinc reached \$4,173/ton (highest since 2007), and gold reached \$2,000/ounce (record level in several currencies).

Russia's leading aluminum producer halted shipments from its Ukrainian alumina refinery, putting at risk the final output of aluminum in its Russian smelters. Despite an already tight market, China has capped its aluminum capacity due to environmental considerations, while the leading US producer recently stated that they are awaiting the development of next generation production technology before undertaking any new investment decisions. Given this backdrop, as well as the high energy intensity of aluminum smelters, we are likely to continue to see high prices.

Russia and Ukraine both play a significant market role in intermediate steel products such as slab and scrap, as well as finished steel. One of Russia's leading steel companies has suspended sales to the EU after its owner was sanctioned. The company's exports account for 10-15% of the EU's finished steel imports.

As noted in the table above, Russia accounts for nearly 44% of the global refined supply of palladium, a key material in autocatalysts for gasoline engines. The collective constraints on aluminum, steel, and palladium, in addition to the loss of production for niche parts such as wire harnesses, for which European automakers have 38 plants in Ukraine, are exerting heavy pressure on the European automotive industry.

Shipping has represented a bottleneck throughout the last 18 months, as goods demand has been exceptionally strong, while localized COVID outbreaks and labor shortages have constrained supply, leading to port congestion and spikes in freight rates. The Russian invasion of Ukraine has added to these pressures. While Russia and Ukraine account for only 1% of global container volumes, the countries comprise 15% of global seafarers, and disruptions here could add to the already mounting concerns within the industry. In the US, there has recently been some optimism about the peaking of congestion in west coast ports, but this has been accompanied by a spike in congestion in east coast ports, simply shifting the bottlenecks. With the Trans-Siberian airspace blocked, we could see even more of a shift toward ocean shipping, exacerbating the tight conditions.

The sum total of the above commodity developments is likely to bring about downward pressure on global economic growth. Simply put, supply is unable to swiftly respond amid the current exogenous shock, in part because we are coming off a period of several years' worth of underinvestment. With supply remaining constrained, the current price spike across the commodity complex is bound to be met with demand destruction.

As shown below, economic activity, as measured by the Atlanta Fed's GDPNow Index, has already begun to slow markedly. We highlighted a number of cautionary signals in last month's commentary, and the escalation of the conflict in Ukraine will likely lead to a further slowing of economic growth. Given the fact that US consumer prices rose by 7.5% year-over-year in January, the Federal Reserve (Fed) is in a challenging position, as it cannot ignore the heightened inflation concerns, which will only be exacerbated by the additional leg up in commodity prices, and is therefore unlikely to be able to respond to slowing growth.

14,000 1

Exhibit 6. Atlanta Fed GDPNow GDP Forecast

Source: Bloomberg

Financial Market Implications

Emerging market equities have unsurprisingly been under pressure year-to-date, from the combination of geopolitical uncertainty, persistent inflation, and the forthcoming tightening of monetary policy by the Fed. As the events in Ukraine unfolded, Russian equities traded in London rapidly lost more than 90% of their value, while the local exchange has been closed since February 28. The Strategy exited its two Russian holdings in the second half of 2021 and maintained no exposure to the country as the conflict escalated.

Beyond equity markets, there are some lingering questions concerning the path forward for debt servicing, the possibility of a technical default, and the potential spillover effects. Clearly, market participants have absorbed heavy losses in a short period of time, and those who were around during the 1998 Russian default recall the ripple effect felt across markets, culminating in a 22% decline in the S&P 500. While that episode was arrested by the Fed cutting the funds rate by 50 basis points, such policy response is not feasible in today's environment of 7.5% inflation.

At time of publication, what we know is that foreign holders' coupons on Russian government debt were paid by Russia's Ministry of Finance into the local National Settlement Depository. However, on order of the CBR, foreign holders did not receive the coupon payments in their bank accounts. It is not clear how foreigners can access the cash, and since Russia did make the coupon payment, it is not clear if this will be considered a technical default.

Other Russian entities will not be allowed to service their FX debts from domestic resources, limiting them to making payments from accounts held abroad or domestically in rubles. Russia's largest oil company has thus far had no issues with upstream drilling or selling oil. It has also had no issues thus far in servicing outstanding Eurobonds, as the company has enough cash abroad and intends to continue making interest and principal payments.

Russia's state-owned gas company has conveyed a similar message. Gas flows through Ukraine are operating at the maximum contracted capacity, while gas flows entering Europe through the Yamal Europe pipeline are actually increasing, despite the price spike. Similarly, the company has had no issues servicing outstanding Eurobonds and may not need additional borrowing, considering the current gas price.

Questions of technical default and unknown spillover effects remain a risk, but for now, this does not look like a situation that will lead to significant financial market contagion. That said, commodity market dislocations have considerable ramifications for financial markets, particularly as they result in a further hit to global economic growth, as equity valuations in many parts of the world remain high, having been supported by the unprecedented monetary stimulus following the initial outbreak of COVID in 2020. The Strategy continues to maintain a defensive posture with a higher-than-normal cash position, and will move in a nimble manner, consistent with our investment philosophy, to capture opportunities that may arise from such dislocation.

Performance Review

At the sector level, the most significant contributors to returns were materials and utilities. Consumer discretionary and information technology detracted the most value. At the country level, China and Canada were positive contributors to performance for the month, Taiwan and South Korea were notable detractors from performance.

Until next month,

Chad Cleaver, Lead Portfolio Manager

And A Com

Driehaus Emerging Markets Small Cap Equity Strategy

This update is not intended to provide investment advice. Nothing herein should be construed as a solicitation, recommendation or an offer to buy, sell or hold any securities, other investments or to adopt any investment fund or strategies. You should assess your own investment needs based on your individual financial circumstances and investment objectives.

This material is not intended to be relied upon as a forecast or research. The opinions expressed are those of Driehaus Capital Management LLC ("Driehaus") as of March 2022 and are subject to change at any time due to changes in market or economic conditions. The material has not been updated since March 2022 and may not reflect recent market activity.

The information and opinions contained in this material are derived from proprietary and non-proprietary sources deemed by Driehaus to be reliable and are not necessarily all inclusive. Driehaus does not guarantee the accuracy or completeness of this information. There is no guarantee that any forecasts made will come to pass. Reliance upon information in this material is at the sole discretion of the reader.