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CIO Strategy Bulletin

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Pivot Point for the World, Pivot Point for Portfolios

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SUMMARY

- Even if the conflict in Ukraine comes to a conclusion, it is unlikely that western sanctions on Russia will be rolled back. Western producers will have to step up and fill Russia's energy export gap as well as agricultural export losses from Ukraine. We believe that this adjustment to recover supplies could take as long as two years. With this realization, the futures price of oil and other commodities has shifted higher not only in the near term, but in the longer term as well.
- In the US, crude oil production has finally started to rise at a double-digit pace. Higher oil, gas, and agricultural commodity prices will incentivize further production gains. This will slow inflation later this year, but not before US consumer prices surge further. A consumer-harming spike to 8.5% US inflation in the next 3 months is most likely. This would send US gasoline prices perhaps 20% higher by early Spring.
- The Fed intends to tighten into this shock, but has no true influence over the supply recovery needed to stabilize consumer prices.
- The yield curve has been flattening on rising recession risk with real interest rates still likely to decline further as prices spike. The plunge in bond yields should (partly) reverse if and when global producers/exporters rise to fill the hole from Russia's departure.
- Prior to the shocking events in Ukraine, it was already clear that a transition from fossil fuels to renewables required significant supply redundancy to avoid damaging price spikes. If Russian oil and gas output is lost, not a single additional net unit of carbon would be emitted to replace it.
- An unfolding, painful jump in crude oil and natural gas costs will incentivize investments in alternatives. At the same time, US oil field services firms and much broader global natural resources firms are likely to see an improved profit environment for the coming two years, even when "crisis peak prices" (perhaps oil in a \$125-\$150 level near-term) are not sustained.
- With this, we are contemplating significant portfolio shifts within our equity allocations toward natural resource producers and away from consumer-sensitive equities within and across regions.

All Eyes on Ukraine

The human tragedy of Russia's invasion of Ukraine appears likely to worsen in coming days and weeks. It will play out under the watchful eyes of billions able to bear online witness, unlike any conflict before in human history. The communications technology that so influenced the economic implications of the COVID pandemic will now serve to pressure leaders in many of the world's capitals who might be tempted to avert their gaze. While global markets often move quickly past regional crises, the bifurcation we identified previously between East and West is accelerating. Russia's miscalculation is returning NATO's status to its post-WW2 preeminence, redefining the stakes for America's military commitments, and causing Russia to bear the effects of broad economic isolation.

Redrawing the Political and Economic World Map

In our view, the ongoing invasion of Ukraine by Russia and the economic sanctions that have been used by the West to isolate Russia have redrawn the political and economic map of the world. Therefore, it appears more likely than not that President Putin will cause Russia to bear the long-term scars of his decision to go to war and use all tactics necessary to control part or all of Ukraine. This will require us to redefine our "base case" economic outlook, and with it, a portfolio that seeks to be resilient and profitable as we move through these uncertain, but not unprecedented, times.

Observations on the Battlefield and Russian Isolation

In Ian Bremmer's March 4th summary of the Ukrainian invasion, he makes the following observations:

- Despite Ukrainians' formidable resistance and Russia's initial battlefield underperformance, much of east and south Ukraine are likely to fall to Russian control in the coming weeks and months.
- Putin has embroiled his country in a decades-long quagmire that has diminished Russian power and strengthened Russia's adversaries, and that will slowly but surely sap his regime of legitimacy—at home and abroad.
- In hindsight, Putin's strategic blunder (in Ukraine) will be seen as comparable to the Soviet-Afghan War that ultimately precipitated the collapse of the USSR.
- Putin's likely "victory" on the battlefield all but guarantees that he will never achieve his core
 political objective and the one reason he chose to invade Ukraine in the first place: to make
 Russia great again.

Given our broad agreement with Bremmer's observations, we see Russia as likely to become significantly isolated economically and to suffer greatly for its destructive invasion.

A Profound Moment in World History

The roots and nature of the war in Ukraine have important historical precedents that suggest this is a profound moment in history.

In 1949, NATO was formed to provide collective security against threats from the Soviet Union, forestall a return of nationalist militarism in Europe and encourage European political integration. With the signing of the Intermediate-Range Nuclear Forces (INF) Treaty in 1987 that eliminated US/Soviet intermediate-range nuclear weapons and the fall of the Berlin Wall in 1989, NATO's primary objectives appeared to be realized.

The formation of the EU followed in 1993 and as its members grew, so did their desire for membership in NATO as a means to remain independent and secure boundaries within greater Europe. Of NATO's 30 present member states, 18 joined since 1949. Ukraine may have been one of them – in 2008, NATO announced Ukraine and Georgia would become members if they met a series of governance and

transparency criteria. Though Ukraine was not a NATO member in 2014, the Alliance boosted Kyiv's defenses, held military trainings and funded cyberwarfare protections as Russia entered Crimea.

Coincident with Russia's 2014 military actions in Crimea, the Ukrainians ousted President Viktor Yanukovych in February 2014 and conducted snap presidential elections in May. This followed mass protests in Kyiv and led to "the signing of the Association Agreement with the European Union and state provision(s) providing greater political and economic freedoms." Thus, Ukraine had voted to seek closer relations with the West for its security and sovereignty. Finally, having made little progress to secure NATO membership, Ukraine amended its constitution in 2019 to demonstrate its commitment to the standards sought by the Alliance.

Putin called the end of the Cold War and the breakup of the Soviet Union in 1989 "the greatest geopolitical tragedy of the twentieth century." The 2014 invasion and annexation of Crimea was his first step in "reversing that humiliation." In his annexation of Crimea were echoes of the invasions of Hungary in 1956 and Czechoslovakia in 1968, a time when the "Prague Spring" defined that country's desire for political liberalization. Putin had justified the 2014 annexation of Crimea as a response to the Western military alliance's expansion into Eastern Europe. He said, "Our decision on Crimea was partly due to considerations that if we do nothing, then at some point, guided by the same principles, NATO will drag Ukraine in and they will say: 'It doesn't have anything to do with you.'"

In 2018 and 2019, major fissures developed within NATO as then-President Donald Trump suggested the US might withdraw from the Alliance and disagreements about the level of threats posed by Russia divided France and Germany. Given NATO's limited response to his acts in Crimea, the recent internal conflicts within NATO appeared to weaken its resolve in the eyes of President Putin. Putin's present goal, therefore, appears to be nothing short of "a Ukraine that is permanently in Russia's sphere of influence."

Post Covid, Post Ukraine: A Lengthier Adjustment to a New Normal

Even if the conflict in Ukraine comes to a "conclusion" as it did in Crimea and parts of Georgia in 2008, it is unlikely that western sanctions on Russia will be rolled back. The world is, therefore, likely to suffer from a severe drop in Russian commodity exports (Figure 1). Russian exports account for 9% of the world's oil exports and 6% of global natural gas supplies, a large part of which is delivered to Western Europe. It is also 18% of global wheat exports.

To a certain extent, Russia can re-direct its exports to countries willing to trade with it, the largest of which is China. However, it would take a dramatic change in trade flows and the willingness for China to assume the full political and economic risks of aligning itself with Russia for the world to avoid a sizeable commodity supply shock and price spike (Figures 2-3). We believe that China's own limits on the concentration of supplies from any one exporter will be stretched, not eliminated.

Therefore, Western producers will have to step up and fill Russia's export gap as well as agricultural export losses from Ukraine. We believe that the adjustment to recover supplies could take as long as two years. With this realization, the futures price of oil and other commodities has shifted higher not only in the near-term, but in the longer term as well (Figure 4).

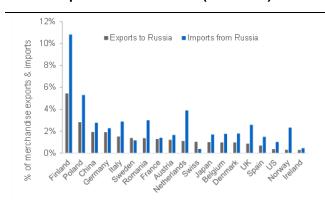
¹ Olena Nikolayenko, Invisible Revolutionaries: Women's Participation in the Revolution of Dignity, April 2020.

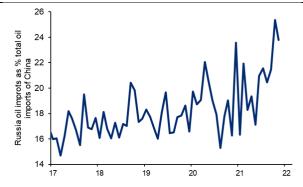
² Carl Gershman, <u>A Fight for Democracy: Why Ukraine Matters</u>, April 2015.

³ Responding to Russia's New Military Buildup Near Ukraine, International Crisis Group, December 2021.

Figure 1: Share of Each National Economy's Trade Dependence on Russia (% of GDP)

Figure 2: China: Russian Crude Oil Imports as % of China's Total Imports



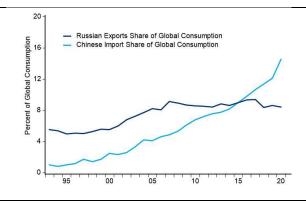


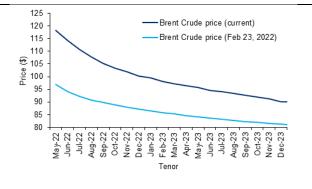
Source: Haver Analytics and Bloomberg through March 4, 2022.

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Figure 3: China's Crude Oil Imports and Russia's Exports as % of World Consumption

Figure 4: Brent Crude Oil Price Curve to Jan-2024: Pre- and Post-Ukraine Invasion





Source: Haver Analytics and Bloomberg through March 4, 2022.

Source: Haver Analytics and Bloomberg through March 4, 2022.

Russia's Departure Adds to the Duration and Severity of the Inflation Shock

With inventories held lean relative to consumption, small changes in either supply or demand for crude oil have historically led to severe price volatility. We believe the worsening of the crisis and its immediate impact on crude oil supplies could see crude spike to between \$125 or \$150 per barrel. This could send US gasoline prices perhaps 20% higher by early Spring.

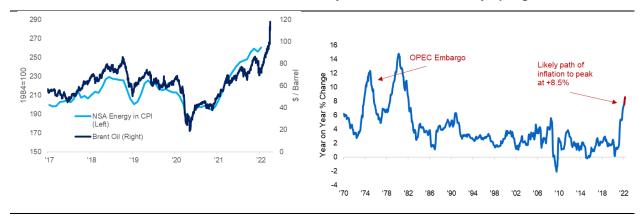
If this occurs, the US consumer price index will be as much as 8.5% higher than a year ago. This compares to +7.5% in January and would be a new cycle high. We believe this bearish view on inflation will be exacerbated once higher prices for food commodities is factored in (Figures 5 and 6). Absent

further Covid transfer payments, this shock to household budgets will sink discretionary consumer spending at a time when consumer spending was already slowing.

Unfortunately, as we have written before (please see "Two Wrongs Won't Make a Policy Right"), the Federal Reserve's desire to fight inflation by raising rates and Quantitative Tightening will not address near-term inflationary pressures driven by commodity shortages. In fact, if the Fed tightens monetary policy too quickly into a worsening supply shock (Figures 7 and 8), the impact could lead to a recession.

Figure 5: Brent Crude Oil and US CPI for Energy

Figure 6: US Headline CPI: Instead of Near-Term Peak, Likely Acceleration to +8.5% by Spring

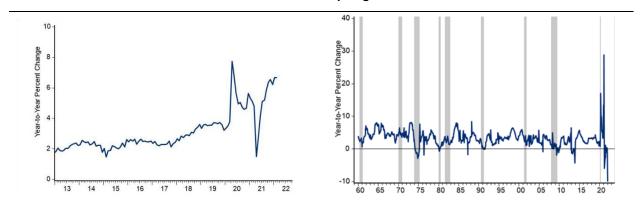


Source: Haver Analytics and Bloomberg through March 4, 2022.

Source: Haver Analytics and Bloomberg through March 4, 2022.

Figure 7: Solid US employment and wages... average hourly earnings: Y/Y%

Figure 8: ...But with a drop in government income transfers and surging inflation, real disposable income has plunged



Source: Haver Analytics and Bloomberg through March 4,

Source: Haver Analytics and Bloomberg through March 4, 2022. Note: Gray areas are recessions.

First a "Crisis Spike" in Price, Then a Shift in Production

The chances of a severe commodity price spike seem highest in the near term. When there is a shortage of supply, desperate bidders in need of the commodity will typically overpay, generating a "crisis spike" in prices. This is most evident in natural gas spot markets through history (see Figure 9).

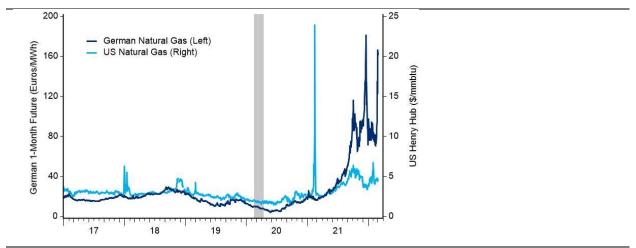
We then expect that producers will rapidly adjust outputs to take advantage of the higher profit opportunity. In the past week, US crude oil output finally rose by a double-digit percentage gain for the year (Figure 10). Nonetheless, US crude oil output remains 11% below a record-high level. Therefore, we

expect that US oil and natural gas outputs will likely reach records in the coming year as the commodity price is far above production costs (Figure 11).

To the extent that new supplies do not overcome the Russian export losses, prices will also continue to rise. Profitability and returns for producers would then be higher for longer. In the case that supplies rise rapidly, unit growth will boost profitability for oil-services-equipment makers for a time, as well.

A rapid shift in demand for oil and gas in the US and elsewhere is also inflationary. Labor and capital constraints are notable in the sector, but extraction technology is such that US oil well productivity can expand production meaningfully with few new resources.

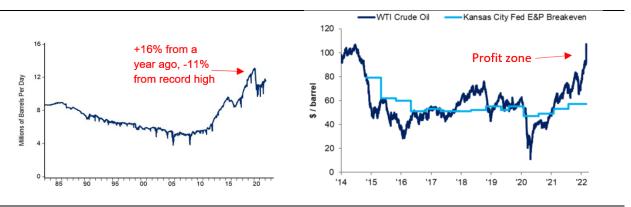
Figure 9: US and German Natural Gas Prices



Source: Haver Analytics through March 4, 2022. Gray areas are recessions.

Figure 10: US crude oil output weekly

Figure 11: US crude oil estimated break even price vs spot price



Source: Haver Analytics and Bloomberg through March 4, 2022.

Source: Haver Analytics and Bloomberg through March 4, 2022.

Time for Realism Regarding the Transition to Renewables

We believe Western producers need to respond to offset Russia's export losses or the world economy will needlessly suffer along with Russia. Prior to the shocking events in Ukraine, it was already clear that a transition from fossil fuels to renewables required significant supply redundancy to avoid damaging price

spikes. If Russian oil and gas output is lost, not a single additional net unit of carbon would be emitted to replace it.

As we discussed a week ago, we do believe the spike in oil will incentivize investment and profitability in renewable energy. The group is still suffering from the exuberant performance boom of 2020, but the enlarged energy needs that will come from lost Russian gas exports may help the sector bottom (see Figure 13). Industry performance, however, may remain volatile as many of the new clean-energy technology firms have balance sheets typical of start-ups. Their gains will replace fossil fuels over a long period. To avoid recessionary supply shocks, one cannot wait and live without energy.

As an aside, we believe US trade restrictions on solar panels imported from China are counterproductive for US clean energy goals. However, any change in this policy would generate both winners and losers within the sector.

In his State of the Union address, President Biden noted a large release of 30 million barrels of oil from the US Strategic Petroleum Reserve. So, we ask, who should refill it? US producers or foreign producers? In a world that is de-globalizing, this is a new and relevant question.

In short, filling the hole of Russia's departure means the world's other commodity producers must rise to meet demand. In his address, Biden said, "lower prices, not wages." Lowering prices will take producing more or consuming less. We believe policymakers must face this with realistic actions to help pave the way.

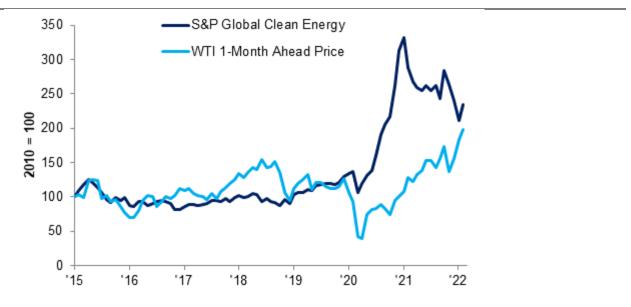


Figure 13: Clean energy equities vs crude oil futures price

Source: Haver Analytics through March 4, 2022. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment. Past performance is no guarantee of future results. Real results may vary.

Pending Portfolio Reallocations

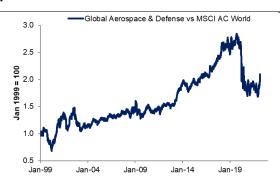
As investors, we seek to allocate capital to address the realities of this "new world" order. By shifting our portfolios toward higher return potential opportunities in energy and commodities, it will come at the expense of other sectors of the economy and regions of the world. We may also see other portfolio tilts, including greater investments in defense equipment. These are not investments

anyone would desire to make in a perfect world. They are, however, necessary in the real world that includes the clash of civilizations Russia has unleashed (Figure 14-15).

Figure 14: US and European Defense Spending

Figure 15: Global Aerospace/Defense relative performance





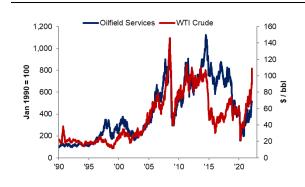
Source: Haver Analytics and Bloomberg through March 4, 2022.

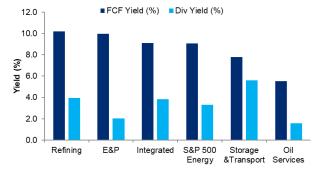
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APPENDIX: ENERGY SECTOR COMPONENTS, VALUATION, RELATIVE PERFORMANCE

Figure 16: US Oilfield Services vs Crude Oil

Figure 17: S&P Energy Sector Component Free Cash Flow and Dividend Yields





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