Citi Global Wealth Investments

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CIO Strategy Bulletin

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UKRAINE

The deaths of innocent civilians and the soldiers defending Ukraine are foremost in our minds as we write this weekend's CIO Bulletin.

"There is no flag large enough to cover the shame of killing innocent people." - H. Zinn

The war that will likely end the independence of Ukraine, the second largest country in Europe, with a population of 44 million, began with Russia's full-scale invasion at 5AM on Thursday, February 24, 2022. Ukraine is a unitary republic with an elected President and legislature, that became independent in 1991. Ukraine's current, elected President is an actor, Volodymyr Zelenskyy, who had starred in a television series called "Servant of the People." Zelenskyy was born to Jewish parents, and his great-grandfather, along with three brothers, were killed in the Holocaust. Freedom House, which grades countries on democracy, gives Ukraine a score of 61 of 100. (By comparison, Russia received a 19, and the US earned a score of 83.) The war now threatens millions, many of whom will be displaced, and is likely to spark a humanitarian crisis in Eastern Europe.

The Ukraine war will likely mark a new security paradigm for Europe and the US. As David Remick and Joshua Yaffa noted in the New Yorker on February 24th (Putin's Bloody Folly in Ukraine), "Putin's confrontation with the West over Ukraine follows a familiar cycle in Russian history of loss and reassertion." The aim of the war is to end what Putin sees as a "prolonged period of Russian weakness and humiliation." Putin considers the expansion of NATO to Eastern Europe and the Baltic states a "direct threat to Russia's security" and the idea of Ukraine drawing closer to NATO "an existential red line." While we will never know Putin's calculus, he perceived Russia's ability to win the war and withstand the likely political and economic ramifications as high enough to proceed with invasion and inevitable bloodshed.

"The fight is here; I need ammunition, not a ride."

Expect a more protracted battle in the Ukraine, with social media providing an unwaveringly clear view of what a ground war in 2022 looks like, fueling protests globally. This is already shifting the views of the German government which has now elected to send weapons and agreed to limit Russian access to the SWIFT interbanking system (Media Monde, France 24, 2/26). Likewise, the US is sending arms and public donations in cryptocurrency are flowing to the Ukrainian resistance. According to a senior US official with direct knowledge of a conversation between President Biden and President Zelenskyy on Saturday, the Ukrainian head of state declined an offer to leave his country. He reportedly said, "The fight is here; I need ammunition, not a ride." (CNN, Sharon Braithwaite, 2/26)

MARKETS AND ECONOMY

The initial Western financial market reaction to the Russian invasion of Ukraine was strongly negative. Markets had assumed that a limited incursion was likely, but not a full-scale war. Initially, stocks were crushed, gold rose and oil prices leapt higher. Rapidly, however, markets priced in two new factors. The first was a more limited US and NATO sanctions response that would not trigger large knock-on economic impacts. So far, Russian gas exports have not been impacted by the invasion. When determining Russian banking sanctions, the US created explicit exemptions for energy-related transactions to limit global impacts. The second is a presumption that the war would slow the Federal Reserve's pending interest rate hikes. The equity market reversal was extraordinary, with the Nasdaq Composite moving from negative 3.5% to end the day up 3.3%. By Friday, US shares – also benefiting from perceived global safety inflows – rose again. They ended the week essentially unchanged in value.

In contrast to European markets that experienced single-digit losses on Thursday, Russia's local stock market declined by a third after being off by as much as 50% intraday. With its huge reliance on trade in energy and wheat for more than 20% of its GDP, Russia's vulnerability to commodity and financial sanctions appears substantial. But Europe's reliance on Russia for 40% of its natural gas and 25% of its oil creates counter-dependencies that may well mitigate the worst Russian sanction outcomes (Figure 1).

The US is far less intertwined with Russia for energy and thus the US dollar surged in the immediate aftermath of Russia's invasion. US interest rates were already higher relative to other developed markets, and this saw US bonds rally on both a "flight from risk" and their more attractive relative yields (Figure 2).

Figure 1: Exports and Imports from Russia as % of GDP

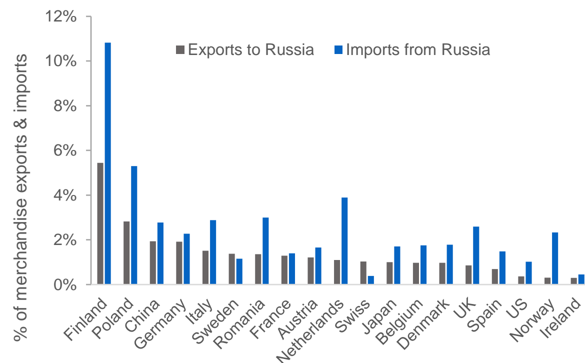

Figure 2: German 10-year Bund yield vs US Treasury yield hedged into Euros

Source: Haver and Bloomberg as of February 25, 2022. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only. Past performance is no guarantee of future returns. Real results may vary.

THE FED AT CENTER STAGE AGAIN

It seems likely to us that the Fed will move ahead and raise rates at its March meeting. Higher near-term, headline inflation as a result of further energy price spikes is a certainty. We see US consumer prices peaking at an 8% year/year reading for March, assuming energy costs stabilize at these higher levels (Figure 3). Even though commodities, including energy, are not elements of the Fed's preferred "core inflation" measure, the impact of inflation on consumers reduces their confidence and buying intentions.

In our view, only continued weakness in financial markets – or actual lower inflation - will convince the Fed that its intended policy tightening approach may be too onerous for the expansion (Figure 4). It may be somewhat more likely that the Fed moves 0.25% now rather than the 0.5% as preferred by the hawkish Fed members. The CME Group put the odds of a 0.5% hike at 9% on Friday compared with 34% on Wednesday past.

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Figure 3: CPI for energy and Brent crude oil price daily

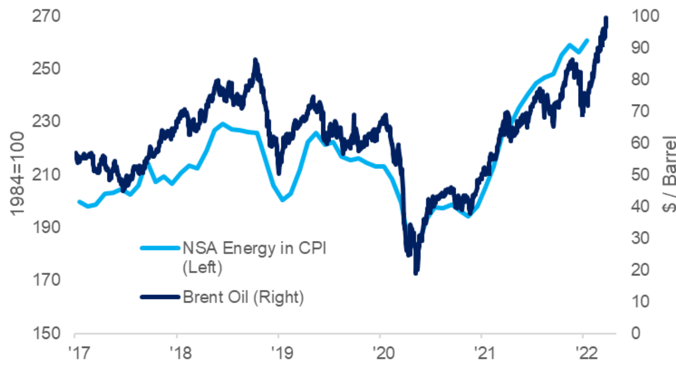
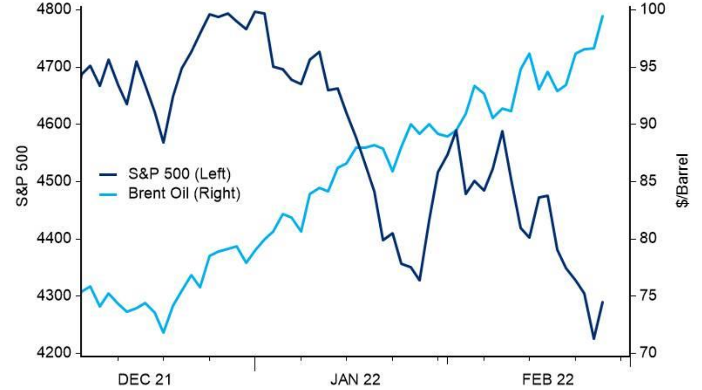


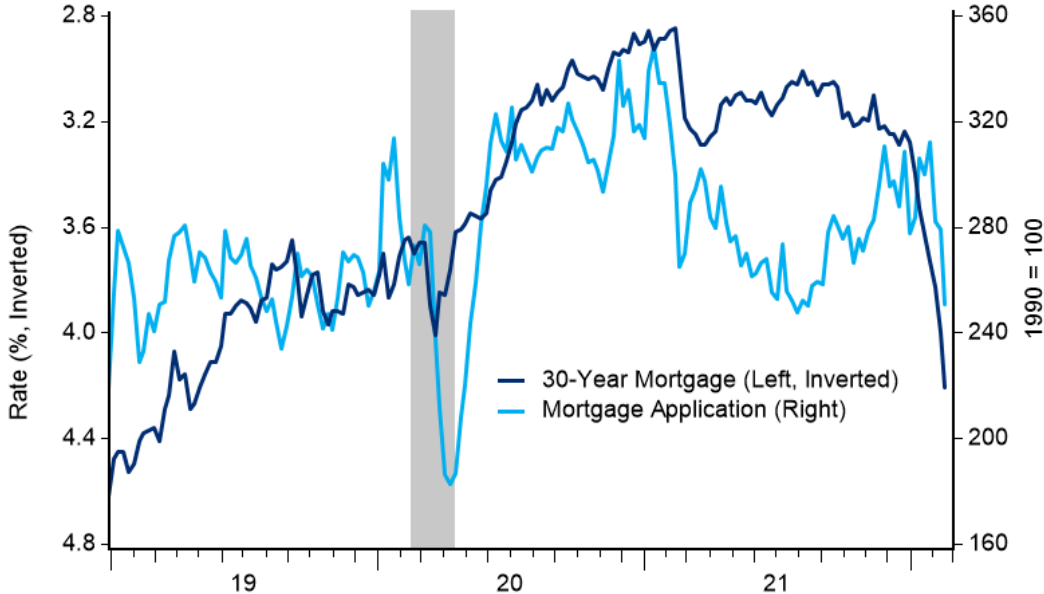
Figure 4: Crude oil price and US equities move to negative correlation on Fed's reactive policy



Source: Haver and Bloomberg as of February 25, 2022. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only. Past performance is no guarantee of future returns. Real results may vary.

Raising rates too quickly in a slowing economy could be harmful. With the US and global economies already normalizing with a 37% decrease in YoY US federal spending, the war in Ukraine will further depress near-term growth. As trade losses become clearer, we would expect estimates for European GDP growth to be reduced at least by 0.5% due to the war. At the same time, we see that higher US interest rates are already dampening demand for housing, and certainly weighing on household wealth (Figure 5). Thus, the risk that the Fed will overshoot and raise rates too far in 2022 has increased, not decreased, given the negative background issue the war presents.

Figure 5: Mortgage Application Volumes for Home Purchase vs US 30-Year Fixed Mortgage Rates (Inverted Scale)



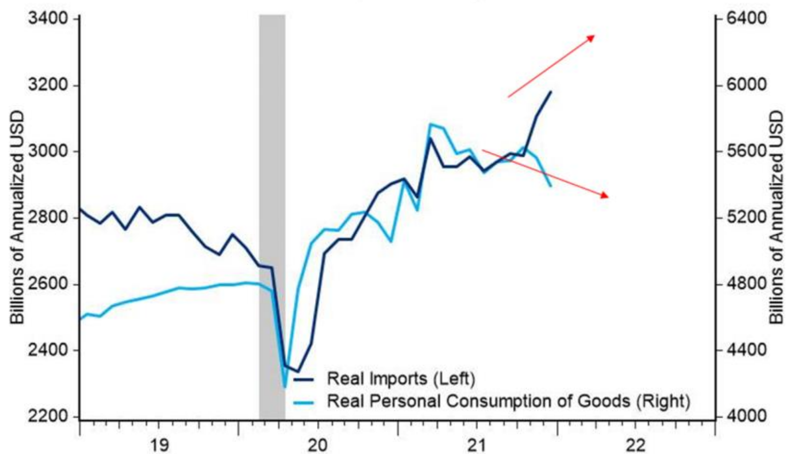
Source: Haver as of Feb 25, 2022. Note: Shaded region is recession. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only. Past performance is no guarantee of future returns. Real results may vary.

IMPLICATIONS

Beyond the shock, slowing is good news for inflation

The world economy is already slowing from the boom pace of 2021 – from China to the US and Europe. The events in Ukraine will also dampen economic growth a bit more. That said, a slowing pace of inflation – which is possible by Spring 2022 – would be the best indicator that the global economic expansion that began in 2020 will survive into 2023 and beyond. A moderation in US consumer goods spending, a sharp rise in imports, and some early positive signs pointing to a recovery in US production are favorable indicators in that regard (Figure 6). When a rebalancing in supply and demand growth – generating a lasting slowdown in inflation becomes evident - the Fed will no longer surprise markets with greater monetary hawkishness.

Figure 6: Real US consumer goods spending vs imports



Source: Haver as of Feb 25, 2022. Note: Shaded region is recession.

Higher defense spending

We expect that an unproductive redirection of economic resources toward security spending by EU nations and the US is likely. Russia's bold move may reverse a systemic decline in defense expenditures (Figure 7). Bolstered military power will now be necessary to prevent a "new Iron Curtain" from expanding westward.

Higher alternative energy spending

The European Union is expected to announce a new energy security strategy this coming week focused on developing renewable energy capacity to move toward greater independence from Russia. On the day of the invasion, European share prices of renewable energy companies surged. This will accelerate one of our Unstoppable Trends, "Greening the World" (see figure 8).

Figure 7: US and EU defense spending as % of GDP

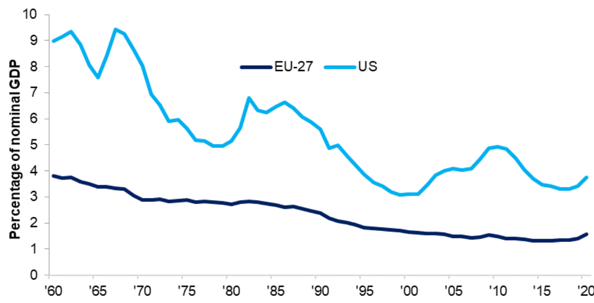
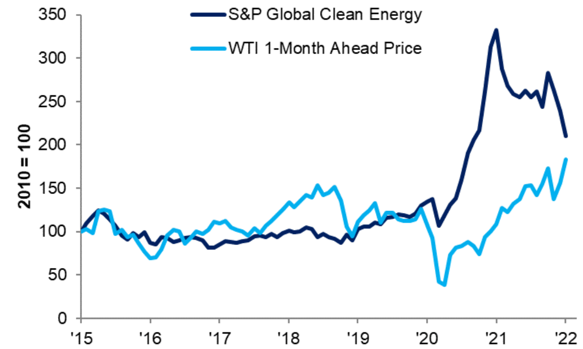


Figure 8: Crude oil futures and clean energy shares



Source: Haver, World Bank and Bloomberg as of February 25, 2022.

A future signal for technology shares

The drop in bond yields Thursday also saw interest-rate sensitive US growth stocks outperform. As we discussed in Outlook 2022, Information Technology fundamentals look nothing like the "tech wreck" period of 2000-2022. Once markets see that rates will reach equilibria, we expect a bottom in tech shares to be formed. A peak in long-term US interest rates – perhaps coinciding with peak inflation – may generate a stronger immediate return environment for US growth shares.

In particular, cybersecurity and fintech

We continue to use risk capital for focused investments in cyber-security shares, fintech and payments, particularly with these shares off as much 30% from their peak values while expected EPS gains are convincingly strong and valuations are no longer excessive (Figure 9).

Figure 9: Valuation, Expected EPS Growth of Transformative Industries

Theme	Fwd P/E	Fwd P/S	5 Yr Avg EPS Growth (%)	PEG Ratio
Payments	20.7	3.2	21%	0.99
Fintech	25.5	4.4	20%	1.31
Clean Energy	27.4	1.9	19%	1.45
E-Commerce	26.2	1.2	17%	1.50
Metaverse	29.8	4.6	13%	2.22
Cyber Security	34.8	3.7	15%	2.29
AI & Cloud Computing	45.8	5.2	17%	2.72
Social Media	32.3	3.4	10%	3.40
Health Care Tech	217.3	4.0	10%	21.08

Source: FactSet as of February 25, 2022. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only. Past performance is no guarantee of future returns. Real results may vary. All forecasts are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events. Past performance is not indicative of future returns. For illustrative purposes only.

FOUR REASONS TO REMAIN CONFIDENT IN MARKETS

1. The history of geopolitical shocks since WWII shows net positive US equity returns on average just one month after an initial negative reaction to regional conflicts (Figure 10). Wars and regional security clashes have historically coexisted during global economic expansion. (Yemen, Afghanistan, and Syria, are examples.) Further, only 2 of 20 significant geopolitical events since World War II have provided turning points for the world economy. It is unlikely the Ukraine conflict will drive a European recession much less a US recession (Figure 11). After initial sharp reactions to global events, markets tend to

accurately assess the realities and discriminate between fundamentally sound and harmed economies and industries (see Figure 12).

2. Investors acted with remarkably cool heads to the latest news from Ukraine. While there was a day of widespread losses across world markets, investors did not liquidate equities indiscriminately. The dispersion of equity market performance stayed strong and investors looked for particular opportunities in what they thought might be a wave of panic. This is not the behavior of irrationally depressed investors or markets. In fact, investor fears and bearishness are typically a contrarian indicator. With that said, 30% of individual US investors are now “bearish” and equity market volatility is double the normal average.

3. After investors gain an understanding of the new security landscape in Europe and react to remaining unknown consequences, we are likely to remain in a “mid-cycle” environment for asset markets, favoring higher-quality equities and higher-quality bonds. As we described in Outlook 2022, the US equity returns in the year following the economy’s peak growth rate in a new recovery have averaged 7.0% since WWII. The drop in shares in early 2022 have improved return prospects somewhat, but we would expect to earn either stronger returns or more secure returns from profitable industry-leading firms that pay growing dividends. In periods such as this one, small, poorly capitalized firms and those within many highly cyclical businesses have seen their equities routinely underperform.

4. If energy prices do not collapse as they did at the start of the last Fed tightening cycle in 2014 – when crude oil fell 66% over two years – we would expect broad emerging equity markets to perform well and offer diversification to global equity portfolios.

Figure 10: Geopolitical shocks have only driven turning points for the world economy twice since WWII

Geopolitical Event	Date	S&P 500 (% since event date)			Crude Oil (% since event date)			MSCI World ex USA (% since event date)			DXY Dollar Index		
		Initial Reaction	30 days	90 days	Initial Reaction	30 days	90 days	Initial Reaction	30 days	90 days	Initial Reaction	30 days	90 days
Pearl Harbor	12/7/1941	-6.87	-2.90	-12.02									
Cuban Missile Crisis	10/19/1962	-3.78	7.61	17.16									
JFK Assasination	11/21/1963	-2.81	3.06	8.28									
US Bombs Cambodia	4/29/1970	-15.30	-6.43	-4.94	0.00	0.00	0.00	-10.45	-17.01	-16.07	-0.20	-0.23	-0.51
Arab Oil Embargo	10/18/1973	-16.26	-5.61	-15.11	67.44	72.09	287.04	-14.68	1.96	-18.53	6.98	4.68	12.31
USSR Invades Afghanistan	12/24/1979	-2.27	5.37	-7.78	8.33	8.33	8.33	3.94	3.94	11.85	-1.06	-0.71	5.91
US Bombs Libya	4/15/1986	2.95	-1.39	0.16	-3.91	8.70	-15.65	0.00	6.19	8.16	-4.15	-4.80	-5.30
US Invades Panama	12/15/1989	-2.06	-3.73	-3.43	2.82	5.08	-6.21	0.00	3.67	-7.04	0.31	-1.69	-0.44
Gulf War	12/24/1990	-4.16	0.09	12.10	17.75	-20.67	-31.32	1.75	1.75	15.96	-0.21	-3.61	4.90
World Trade Center Bombing	2/26/1993	-0.31	1.67	2.04	-0.18	-3.44	-5.81	0.00	8.52	18.62	0.18	-1.15	-4.79
911	9/11/2001	-11.60	0.45	4.34	-4.09	-17.68	-31.98	-8.48	3.24	5.48	-1.08	0.29	1.85
US Invasion of Iraq	3/20/2003	2.49	2.06	15.57	-8.16	-5.86	-6.54	1.53	4.58	22.05	0.84	-1.85	-7.89
Russian Annexation of Crimea	2/26/2014	1.16	0.68	3.62	-3.77	-2.43	-0.92	-2.42	-0.45	3.25	-0.40	-0.31	-0.10
North Korea Related													
Korean War	6/23/1950	-12.80	-8.67	1.20									
Operation Paul Bunyan	8/18/1976	-3.15	1.64	-4.32	0.00	0.00	0.00	0.00	-0.26	-7.60	0.07	-0.57	-0.12
2006 Nuclear test	10/9/2006	0.90	2.60	4.60	-1.46	1.09	-7.43	0.46	4.33	8.09	0.43	-1.32	-2.21
2009 Nuclear test	4/25/2009	-1.28	5.09	13.05	-3.73	19.56	36.56	-2.32	12.28	21.21	0.52	-5.54	-7.04
2013 Nuclear test	2/12/2013	0.02	2.88	7.53	-0.27	-8.18	-12.49	-0.99	1.15	5.73	0.59	3.12	3.96
2016 Nuclear test	9/9/2016	-2.55	-0.81	2.97	-3.38	14.12	16.54	-2.06	-0.81	-0.72	-0.01	1.36	6.05
2017 Escalation	8/7/2017	-0.24	-0.64	4.44	2.19	7.00	21.65	-0.26	-0.49	3.60	0.23	-1.22	1.62
Missle test over Japan	8/28/2017	0.08	2.69	6.43	-0.83	10.37	23.06	-0.25	1.80	5.45	0.05	1.25	0.62

S&P 500	Initial Impact %	30 days %	90 days %
Average all events	-3.7	0.3	2.7
Average ex WW2	-3.5	0.4	3.4
Average ex WW2 and Oil Embargo	-2.9	0.7	4.4

Source: CGWI OCIS and Bloomberg as of Feb 22, 2022. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only. Past performance is no guarantee of future returns. Real results may vary.

Figure 11: Regional contractions are far more common than global

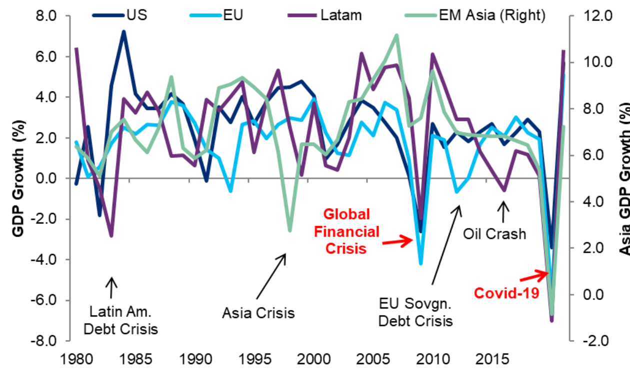


Figure 12: World markets typically sell off together following an initial shock. However, they later distinguish fundamentals

Regional Returns following Russian Invasion of Crimea

Region	Initial Reaction	1 Year Return
US	0.7%	14.1%
Japan	-5.1%	24.4%
Europe	-3.0%	14.1%
EM	-0.2%	3.6%
Russia	-11.8%	-29.6%

Source: Haver as of February 25, 2022. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only. Past performance is no guarantee of future returns. Real results may vary.

THREE AREAS OF CONCERN

1. While the 12% decline in US equities has improved valuation and forward-looking returns since December, the prior three years have already delivered gains of 19.8% per annum for the S&P 500. Future equity gains will be dependent on the delivery of increased corporate earnings in an almost linear fashion. Thus, we believe a future 9% gain in the S&P 500 to be roughly in line with EPS gains in mid- to high single digits, a pace that requires continued economic expansion. The currently high but diminishing pace of upward EPS forecast revisions is a contrarian negative indicator for markets, much the opposite of the investor sentiment data.

2. While self-destructive for Russia's economy, it remains possible that it may withhold oil and gas supplies in an act of retaliation to sanctions. If so, Russia's optimal timing is soon as winter heating demand will soon wane in Europe. European gas inventories were unusually low this winter causing energy services costs to jump at a record pace even before the invasion. Markets may still react to Russian cyber-attacks on western firms and infrastructure despite widespread warnings akin to US warnings over the invasion itself.

3. The history of war is one of unexpected consequence and unexpected spread. For example, the US decision to pull air power from Afghanistan last year may have added to Russia's confidence in its action against Ukraine. While we view the probability of action on the part of China as low, its territorial dispute with Taiwan remains an even larger immediate risk for the world economy given much larger financial and supply chain linkages (please see Outlook 2022).

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