

FISHER INVESTMENTS EUROPE™



MARKET PERSPECTIVES REVIEW & OUTLOOK

FIRST
QUARTER
2022

FIRST QUARTER 2022 REVIEW & OUTLOOK

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FIRST QUARTER 2022 REVIEW & OUTLOOK

EXECUTIVE SUMMARY

12 April 2022

PORTFOLIO THEMES

- We continue to favour larger, high-quality companies given our assessment that we remain in a late bull market cycle in global equities.
- We remain constructive on global equities and believe the relative strength in cyclical and defensive categories will likely reverse as we move past the market correction.
- Economic growth and inflation expectations likely continue to moderate as supply and labour constraints subside, supporting our preference for growth equities.

MARKET OUTLOOK

- **Early Year Volatility Appears to be a Classic Correction:** Geopolitical uncertainty drove a sharp, early year decline in global markets. Despite the humanitarian tragedy, the scope of the conflict seems unlikely to derail the global economy or global equity markets.
- **Increased Investor Pessimism:** Depressed sentiment, driven primarily by Russia's invasion of Ukraine and concerns on inflation, has significantly lowered investor expectations increasing the likelihood that markets realise a better-than-expected outcome.
- **Global Markets Typically Reward US Political Gridlock:** The incumbent party routinely loses power during the midterm year, reducing political uncertainty and the likelihood of extreme legislation. Increased gridlock likely acts as a tailwind for global markets in the back half of the year.

After hitting a 4 January high, global markets fell into this bull market's first correction as investors feared rising interest rates, inflation and Vladimir Putin's vile Ukrainian invasion. At its 8 March low, the MSCI ACWI Index was down -13.4% before rallying to put full-quarter returns at -5.4%.ⁱ Despite the volatility, we still believe 2022 should be good for equities, with Tech and growth leading.

This turbulent start to the year unnerved many, especially with the tragic Ukraine invasion. Yet this appears to be a classic correction. Like typical corrections, this decline was a steep drop off a market high with big scare stories that headlines quickly extrapolated into worst-case scenarios. Excluding 2020's lockdown-driven (and correction-like) downturn, bear markets usually start much more gradually, with investors much more complacent—even dismissive. The central cause typically expands unnoticed, getting scant attention until far later in the downturn. By contrast, corrections strike and recover quickly, although neither happen in straight lines. Equities usually move on to material up moves afterwards.

ⁱ Source: FactSet, as of 01/04/2022. MSCI ACWI Index returns with net dividends, 04/01/2022 – 08/03/2022 and 31/12/2021 – 31/03/2022.

When 2022 began, we forecast a nicely positive but back-end-loaded year, with early volatility. We still believe this is most likely, hard as it may be to fathom after this difficult quarter. All those suffering from the war have our deepest sympathies. Yet neither Russia's invasion nor sanctions' fallout changes our market outlook. While the human toll will last for years—with the damage to so many irreparable—for equities, this too shall pass. There is a very long history of regional wars and corrections. Corrections often end with a V-shaped bottom, and perhaps we are on the right side of that now. Or, perhaps this will have a W-shaped bottom, delaying the rebound briefly with another brief down spurt ahead.

While we didn't forecast the invasion, we wouldn't expect to. Nor have we ever tried predicting corrections or other short-term swings. Yet we did think the first half would likely be volatile—the correction fits with this, similar to other midterm-year corrections. The war simply adds to this uncertainty in the near term. The economic response, particularly sanctions, extends some of the dislocations weighing on sentiment and triggering inflation. Yet these issues aren't insurmountable for equities. The MSCI ACWI and S&P 500 are both nicely positive since 24 February, the day Russian forces invaded Ukraine.

Always remember: Equities don't need perfection. Objectively negative realities aren't always negative for equities, especially if they don't go as badly as feared. Due to high oil and gas prices stemming from the war, inflation likely peaks higher and stays elevated longer than we initially expected. Objectively, this is bad, creating hardship and forcing people into tough choices. Yet the economy has already proven strong enough to absorb the hit. Many businesses' gross operating profit margins remain fat, particularly large growth equities.

Additionally, inflation-adjusted spending remains firm. Business surveys globally show strong activity, with higher input costs hitting sentiment more than output. This is true even in Europe, which is the most vulnerable major region to the war and sanctions' economic dislocations. If the war's fallout were to drive a global recession, Europe would show it first. But data suggest Europe is faring better economically than most assumed. If Europe doesn't contract, the chances of Ukraine driving a global recession are low. Slower growth is almost certain but that doesn't stop equities. We have long expected growth to slow after the initial COVID reopening surge.

Emerging Markets (EM) were down slightly more than developed in Q1 falling -7.0%.ⁱⁱ Yet with careful analysis, EM's volatility is a tale of divergence between China and the rest of the emerging world. Seventeen of the MSCI EM Index's now 24 constituent countries have had positive year-to-date returns, many of them in the high double digits. Chinese equities meanwhile fell -14.2% over the quarter.ⁱⁱⁱ Yet there is some encouraging news, as the MSCI China was down -24.9% month-to-date in mid-March, before a 22.5% rally in the month's second half.^{iv} The early decline stemmed first from a sentiment reaction to US officials putting a few small, US-listed Chinese firms on delisting watch—sparking fears that bigger companies would follow—and the COVID outbreak and lockdown in Shenzhen. Yet in the early morning US time on 16 March, Chinese officials announced several measures aimed at calming markets. Additionally, Chinese officials signaled a forthcoming end to Tech regulatory uncertainty, a heightened focus on backstopping troubled property developers, and continued accommodative fiscal and monetary policy. While we don't think any of these issues had much fundamental power moving forward, they have weighed heavy on sentiment and therefore returns, making China's announcement a beneficial confidence boost.

ii Ibid. MSCI EM returns in USD with net dividends, 31/12/2021 – 31/03/2022.

iii Ibid. MSCI China returns in USD with net dividends, 31/12/2021 – 31/03/2022.

iv Ibid. MSCI China returns in USD with net dividends, 28/02/2022 – 15/03/2022 and 15/03/2022 – 31/03/2022.

Many forecasters now fear the eurozone will enter recession this year as the war's fallout sends energy and food prices higher and hurts consumer confidence. It is possible eurozone GDP contracts, though the latest business surveys suggest eurozone businesses continue to expand despite the geopolitical related uncertainty. Additionally, we don't think the energy supply issues are as dire as projected. Sanctions haven't prevented Russia from selling oil to India and China, which has freed up other producers to sell to Europe. Moreover, big global producers (e.g., the US) are set to raise output this year, adding to global supply. Like other commodities, oil supply and demand are likely to be in better balance than many appreciate.

Long-term interest rates' rise is the other big fear—frequently cited as negative, especially for growth equities. Yet reality suggests otherwise. One, growth equities have a long history of rallying alongside higher long rates, as the full Review will detail. Two, higher long rates steepened the yield curve—a positive economic signal.^v If a recession were nigh, we would expect an inverted yield curve, with 3-month rates exceeding 10-year. As we will detail, while many fret inversions at other less-important segments of the yield curve, like the commonly touted 2-year to 10-year spread, the most meaningful spread is wider today than at 2022's outset. Amazingly, this remains largely unnoticed.

How long war-intensified disruptions will last is unknowable. Eventually, though, they should fade alongside rising US political clarity from the midterms. The US elections will likely create traditional interparty gridlock—bringing benefits that have a long reality of positively surprising almost everyone as they induce political calmness. This usually generates a late-year rally, and maybe this correction accelerates the rally's arrival. Regardless, whether it comes immediately or later this year, we think patient investors will be rewarded. Of course, we are monitoring risks to this outlook, and could change course if we saw a huge enough negative shock to have us believe a bear market was underway. But, for now, we see nothing with the size and surprise for that.

^v Source: FactSet, as of 04/04/2022. Statement based on comparison of 10-year Treasury and 3-month Treasury constant maturity yields.

GLOBAL UPDATE AND MARKET OUTLOOK

10 May, 2022

Q1 MARKET RECAP

Q1'S CLASSIC CORRECTION

Fears of inflation, rising interest rates and, especially, Russian President Vladimir Putin's horrific actions in Ukraine rattled investors in Q1 and drove world equities' first correction of this bull market. We don't dismiss the pain rising prices and the war bring. They are very real, and we empathise with those most impacted. However successful investing often requires a dispassionate view—weighing these negatives' potential effects versus what efficient markets already pre-priced. In our view, they lack the size and surprise power to trigger a bear market, and sour sentiment suggests equities already reflect their impact. We remain confident this correction will end soon—if it hasn't already—with equities hitting new highs as uncertainty falls.

VOLATILITY SHOULDN'T SURPRISE

As our Q4 2021 Client Review & Outlook noted, midterm years often feature an early grind with increased volatility. To quote it:

As we write, this bull market has yet to experience its first correction. We could get one in 2022, with moments of genuine concern as false fears appear true. But worrying will come. It is part of midterm elections. These worries and associated turbulence should dissipate in the year's back half.

Our comments regarding this year's early, volatile grind to tepid returns were not a call to action. Volatility is a directionless term. It is often conflated with negativity, but it simply means movement—down and up. US midterm years usually see more daily swings en route to moderate gains nine months in.ⁱⁱⁱ Of course, averages are descriptive, not predictive, but nothing here suggests early midterm years are bearish.

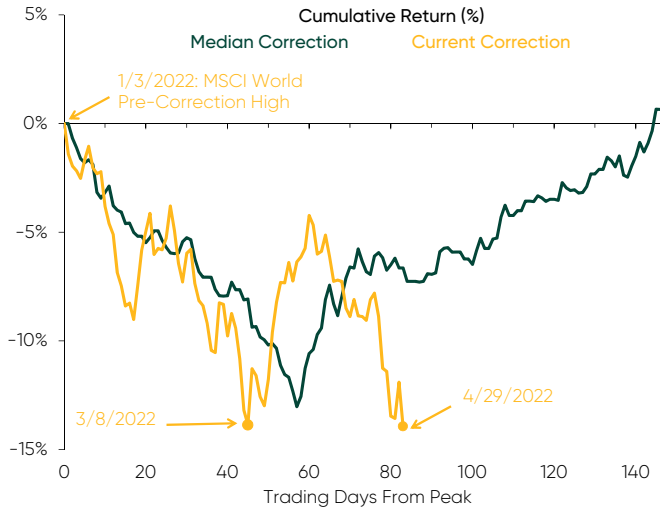
A CLASSIC CORRECTION

While this correction has been challenging for many, its path thus far is typical. On 8 March, the MSCI World Index was down -13.7%^{iv} from its prior high in just over two months. That decline and pace are almost perfectly in line with historical corrections. (Exhibit 1) The S&P 500's initial decline through 8 March is also similar to median corrections. (Exhibit 2) However, corrections occasionally take a W-shape, as we believe the drawdown in April appears to be. Furthermore, nothing in the decline thus far looks like a bear market. Equities fell sharply off a relative high amid big scare stories, both classic correction traits. In a bear market, we would expect to see a slower rolling top, with most investors dismissing the alleged cause and seeing weakness as a buying opportunity.

ⁱⁱⁱ Source: Global Financial Data, Inc., as of 02/02/2021. Average S&P 500 total return in the first nine months of midterm election years, 1925 – 2020

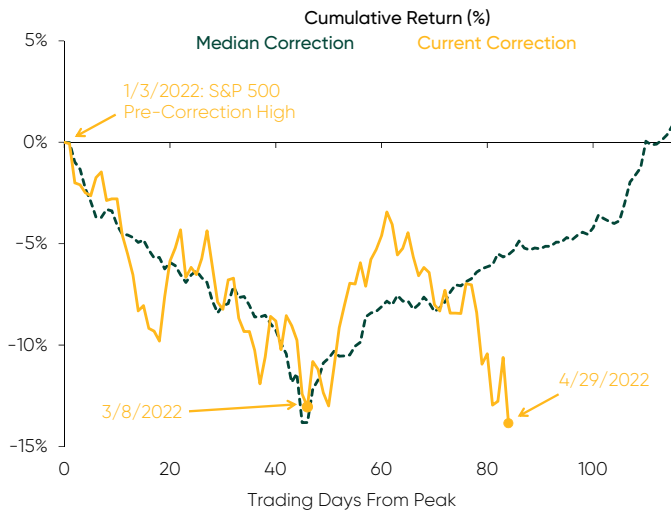
^{iv} Source: FactSet, MSCI World Index returns with net dividends from 04/01/2022 – 08/03/2022.

EXHIBIT 1: CURRENT AND MEDIAN GLOBAL CORRECTION



Source: FactSet and Global Financial Data, Inc., as of 29/04/2022. MSCI World Index price return in current correction and median corrections, 31/12/1969 – 29/04/2022.

EXHIBIT 2: CURRENT AND MEDIAN S&P 500 CORRECTION



Source: FactSet and Global Financial Data, Inc., as of 29/04/2022. S&P 500 Index price return in current correction and median corrections, 03/01/1928 – 29/04/2022.

Corrections are uncomfortable but common. A bull market ordinarily has at least one, sometimes several. History’s longest bull market, 2009 – 2020’s, featured six. Regional conflicts like the Ukraine war have occasionally caused corrections.

Corrections typically come and go fast—with no early warning and no all-clear when they end. Equities usually recover quickly and keep climbing. As Exhibit 3 shows, median returns 6, 12 and 24 months from S&P 500 correction lows are 23%, 30% and 44%, respectively. This is why timing a correction is risky. As hard as volatility can be, equities reward patience.

EXHIBIT 3: HISTORICAL S&P 500 CORRECTIONS

| Peak | | Peak to Trough | | Forward Returns After Trough | | |
|------------|-------------|-----------------|--------|------------------------------|--------|--------|
| Peak Date | Trough Date | Length (Months) | Return | 6M | 12M | 24M |
| 5/14/1928 | 6/12/1928 | 1.0 | -10.3% | 22.8% | 38.8% | 20.7% |
| 6/15/1932 | 7/8/1932 | 0.8 | -13.8% | 64.0% | 171.7% | 124.3% |
| 9/7/1932 | 2/27/1933 | 5.7 | -40.6% | 104.1% | 95.4% | 59.0% |
| 3/16/1933 | 3/31/1933 | 0.5 | -15.6% | 68.3% | 84.1% | 44.8% |
| 6/12/1933 | 6/15/1933 | 0.1 | -10.6% | 3.5% | 5.0% | 5.4% |
| 7/18/1933 | 3/14/1935 | 19.9 | -34.0% | 46.1% | 81.4% | 126.9% |
| 4/6/1936 | 4/29/1936 | 0.8 | -12.7% | 27.1% | 18.1% | -27.8% |
| 7/14/1943 | 11/29/1943 | 4.5 | -13.1% | 11.6% | 16.9% | 55.0% |
| 2/5/1946 | 2/26/1946 | 0.7 | -10.1% | 3.9% | -9.0% | -16.8% |
| 6/12/1950 | 7/17/1950 | 1.2 | -14.0% | 29.2% | 31.4% | 50.2% |
| 1/5/1953 | 9/14/1953 | 8.3 | -14.8% | 17.5% | 37.7% | 98.1% |
| 9/23/1955 | 10/11/1955 | 0.6 | -10.6% | 18.4% | 14.7% | 0.3% |
| 8/3/1959 | 10/25/1960 | 14.7 | -13.9% | 24.9% | 30.7% | 4.6% |
| 8/22/1962 | 10/23/1962 | 2.0 | -10.5% | 30.0% | 36.5% | 59.2% |
| 9/25/1967 | 3/5/1968 | 5.3 | -10.1% | 14.8% | 13.7% | 2.6% |
| 4/28/1971 | 11/23/1971 | 6.9 | -13.9% | 21.8% | 29.7% | 10.3% |
| 11/7/1974 | 12/6/1974 | 1.0 | -13.6% | 42.3% | 33.5% | 59.3% |
| 7/15/1975 | 9/16/1975 | 2.1 | -14.1% | 22.9% | 28.3% | 17.5% |
| 9/21/1976 | 3/6/1978 | 17.4 | -19.4% | 21.3% | 12.6% | 25.0% |
| 9/12/1978 | 11/14/1978 | 2.1 | -13.6% | 6.0% | 11.8% | 48.3% |
| 10/5/1979 | 11/7/1979 | 1.1 | -10.2% | 7.3% | 29.3% | 22.8% |
| 2/13/1980 | 3/27/1980 | 1.4 | -17.1% | 28.6% | 37.1% | 14.0% |
| 10/10/1983 | 7/24/1984 | 9.4 | -14.4% | 19.5% | 29.6% | 61.0% |
| 10/9/1989 | 1/30/1990 | 3.7 | -10.2% | 10.1% | 5.6% | 27.4% |
| 10/7/1997 | 10/27/1997 | 0.7 | -10.8% | 23.9% | 21.5% | 47.9% |
| 7/17/1998 | 8/31/1998 | 1.5 | -19.3% | 29.4% | 37.9% | 58.5% |
| 7/16/1999 | 10/15/1999 | 3.0 | -12.1% | 8.8% | 10.2% | -12.6% |
| 11/27/2002 | 3/11/2003 | 3.4 | -14.7% | 26.9% | 38.2% | 49.9% |
| 4/23/2010 | 7/2/2010 | 2.3 | -16.0% | 23.0% | 31.0% | 33.5% |
| 4/29/2011 | 10/3/2011 | 5.2 | -19.4% | 28.6% | 32.0% | 52.7% |
| 4/2/2012 | 6/1/2012 | 2.0 | -9.9% | 10.8% | 27.6% | 50.5% |
| 5/21/2015 | 2/11/2016 | 8.7 | -14.2% | 19.5% | 26.6% | 43.2% |
| 1/26/2018 | 2/8/2018 | 0.4 | -10.2% | 10.7% | 4.9% | 28.9% |
| 9/20/2018 | 12/24/2018 | 3.1 | -19.8% | 25.3% | 37.1% | 57.5% |
| Average | | 4.2 | -14.9% | 25.7% | 33.9% | 38.3% |
| Median | | 2.1 | -13.8% | 22.9% | 29.6% | 44.0% |

Source: Global Financial Data, Inc., as of 05/04/2022. S&P 500 Index price returns during and after corrections, 03/01/1928 – 31/12/2021.

A FURTHER WORD ON PORTFOLIO POSITIONING

Portfolios are currently positioned for a maturing bull market, emphasising higher-quality, larger-cap growth equities. Tech and Tech-like equities in the Communication Services and Consumer Discretionary sectors are central to that, and we think this positioning will prove beneficial once the correction fades.

That view holds despite potentially rising interest rates. The idea Tech and growth equities face challenges from rising rates is tied to the simplistic notion higher yields decrease the value of long-distant earnings, hurting Tech and growth since their valuations reflect far-future profits. This is a nice theory, but the data supporting it are flimsy. Over the trailing 20 years through Q1's end, the correlation coefficient between 10-year yields and growth stock leadership is -0.14 .^v There is effectively no statistically significant relationship between rates and growth leadership.

Fed tightening doesn't doom Tech and growth, either. In the four Fed tightening cycles for which we have sector-and-style level returns, US Tech beat the S&P 500 three times—twice by big margins. In the 1994 – 1995 tightening cycle, the Fed hiked rates by 3 percentage points in just over a year.^{vi} US Tech rose 15.7% during this stretch, outpacing the S&P 500's 0.7%.^{vii} Growth rose 3.3%.^{viii} In the 2015 – 2018 tightening cycle, Tech and growth rose 56.9% and 36.2%, respectively, outpacing the S&P 500's 30.5%.^{ix} The one exception is 2004 – 2006, which came amid the value-led 2002 – 2007 bull market truncated by 2008's financial crisis.

A MARKET PERSPECTIVE ON THE UKRAINE TRAGEDY

The horror in Ukraine is a terrible tragedy, and we have the deepest sympathy for everyone affected. That includes those still in Ukraine, those forced to flee and those with family and loved ones there. It also includes everyday Russians impacted by sanctions—they didn't cause this and are paying dearly for President Putin's decisions. And it includes the Russians imprisoned for protesting the war and members of the Russian diaspora whose businesses have faced looting and boycotts even though they don't support President Putin. Finally, it includes those in the surrounding nations, like Moldova, worried they could be next. This terrible invasion and war affect so many people in so many ways.

Yet we must approach things like markets do—pragmatically looking forward. There is a long history of regional wars and market returns. Some coincided with bear markets and perhaps contributed to an extent, but none were the proximate cause, in our view. Some caused corrections, but even then, equities usually fell in the run-up to the conflict, with recovery beginning while fighting raged—well before signs of a resolution were emerging. Thus far, markets are following this blueprint, and we don't think the conflict and the economic dislocations it causes are sufficient to offset the world's underlying strength.

v Source: FactSet, as of 08/04/2022. Correlation coefficient between MSCI World Growth minus MSCI World Value Index price returns and the change in 10-year Treasury constant maturity yields, calculated weekly from 31/03/2002 – 31/03/2022.

vi Source: US Federal Reserve, as of 08/04/2022. Based on fed-funds target rate, 04/02/1994 – 15/05/1995.

vii Source: FactSet, as of 08/04/2022. S&P 500 Information Technology sector and S&P 500 total return, 03/02/1994 – 15/05/1995.

viii Ibid. S&P 500 Growth Index total return.

ix Ibid. S&P 500 Information Technology sector, S&P 500 Growth and S&P 500 total returns, 15/12/2015 – 19/12/2018.

HOW MARKETS DEAL WITH REGIONAL CONFLICT

Equities dislike rising uncertainty—and wars and rumors of war are a reliable source. Every potential conflict raises questions: Will fighting break out? How far will it spread? Will major powers get involved? Will proxy wars turn to world wars? Will war disrupt production and trade? Commodity markets? Energy markets? As these questions swirl, equities usually fall quickly. Corrections are common, as the escalating tensions are widely watched and people hastily spiral to worse scenarios, forcing equities to swiftly price the disruption. Corrections that include regional wars are often even scarier than others, for understandable reasons. Normal correction scare stories tend to involve politics or economics, but wars involve death—potentially untold amounts of people if nuclear powers are involved.

However, corrections tied to regional conflict also tend to end quickly and start recovering well before the fighting ends. Equities tend to price in the worst-case scenario, sometimes even before conflict begins, weighing the likely damage and disruptions. After the initial drop and the start of the conflict, they can return to pricing in expected corporate earnings over the next 3–30 months. Conflicts that involve a sliver of global GDP simply lack the power to cause a global recession. Equities see this long before most people do, teeing up a recovery.

Exhibit 4 details equity returns surrounding a broad selection of regional conflicts from Korea onward. Note: This isn't all, but that is in part because regional conflicts happen almost every year. As you will see, some occurred during bear markets and some during bull markets, but in most cases, equities were higher by the end of the fighting.

EXHIBIT 4: SELECTED REGIONAL CONFLICTS AND MARKET RETURNS

| Global Events | Date | Began During Bear? | S&P 500 Forward Returns | | |
|----------------------------------|------------|--------------------|-------------------------|--------|--------|
| | | | +3m | +6m | +12m |
| Korean War Begins | 6/25/1950 | No | -0.2% | 7.7% | 23.1% |
| Cuban Revolution | 7/26/1953 | No | -1.8% | 5.8% | 28.0% |
| French-Algerian Crisis | 7/1/1954 | No | 11.9% | 26.0% | 46.7% |
| Hungarian Uprising | 10/23/1956 | Yes | 3.9% | -0.8% | -2.8% |
| Suez Crisis | 10/29/1956 | Yes | 3.9% | -0.8% | -2.8% |
| Russia Invades Hungary | 11/4/1956 | Yes | -1.0% | 2.3% | -6.4% |
| Castro Seizes US Oil Refineries | 6/30/1960 | No | -5.1% | -1.0% | 17.3% |
| Bay of Pigs Invasion | 4/17/1961 | No | 0.1% | 4.1% | 10.1% |
| Berlin Wall Constructed | 9/4/1961 | No | 5.5% | 4.3% | -10.4% |
| Cuban Missile Crisis | 10/16/1962 | No | 13.1% | 20.3% | 31.6% |
| Vietnam: Tonkin Gulf Crisis | 8/2/1964 | No | 2.8% | 6.8% | 5.6% |
| Six-Day War | 6/5/1967 | No | 5.9% | 7.2% | 14.3% |
| US Sends Troops to Cambodia | 4/30/1970 | Yes | -10.2% | 5.2% | 32.2% |
| Yom Kippur War | 10/6/1973 | Yes | -9.3% | -11.8% | -39.0% |
| Iranian Hostage Crisis | 11/4/1979 | No | 13.6% | 7.2% | 31.8% |
| Soviet Union Invades Afghanistan | 12/24/1979 | No | 8.4% | 7.6% | 39.3% |
| Iraq Declares War on Iran | 9/22/1980 | No | 16.2% | 9.8% | 5.3% |
| Falklands War | 4/2/1982 | Yes | -0.6% | 10.8% | 44.2% |
| Iraq Invades Kuwait | 8/2/1990 | Yes | -10.4% | -0.6% | 14.1% |
| US Enters Gulf War | 1/16/1991 | No | 23.6% | 22.7% | 36.6% |
| Bosnian War | 4/6/1992 | No | 2.8% | 2.0% | 12.0% |
| First Chechen War | 12/11/1994 | No | 10.3% | 19.7% | 42.2% |
| Second Chechen War | 8/26/1999 | No | 4.3% | -1.5% | 11.9% |
| US Invasion of Afghanistan | 10/7/2001 | Yes | 9.1% | 5.5% | -25.6% |
| Start of Iraq War | 3/20/2003 | No | 14.2% | 19.4% | 29.0% |
| Israel and Hezbollah Conflict | 7/12/2006 | No | 8.8% | 14.8% | 25.3% |
| Russia Invasion of Georgia | 8/1/2008 | Yes | -22.7% | -33.6% | -19.5% |
| Arab Spring | 12/17/2010 | No | 2.9% | 3.2% | 0.1% |
| Russia Annexed Crimea | 2/20/2014 | No | 2.3% | 9.1% | 17.1% |
| Russia Joins War in Syria | 9/30/2015 | No | 8.1% | 8.7% | 15.4% |

Source: Global Financial Data, Inc., as of 12/04/2022. S&P 500 total returns, 25/06/1950 – 30/09/2016. Data are monthly through 31/12/1987 and daily thereafter.

Some, like the Yom Kippur War, ostensibly contributed to the fundamental issues that caused bear markets. Others, like the US invasion of Afghanistan, occurred during unrelated bear markets. In our view, the only war ever to be the proximate cause of a bear market since good S&P 500 data began was WWII. Only that war destroyed a large enough share of global productive capacity to cause a global recession and bear market.

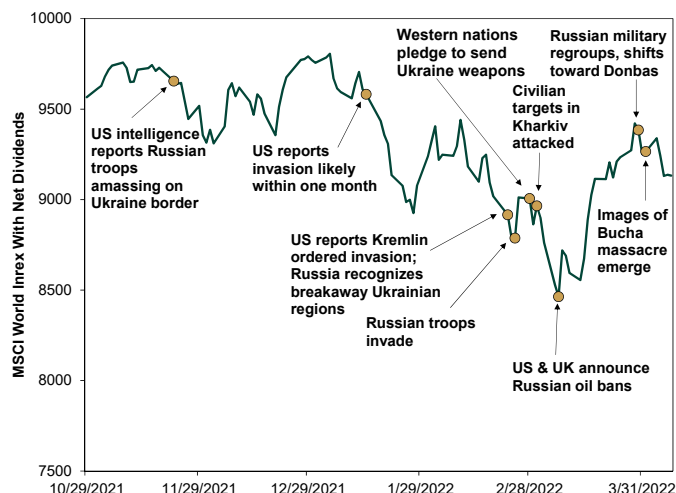
By September 1938, we think equities were recovering from the bear market that began in 1937, when the Fed raised reserve requirements and truncated the economic recovery from the early 1930s' Depression. But when Germany invaded and annexed the Sudetenland, which was then Czech territory, it forced markets to absorb Hitler's territorial ambitions. Equities then drifted mostly sideways for 11 months before falling when Germany took Poland—then plunged half a year later, when France shockingly fell swiftly. The bear market continued as the conflict drew in more participants, yet a new bull market began in 1942, three years before the war's end. It was an extreme version of the normal pattern of markets moving on from a conflict well before it ends.

UKRAINE FITS THE PATTERN

Equities' reaction to Russia's invasion and campaign of terror is similar to how markets ordinarily digest regional conflicts: selling off as tensions rose, then rallying soon after fighting began.

Global equities' pre-correction high was in early January—after reports of Russian troops amassing along Ukraine's border, but before the rhetoric really escalated. As invasion chatter ratcheted up and diplomacy fizzled, oil prices jumped and equities sharply fell. After Russian troops breached the border, equities initially rallied—seemingly on hopes that it would be a lightning strike with a swift end and minimal damage, as Russia's annexation of Crimea (Ukrainian territory) was in 2014. But when Ukraine's resistance surprised the world and Russia responded with indiscriminate killing and destruction, another sharp decline followed. (Exhibit 5) In short, they fell in the run-up and as the fighting broke out—but quickly priced the terrible devastation and moved on.

EXHIBIT 5: UKRAINE CONFLICT AND GLOBAL EQUITIES



Source: FactSet, as of 11/04/2022. MSCI World Index with net dividends, 29/10/2021 – 08/04/2022.

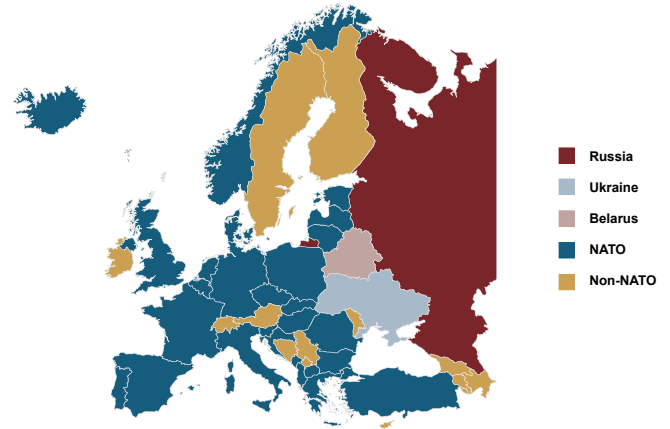
WHERE DO THINGS GO FROM HERE?

We are not military analysts. But from our vantage point, there is next to no chance this conflict becomes WWII, which is what we think it would take to wallop equities. While markets were surprised that Russian forces couldn't swiftly subdue Kyiv and install a puppet government, arguably no one was more shocked than President Putin. He sold his people on a quick "liberation" mission with minimal risk for conscripted soldiers. Given how quickly Crimea rolled over in 2014, this perhaps seemed plausible. Even if he didn't believe Ukrainians would welcome his troops with open arms, surely he expected a faster and easier victory—otherwise, the logistics would have been much more organized, with more support for tank columns and other ground forces. There is no way to know for sure, but when a murderous despot rules by fear and blackmail, surrounding himself with yes-men, there is likely no one with the courage to say the military was unprepared. The oligarchs who function as his Politburo have their own personal and financial interests to consider, after all, and excommunication can amount to a financial (if not actual) death sentence.

Today, over a month and a half into the campaign, Russia's military seems unable to make and keep significant gains. Maps showing big areas under Russian control are surface-level—those are areas where Russian troops control the roads, but there are huge swaths of uncontrolled rural lands around them. Those lands are where the Ukrainian resistance launches its counterstrikes. They have retaken several areas, and Russian troops have abandoned others in order to concentrate on the Donbas region—perhaps not coincidentally, home to much of Ukraine's shale gas reserves. From the outside, it appears Putin's plans are changing. Russian propaganda no longer talks of "denazification" of the whole country. It appears President Putin is repositioning his rhetoric to portray minimal territorial gains and mandated Ukrainian neutrality as a victory.

At this point, Mr. Putin would have to be exceedingly foolish to take his war much beyond Ukraine's borders. We are aware of the chatter about his physical and mental health, which is the subject of many rumors with questionable support. Evaluating those claims is far beyond our role or expertise. But from a strategic standpoint, significant geographic escalation would be suicidal. Perhaps he makes a similar play for Moldova's breakaway Transnistria region, where his "little green men" (as locals call the Russian soldiers in unmarked uniforms) have operated for years. Perhaps he continues using Belarus as a staging ground. But as Exhibit 6 shows, most everything beyond that is NATO territory. Even deploying tactical nuclear weapons in Western Ukraine, which military analysts warn is a risk, could invite NATO retaliation since the fallout could reach Latvia, Lithuania, Poland or other NATO and EU members. Make no mistake, this is a very scary time—the scariest since the Cold War. But by consolidating in Eastern Ukraine, President Putin appears to be winding things down, not up. Fighting there could last years. Yet that conflict has raged since 2014 without bothering global equities.

EXHIBIT 6: PUTIN'S OPTIONS SEEM LIMITED



Source: NATO, as of 01/04/2022.

SANCTIONS AND THEIR DISLOCATIONS

The longer-than-expected conflict isn't a worst-case scenario for the global economy. But in addition to prolonging the killing and destruction, it extends economic dislocations.

Those stem chiefly from sanctions. Exhibit 7 (next page) chronicles those announced to date. We are already seeing their effects in prices of oil, fertiliser, grain and other commodities, making inflation spike higher. Germany is contingency planning for energy rationing. While markets tend to be cold to such things, the risk of hunger in less-developed nations rises the longer this drags on. It is all just terrible.

EXHIBIT 7: ALL SANCTIONS ANNOUNCED TO DATE

| | Sanction | Impacted Areas / Companies | Implementation Timeframe | Initiating Region | | | |
|-----------|---|--|---|-------------------|----|----|----|
| | | | | US | UK | EU | RU |
| Announced | Individual sanctions on high net worth individuals | Rostec; Oligarchs; Putin's family | In force, started pre-invasion | X | X | X | NA |
| | Airspace ban | Travel | In force | X | X | X | NA |
| | Extend sanctions to Belarus | Belarus | In force | X | X | X | NA |
| | Suspension of dual-export licenses to Russia | Aerospace/Defense; Manuf. | In force, announced Feb 24 | | X | X | NA |
| | Export ban on high-tech/oil equipment exports to Russia | Tech; Energy; Military | In force, announced Feb 24 | X | X | X | NA |
| | Halt Certification of Nord Stream II | Energy | In force, announced Feb 24 | | | X | NA |
| | Full blocking sanctions, asset freezes, prohibition of business, currency, new financing transactions | Sberbank & Alfa Bank, energy transactions exempt | In force, announced Feb 24, increased April 6 | X | X | | NA |
| | Industrial and food related export ban | Russian trade partners | In force, announced Mar 8 | NA | NA | NA | X |
| | Removal from MSCI/FTSE/S&P Indices | Russian Equities | In force, started Mar 9 | NA | NA | NA | NA |
| | Ban on all new investment in Russia | All | In force, announced in US Mar 11, increased 4/6 | X | X | X | NA |
| | Import ban on consumer and industrial products | Industrials; Metals; Discretionary | In force, announced in US Mar 11 | X | X | X | NA |
| | SWIFT ban, asset freezes, prohibition of business, currency, new financing transactions | VTB, VEB, Bank Otkritie, Novikombank, Promsvyazbank, Rossiya, Sovcombank | In force, SWIFT ban started Mar 12, increased April 6 | X | X | X | NA |
| | Prohibiting any transactions to military-linked firms | State military-industrial companies | In force, announced Mar 15 | | | X | NA |
| | Export ban on luxury goods | Discretionary; Oligarchs | In force, announced Mar 15 | X | X | X | NA |
| | Ban on issuing credit rating for companies | Russian public companies | In force, announced Mar 15 | | | X | NA |
| | Foreign currency cash exports exceeding \$10,000 | Holders of USD-denom. Russian debt | In force, announced Mar 15 | NA | NA | NA | X |
| | Natural gas payments must be made in rubles | Purchasers of Russian gas | In force, announced Mar 23 | NA | NA | NA | X |
| | Expanded ban of Russian tech and aerospace companies | 34 companies & people connected with Russian tech | Announced April 1 | X | | | |
| | Russian coal import ban | Energy | Announced, phased in through August | | X | X | NA |
| | Russian oil import ban | Energy | US immediate, UK phased in by 12/31 | X | X | | NA |
| Proposed | Restrict investor access to existing Russian bonds | All | | | | | |
| | Full embargo on Russian oil & gas exports | Energy | | | | | |
| | Limit deposits of Russian nationals in foreign banks | All | | | | | |

Source: The White House, BBC and Reuters, as of 07/04/2022.

Yet sanctions aren't a wallop. We have tracked 42 cases of major international sanctions since the 1930s. The only case we have identified where sanctions perhaps contributed to a bear market was the US oil embargo on imperial Japan in 1940. Cutting off Japan's oil supply arguably led to a Japanese military offensive to secure supplies in Southeast Asia, culminating in Pearl Harbor. While Hitler's conquest had already walloped markets and a bear market was in progress when Japan attacked, the US's declaration of war drove that long downturn's last leg.

Beyond that, sanctions have often hit the targeted nation hard, but not swayed the global economy. This includes the US and Europe's severe sanctions against Chile's Socialist regime in the 1970s, those against Manuel Noriega's dictatorship in Panama in the late 1980s, nearly 15 years of strict financial sanctions against Iraq tied to the Gulf War, the multi-decade Western embargo of Iranian oil—and many, many more. Sometimes volatility accompanied the sanctions' announcement, especially when they were related to a regional conflict. But these short-term swings tied to initial uncertainty clearly didn't prevent the recoveries.

However, sanctions don't dissuade dictators and very few sanctions led to meaningful change. Decades of sanctions against Cuba and North Korea haven't removed murderous leaders or brought freedom to their people. This time, Vladimir Putin has already proven sanctions aren't a deterrent, and it is easy to see why: Most of the world's countries support and are enforcing the sanctions, but those who aren't contain just over half the world's population, including China and India.

EXHIBIT 8: THE WORLD'S STANCE ON RUSSIA

| UN Vote of Condemnation : Russia | # of Votes | % of UN Votes | # of People | % of Population | GDP | % of World GDP |
|----------------------------------|------------|---------------|---------------|-----------------|----------------------|----------------|
| Yes | 141 | 73% | 3,287,719,363 | 43% | \$56,906,707,091,258 | 67.7% |
| No | 5 | 3% | 200,059,426 | 3% | \$354,158,088,293 | 0.4% |
| Abstain | 35 | 18% | 3,900,780,913 | 51% | \$26,346,286,517,571 | 31.4% |
| Didn't Vote | 12 | 6% | 294,812,557 | 4% | \$413,448,302,879 | 0.5% |

Source: United Nations, FactSet and World Bank, as of 01/04/2022. Vote taken 02/03/2022 to condemn Russian aggression versus Ukraine. Population and GDP are as of 2019.

Therefore, there are plenty of countries to buy Russian products directly or on the black market, with big arbitrage opportunities for those who buy from Russia at a discount and flip for a profit. President Putin likely still gets his money, and the oligarchs probably get their cut, but the ordinary citizens will suffer. Again, look at Cuba and North Korea, where so many face privation and deep poverty while their leaders roll in cash.

Make no mistake: Delivering this message doesn't make us happy. Putin is an evil thug and probably a war criminal. The images and stories documenting the atrocities in Bucha are horrifying. Putin's military playbook was immoral and heinous when he used it in Chechnya—from bombing civilians and framing terrorists for the attack in order to sell people on intervening, to leveling Grozny. It was horrid when he used it in Georgia in 2008 and Syria in 2015. Leveling entire cities, murdering civilians, violating the Geneva Conventions—and torturing protestors and political prisoners at home—all are horrific.

But terrible as Vladimir Putin is, nations willing to trade with him can create a black market. China and India are reportedly purchasing Russian oil. There is evidence of ship-to-ship transactions in Russian waters, and industry analysts suspect the same is happening off Malaysia. Russian oil is trading at a roughly \$35 discount to global prices, creating arbitrage opportunities too lucrative for some to pass up.^x The one silver lining: This should help the economic dislocations from sanctions ease sooner than many expect.

INTEREST RATES, INFLATION AND THE YIELD CURVE

The war wasn't the only thing fraying investors' nerves in Q1. Accelerating inflation also brought pain and frustration. From young families to seniors on fixed incomes, expensive essential goods create hardship, and we feel for those stressed by the effects. Inflation running this hot isn't good. It has also become a heated political issue. So please note: Our commentary on inflation and associated matters aims to be apolitical, addressing the economics through a market-oriented lens. In doing so, it is vital to tune emotions down.

x Source: Neste, as of 18/04/2022. Urals to Brent discount, five-day average.

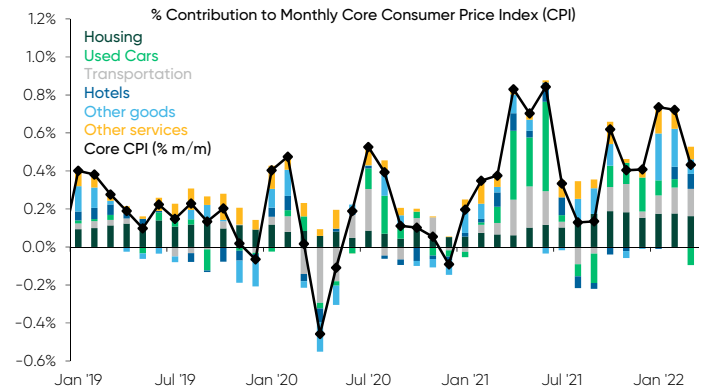
Markets don't price trends according to whether they are good or bad objectively. Rather, they weigh all the variables and determine whether the bad is powerful enough to offset all the good. As we will discuss, we think that calculation should work out in equities' favour. Today's negatives just don't have the power to offset the underappreciated positives we detail later.

THE INS AND OUTS OF OIL AND INFLATION

In prior Reviews, we said inflation included COVID dislocations that would unwind over time, but it seems set to last longer and peak higher than we anticipated. One reason we expected price pressures to abate was a math quirk known as the base effect. The inflation rate is a year-over-year calculation—prices today divided by prices a year ago (minus 1 and then converted to a percentage figure). So, for example, March 2022's US consumer price index was 8.5% higher than March 2021.^{xi} When lockdowns arrived in 2020, they caused a few months of deflation. Prices didn't start creeping past pre-pandemic levels until July 2020—and even then they crawled as many restrictions remained in place, keeping demand crimped.

In spring 2021, as the country began reopening in earnest, demand jumped faster than supply. That drove prices higher across a range of goods and services, just as 2020's deflated prices were entering the denominator of the inflation rate calculation. A bigger numerator divided by a lower denominator created a jump in the inflation rate. As we showed at the time, most of it stemmed from autos and travel and leisure services, which experienced a demand surge that they weren't prepared to meet. That, too, was a COVID dislocation. In 2020, rental car companies liquidated their fleets to stay afloat. In 2021, as travel returned, they had to rebuild in a hurry, draining supply from the retail market. That sent prices higher for new and used cars alike. Manufacturers struggled to respond to these price signals, as the semiconductor shortage limited their capacity. This and other supply chain-related issues kept inflation elevated as 2021 rolled on. Exhibit 9 illustrates the effect on the monthly core CPI inflation rate before, during and after lockdowns.

EXHIBIT 9: MONTHLY INFLATION AND SELECT CONTRIBUTIONS



Source: FactSet & U.S Bureau of Labour Statistics. US Core Consumer Prices Index (CPI), month-over-month change, monthly, 01/01/2019 – 31/03/2022. March 2022 weights are based on February 2022 weights, the latest available data.

All else equal, these forces would have started leaving the inflation math around now. The depressed prices from 2020 are out of the calculation base, and 2021's higher prices have taken their place. Several auto companies reported production headwinds were easing. Shipping backlogs were also starting to clear, and freight costs were easing. It all pointed to prices rising more slowly off a higher base—a lower inflation rate.

Omicron and, especially, Russia's invasion change this. It delays relief and probably makes inflation spike higher because of its direct and indirect dislocations. Between sanctions and the conflict's disruption of major shipping routes, global trade is flowing in directions it otherwise wouldn't, moving prices up. Unfortunately, we think it is realistic to expect the pain of high inflation to lurk longer than we thought earlier.

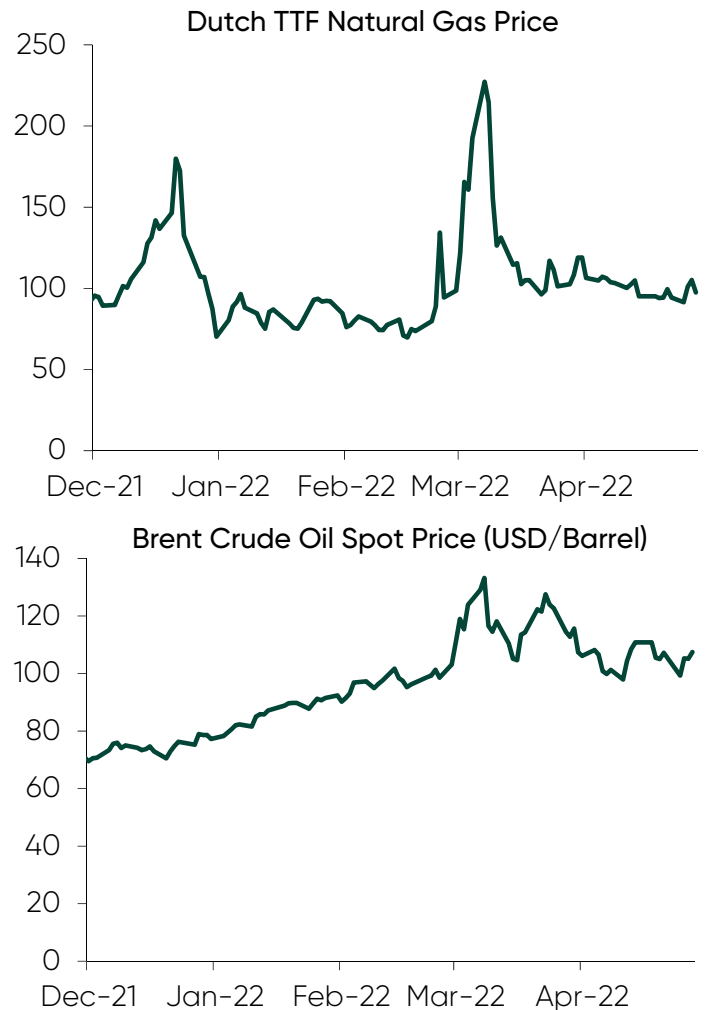
xi Source: US Bureau of Labour Statistics, as of 12/04/2022.

The obvious example is oil. Brent crude—the global benchmark—spiked from \$69.53 per barrel to \$133.18 as markets quickly priced fear of Russian supply leaving the global marketplace.^{xii} High oil is most visible in expensive energy and gasoline prices, but the effect doesn't stop there. Oil prices also flow into petrochemical feedstocks—partially refined petroleum used in plastics, synthetic rubber and chemicals—which feed into a large swath of consumer goods. Some companies absorb these costs. Others pass them to their customers, fueling higher prices.

Fertiliser has also been disrupted. Russia and Belarus produce nearly half the world's supply of potash. Scarce fertiliser makes crop production more expensive, driving food prices higher. So will the grain shortage stemming from Ukraine's major role in global wheat production. Many of its exports go to Africa, potentially laying the groundwork for a severe hunger crisis in less-developed nations. Yet even in the developed world, prices for grains and cereals—and foods derived from them, including livestock—are up. Moving alongside oil, this means two of the most visible costs to households—food and energy—are straining some consumers' budgets lately.

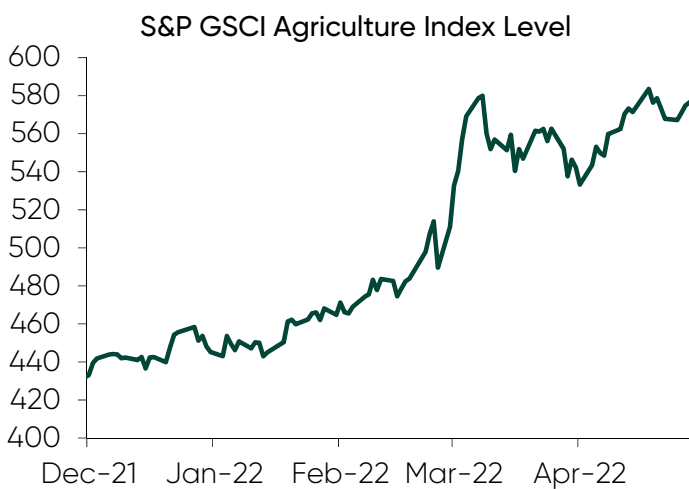
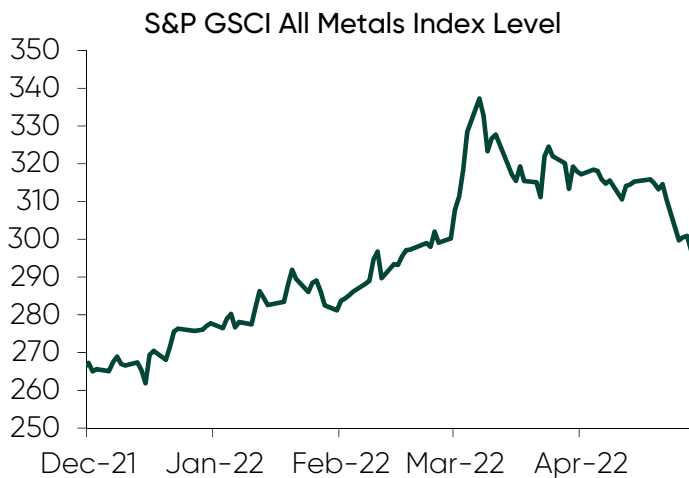
Several other commodities have also spiked, including many industrial metals (Exhibit 10). Part of this is due to issues in commodity markets' plumbing, including rising hedging costs. But Russia is also a leading producer of palladium, aluminum and other metals, causing supply disruptions.

EXHIBIT 10: COMMODITY PRICE SPIKES AT A GLANCE



Source: FactSet, as of 28/04/2022. Brent crude oil spot price, Dutch TTF natural gas futures price, 30/11/2021 – 28/04/2022.

xii Source: FactSet, as of 11/04/2022. Brent crude oil spot price, 01/12/2021 – 08/03/2022.



Source: FactSet, as of 28/04/2022. S&P GSCI Index – All Metals and S&P GSCI Index – Agriculture, 30/11/2021 – 28/04/2022.

These developments are negative, but we don't think they are a big enough negative to cause a US or global recession. For one, the supply disruptions are likely temporary. Eventually, as Russia finds willing buyers, global supply should balance out. We may not like how this happens from a social or geopolitical standpoint, but the reality is disinflationary.

Case in point: Brent crude oil fell from \$133.18 on 8 March to \$101.41 on 7 April as the world fathomed Russia continuing to find buyers.^{xiii} Wheat and other commodities are similarly down from their acute peaks, although they remain above their pre-conflict norms.

Two, many economies depends much less on energy and physical goods than they did decades ago. As the services sector ascended, energy-efficiency improved. Plus, we have witnessed energy dislocations before. Oil spent much of 2011 – 2014 around or above \$100 per barrel amid the Arab Spring. There was no global recession. Consumer spending grew—logical, when you remember spending on gas is still spending. US business investment also grew: From Q1 2011 through Q3 2014, the full stretch of high oil, real (inflation-adjusted) investment in mines and wells jumped 47%, miles above non-energy business investment's 30% rise.^{xiv} Compare that to the plunge in energy-related investment when oil hit rock-bottom levels over the next two years.

Equities, too, are resilient to high oil prices. In that same 2011 – 2014 stretch, S&P 500 companies' operating profits averaged 7.9% annual growth.^{xv} Profits rose in 9 of 11 sectors, including Consumer Discretionary, where growth averaged 11.2%—contradicting the thesis that expensive fuel wrecks demand for non-essential goods and services.^{xvi} The S&P 500 returned 69.9% from 2010's end through August 2014.^{xvii} High oil isn't automatically negative for equities.

xiii Ibid. Brent crude oil spot price, 08/03/2022 – 06/04/2022.

xiv Source: US Bureau of Economic Analysis, as of 04/03/2022.

xv Source: FactSet, as of 04/03/2022.

xvi Ibid.

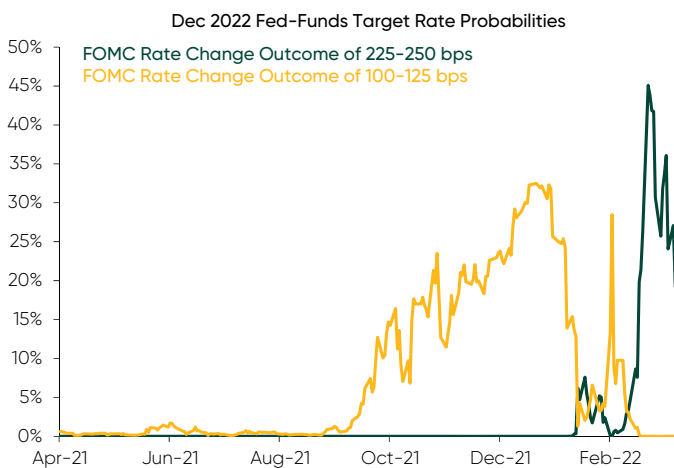
xvii Source: FactSet, as of 04/03/2022. S&P 500 total return, 31/12/2010 – 31/08/2014.

THE FED CAN'T FIX THIS. BUT THEY CAN'T EASILY KILL THE EXPANSION, EITHER

The Fed, Bank of England and other major central banks err in thinking they can cool inflation now. Rate hikes won't slow rising prices. This inflation stems from supply-side factors, not monetary excess, so the Fed can't solve it monetarily. Yes, broad money supply surged in 2020, but this replaced wages and revenues lost to lockdowns. The Fed's measures—which mostly affect loan supply and demand—aren't a likely fix.

Accordingly, we are watching the Fed carefully. In addition to missing the mark conceptually, battling supply-side inflation with monetary tightening raises the risk of error. With that said, based on where short- and long-term interest rates are today, a series of rate hikes isn't likely to cause recession. Futures markets presently anticipate March's rate hike will be the first of seven this year. But as Exhibit 11 shows, rate hike expectations are volatile.

EXHIBIT 11: RATE HIKE EXPECTATIONS ARE VOLATILE



Source: CME Group, as of 05/04/2022. December 2022 fed-funds target rate probabilities, 29/04/2021 – 05/04/2022. "Bps" stands for basis points, or hundredths of a percentage point.

Last April, markets expected no hikes by yearend 2022. Then that shifted to four. Now most expect more. But if prior expectations were so off, we see little reason to believe they are exactly correct now.

xviii Source: Federal Reserve Bank of St. Louis, as of 08/04/2022. Fed-funds target rate hikes, June 2004 – June 2006.

Moreover, tightening cycles aren't automatically negative—returns are often strong for the first year or two after the Fed starts acting. (Exhibit 12) Only when the Fed overshoots and inverts the yield curve—deeply and for a sufficiently long time—does trouble arrive. From June 2004 – June 2006, the Fed hiked rates 17 times.^{xviii} The next recession didn't begin until the end of 2007. Even then, we don't think Fed error was the recession or bear market's proximate cause—that honor goes to the misapplication of the mark-to-market accounting rule to illiquid assets banks never intended to sell. It would have wreaked havoc with or without the Fed.

EXHIBIT 12: S&P 500 RETURNS AFTER INITIAL RATE HIKES

| First Rate Hike | 12 Months Prior | 12 Months After | 24 Months After |
|-----------------|-----------------|-----------------|-----------------|
| 7/16/1971 | 32.0% | 7.6% | 4.8% |
| 8/16/1977 | -5.8% | 5.8% | 10.3% |
| 10/21/1980 | 30.5% | -9.3% | 5.0% |
| 3/27/1984 | 2.6% | 13.9% | 51.5% |
| 12/16/1986 | 18.2% | -2.2% | 10.5% |
| 3/29/1988 | -12.9% | 13.0% | 32.5% |
| 2/4/1994 | 7.5% | -0.4% | 32.3% |
| 6/30/1999 | 18.7% | 6.7% | -9.4% |
| 6/30/2004 | 16.4% | 5.6% | 12.0% |
| 12/16/2015 | 5.1% | 8.9% | 29.1% |
| Average | 11.2% | 5.0% | 17.9% |

Source: FactSet, as of 31/12/2021. S&P 500 price returns, 16/07/1970 – 16/12/2017.

This time, the Fed has bandwidth to hike without inverting the yield curve. The gap between 3-month and 10-year yields has widened, nearing 2 percentage points by quarter end. While we don't think long rates are likely to surge from here, the Fed has signaled it will begin unwinding its balance sheet as it hikes rates. All else equal, that removes some of the Fed's downward pressure on long rates—reducing the likelihood of near-term inversion. Those calling that policy "quantitative tightening" get higher long rates' effects backwards.

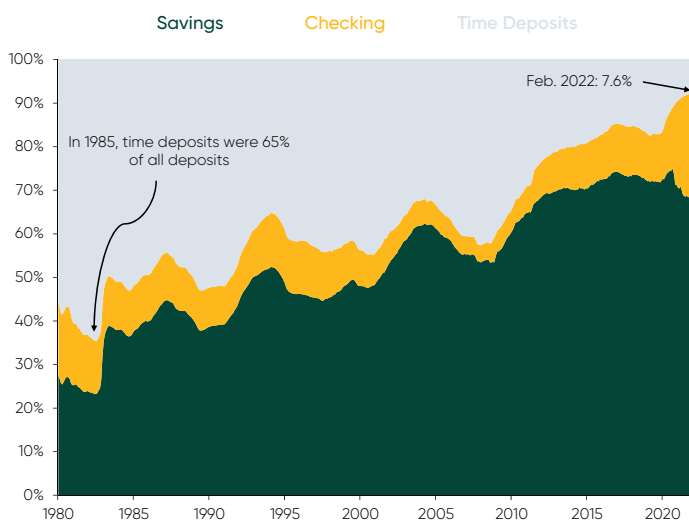
THE YIELD CURVE HAS ACTUALLY STEEPENED

Today, headlines warn of an inverted yield curve—perhaps making our statement that it has steepened sound crazy. But these headlines wrongly focus on arbitrary chunks of the yield curve, like the 10-year minus 2-year spread. This overlooks why the yield curve is predictive.

The yield curve's power stems from its insights on future bank lending. Banks borrow at short-term rates and lend at long-term rates. The spread between them—long rates minus short—is a proxy for banks' potential profits on new loans. The wider the spread, the greater the potential profit, and the more eager banks are to lend. Flatter spreads reduce the incentive to take risk, limiting lending to only the most creditworthy borrowers. An inverted curve—a negative spread—renders lending unprofitable, freezing credit.

Banks don't get much funding from 2-year CDs. Exhibit 13 breaks down the share of US bank deposits by type. As shown, the huge majority of their funding is tied to very short-term rates. Beyond this, overnight interbank credit—also very short term—is another source of frequently tapped funding.

EXHIBIT 13: US BANK DEPOSITS BY MATURITY

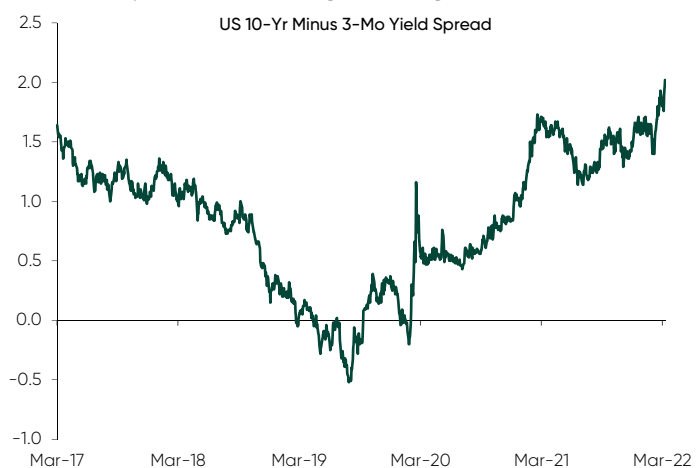


Source: Federal Reserve, as of 15/04/2022. February 1980 – February 2022.

Hence, we think 3-month yields are a better reference point. As for the long end, the 10-year US Treasury yield is the reference rate for most long-term loans. So the 10-year minus 3-month spread best approximates banks' business models. It has widened, as Exhibit 14 shows.

Additionally, in the countries where the 10-year minus 3-month yield spread has widened, loan growth has accelerated. As Exhibit 15 shows, US, eurozone and UK loan growth has accelerated in recent months. In Japan, where the yield curve is far flatter, loan growth remains moribund.

EXHIBIT 14: THE WIDENING YIELD SPREAD



Source: St. Louis Federal Reserve, as of 11/04/2022. US 10-year minus 3-month Treasury yields (constant maturity), 31/03/2017 – 08/04/2022.

EXHIBIT 15: LOAN GROWTH ACCELERATES IN AMERICA AND EUROPE; JAPAN LAGS

| Loan Growth (Y/Y) | United States | | Eurozone | | Japan | | United Kingdom | |
|-------------------------|---------------|---------|-----------|---------|-----------|---------|----------------|---------|
| | Date | Reading | Date | Reading | Date | Reading | Date | Reading |
| Current Total | 3/31/2022 | 5.6% | 2/28/2022 | 4.1% | 3/31/2022 | 0.5% | 2/28/2022 | 4.1% |
| Previous Reading | 2/28/2022 | 4.4% | 1/31/2022 | 3.9% | 2/28/2022 | 0.3% | 1/31/2022 | 2.7% |
| Prior 12 Mo. Avg | | 0.5% | | 2.5% | | 1.2% | | 0.3% |
| Commercial & Industrial | 3/31/2022 | -2.6% | 3/31/2022 | 4.4% | 2/28/2022 | 0.1% | 3/31/2022 | 0.7% |
| Consumer | 3/31/2022 | 11.9% | 3/31/2022 | 4.4% | - | - | 3/31/2022 | 0.5% |
| Real Estate | 3/31/2022 | 4.8% | 3/31/2022 | 5.0% | 3/31/2022 | 2.7% | 3/31/2022 | 4.6% |

Source: FactSet, Federal Reserve, ECB, Bank of Japan and Bank of England, as of 18/04/2022.

THE BULL MARKET'S STRONG, OVERLOOKED FUNDAMENTALS

Note, we aren't claiming an inverted yield curve is directly causal of recessions. Again, the yield curve spent much of July 2006 to July 2007 inverted, but no recession occurred in that span. When the bear market started in October 2007, the curve had been positive again for months. Similarly, the US yield curve inverted for a spell in mid-2019, but this quite obviously didn't cause 2020's economic contraction—lockdowns did.

We don't think dismissing an inverted yield curve is wise, but it is important to think things through. The yield curve represents government rates. They can hint at future bank lending, but bank rates aren't identical to government rates. In 2019, lending remained plentiful because banks' funding costs didn't rise alongside the Fed's benchmark rate and 3-month Treasury yields. Deposit rates stayed stubbornly near zero since banks had surplus deposits—there was no need to compete for more by offering higher rates. Then too, the global yield curve wasn't inverted, creating easy arbitrage opportunities in a world where money crosses borders freely. Banks could borrow at negative rates in Europe and lend here at higher long rates—while hedging for currency risk—at the click of a mouse. An inverted yield curve is a call to careful observation and analysis, but not necessarily action.

We will watch this closely. Perhaps long rates rise a bit more, depending on how supply-side inflationary forces and Fed policy evolve—like its plan to reduce bond holdings acquired under quantitative easing, which could steepen the curve. Perhaps the Fed moves too far, too fast with short-term rates. We will have to watch them, one meeting at a time. If they do too much we may adjust our outlook and positioning, but we don't think this is likely soon.

What matters is that the yield curve isn't signaling recession. We wouldn't read too much into its recent steepening, as bond markets are volatile, but the Fed has plenty of room to act without causing problems.

As legendary investor Benjamin Graham said, "In the short term, the market is a voting machine, but in the long run, it is a weighing machine." That wisdom is apt today. A popular idea can sway markets temporarily, appearing "right." But in the long term, fundamentals outweigh feelings. Hence, it is vital to assess what ideas are popular today—and how markets have priced them—versus the fundamentals markets will eventually weigh. Today, we think investors are much too dour relative to the fundamental forces likely to gain supremacy.

We don't dismiss today's negatives. Some, particularly the Russia-Ukraine war, have tragic consequences and cause short-term economic disruptions. Markets react negatively, but as time passes, they weigh the impact and reality that companies will adapt fast, recognising fighting isn't likely to hit the global economy materially.

The same goes for rising interest rates or elevated inflation. The former isn't even truly a negative for markets and the economy, unless and until it inverts the yield curve. The latter is negative for households, but the impact on economic growth isn't enormous.

In our view, today's headwinds aren't big enough to cause a recession. They don't negate the economic and political fundamentals underpinning this bull market. Fear may hold sway today, but an economy on strong footing is the longer-term reality. That is hard to fathom, but fundamentals are much more resilient than widely appreciated. This provides support for the bull market to continue its irregular climb.

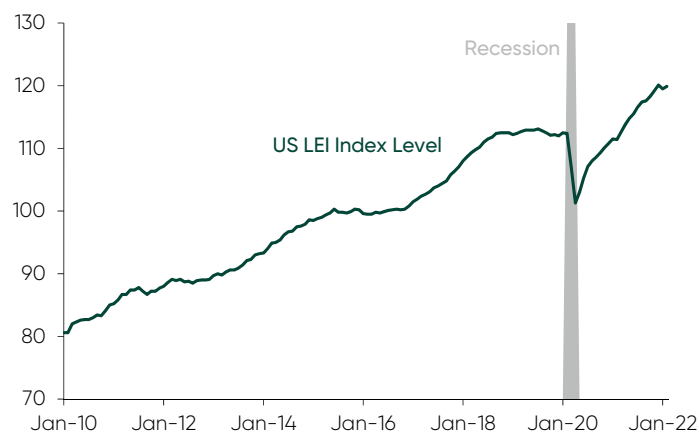
FORWARD ECONOMIC INDICATORS POINT TO GROWTH

Over 100 years of economic theory and data show steep yield curves are expansionary. A previously explained, the most meaningful part of the curve, the 10-year minus 3-month spread, has steepened.

Other data point positively, too. Take The Conference Board's Leading Economic Index (LEI)—a composite of mostly forward-looking indicators that reliably predicts economic conditions. Along with the yield curve spread, US LEI includes equities and some manufacturing new orders measures (a useful proxy for growth since today's orders are tomorrow's production). Another contributor: The Leading Credit Index, which monitors credit trends (e.g., debit balances at broker-dealers' margin accounts and the Senior Loan Officer Opinion Survey on Bank Lending Practices). US LEI is trending upward today. (Exhibit 16)

This isn't solely a US phenomenon. UK and eurozone LEIs have rebounded recently, with both growing over the past three months.^{xix} That argues for more expansion—not recession—in the near future.

EXHIBIT 16: US LEI IS HIGH AND RISING



Source: FactSet, as of 06/04/2022. The Conference Board's US LEI, January 2010 – February 2022. Recession dating based on National Bureau of Economic Research criteria.

CLOSER TO A POST-COVID WORLD

More than two years after Italy imposed a national lockdown, normal life has returned in fits and starts. Omicron's late-2021 emergence spurred a spate of renewed, albeit less harsh, COVID measures. But even these have started easing. Many companies have returned workers to their offices. In the UK, England began reopening fully in late February. EU nations have followed suit, with Germany lifting most pandemic controls in late March. Japan ended its quasi-state of emergency in March. Canadian provinces have relaxed restrictions, and the national government scaled back its COVID travel rules for fully vaccinated travelers in April. Australia has also reopened its borders to international travelers and resumed major sporting events at full capacity.

The one prominent exception: China, which locked down big economic hubs in Shenzhen and Shanghai in mid-March. By mid-April, as Omicron and restrictions continued spreading around the country, around one-third of the population was under full or partial lockdown.^{xx} Many talk this negative up, ignoring the host of global evidence going the other direction. But even here, the pattern is well-known: Lockdowns hit growth, but they can also end fast—and the economic snap back is usually quick.

SURVEYS SHOW GROWTH—A RETURN TO NORMAL

Reopening creates strong demand for services as people return to the office and leisure activities. That return to normal life in services-heavy economies is a huge—and underappreciated—offset to the Russia-Ukraine war's negative economic impact. As offices reopen, the surrounding businesses see a return to normal foot-traffic as office workers dine and shop. Purchasing managers' indexes (PMIs) provide one way to see this. These monthly surveys track whether companies reported more or less economic activity. However, PMIs don't reveal the magnitude of expansion or contraction. Instead they capture the breadth of activity—a snapshot of recent business conditions.

xix Source: The Conference Board, as of 04/04/2022. UK LEI, November 2021 – January 2022, and eurozone LEI, December 2021 – February 2022.

xx "China's Economy Pays a Price as Lockdowns Restrict Nearly a Third of Its Population," Alexandra Stevenson, The New York Times, 14/04/2022.

The latest PMIs, recorded with the Russia-Ukraine war ongoing, are expansionary—even in Europe—and services sectors are booming. (Exhibit 17) Despite headwinds from high energy costs and other conflict-related dislocations, economic activity remains resilient. China’s PMIs are the exception, with the expanding lockdowns contributing to weak readings.

EXHIBIT 17: MARCH 2022 PMIS

| | Services | Manufacturing | Composite |
|--------------------|----------|---------------|-----------|
| US (ISM) | 58.3 | 57.1 | N/A |
| US (S&P Global) | 58.0 | 58.8 | 57.7 |
| UK | 62.6 | 55.2 | 60.9 |
| Eurozone | 55.6 | 56.5 | 54.9 |
| Japan | 49.4 | 52.7 | 50.3 |
| Australia | 55.6 | 57.7 | 55.1 |
| China (official) | 46.7 | 49.5 | 48.8 |
| China (S&P Global) | 42.0 | 48.1 | 43.9 |

Source: FactSet, S&P Global, Institute for Supply Management and China’s National Bureau of Statistics, as of 06/04/2022.

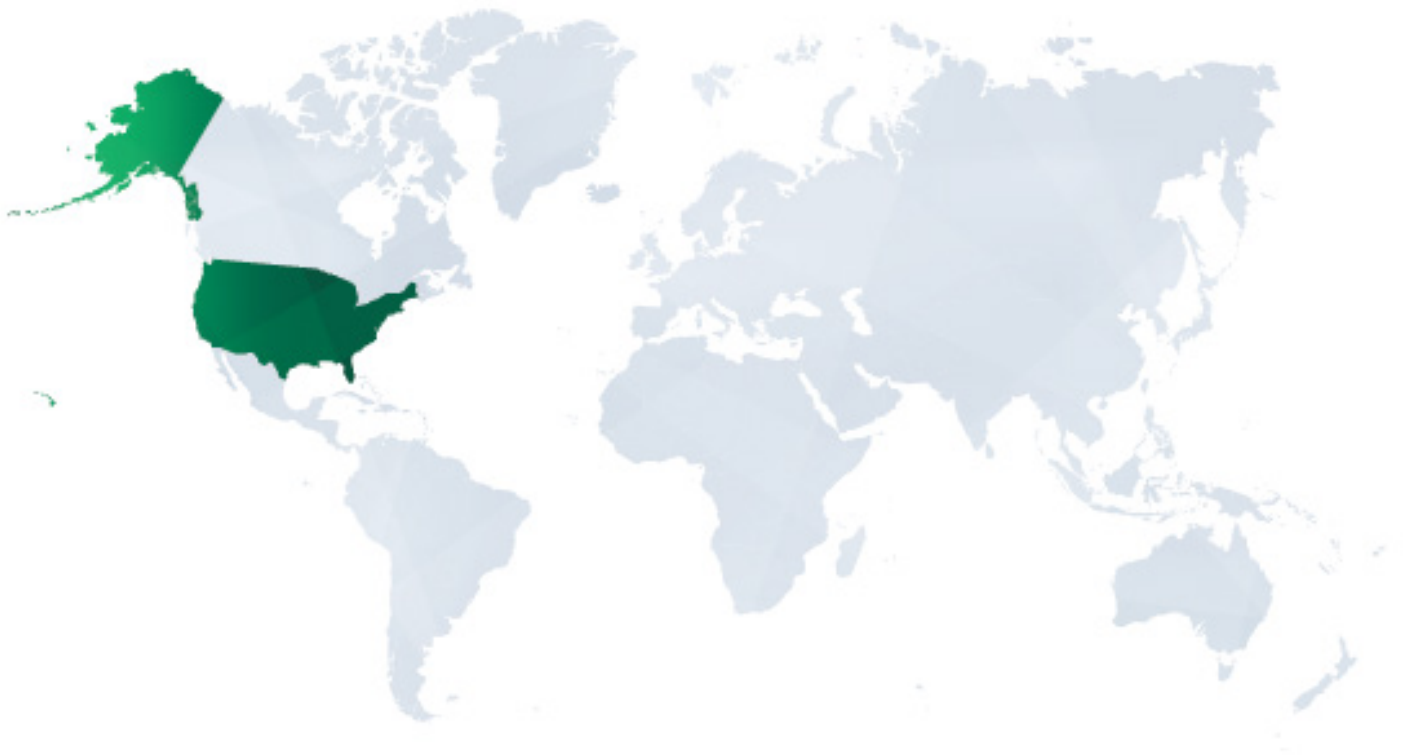
If a survey taken in today’s challenging environment isn’t pointing to disaster, it seems unlikely global output has plummeted. Readings in the major economic region impacted directly by the war—Europe—are expansionary. If the fighting doesn’t tip the Continent into a regional recession, then a global downturn stemming from the conflict looks exceedingly unlikely. Yes, the war could slow eurozone growth—and potentially some other parts of the world. But other nations and regions will likely see an economic boost. Energy and commodity heavy economies like South Africa, Brazil, Australia and Canada could see tailwinds from higher commodity prices and shifting demand as some economies shun Russian imports.

EXHIBIT 18: POST-MIDTERM RETURNS ARE OFTEN STELLAR

| Midterm Year | Midterm Q1 | Midterm Q2 | Midterm Q3 | Midterm Q4 | Following Q1 | Following Q2 | Following Q3 | Following Q4 |
|---------------|------------|------------|------------|------------|--------------|--------------|--------------|--------------|
| 1926 | -9.1% | 8.9% | 10.1% | 2.0% | 4.6% | 7.3% | 16.1% | 5.2% |
| 1930 | 18.4% | -17.8% | -8.2% | -16.4% | 10.2% | -9.9% | -33.6% | -14.8% |
| 1934 | 7.4% | -8.0% | -6.2% | 5.4% | -9.9% | 22.1% | 14.4% | 17.0% |
| 1938 | -17.8% | 38.5% | 7.3% | 9.0% | -16.0% | 0.0% | 21.4% | -2.9% |
| 1942 | -5.9% | 5.8% | 8.5% | 12.1% | 20.1% | 8.0% | -0.9% | -2.1% |
| 1946 | 5.1% | 2.9% | -18.0% | 3.5% | 0.3% | 1.5% | 0.5% | 2.7% |
| 1950 | 4.9% | 4.0% | 11.9% | 6.9% | 6.7% | -0.3% | 12.8% | 3.8% |
| 1954 | 10.1% | 9.8% | 11.9% | 12.6% | 2.8% | 13.3% | 7.5% | 5.1% |
| 1958 | 6.4% | 8.5% | 11.6% | 11.2% | 1.2% | 6.3% | -2.0% | 6.1% |
| 1962 | -2.1% | -20.6% | 3.7% | 13.1% | 6.4% | 5.0% | 4.2% | 5.4% |
| 1966 | -2.7% | -4.3% | -8.8% | 5.9% | 13.2% | 1.3% | 7.5% | 0.5% |
| 1970 | -1.8% | -18.0% | 17.1% | 10.3% | 9.7% | 0.2% | -0.6% | 4.6% |
| 1974 | -2.8% | -7.6% | -25.2% | 9.3% | 23.0% | 15.4% | -10.9% | 8.6% |
| 1978 | -4.9% | 8.5% | 8.7% | -5.0% | 7.1% | 2.6% | 7.6% | 0.1% |
| 1982 | -7.3% | -0.6% | 11.5% | 18.3% | 10.0% | 11.1% | -0.2% | 0.4% |
| 1986 | 14.1% | 5.9% | -7.0% | 5.6% | 21.3% | 5.0% | 6.6% | -22.5% |
| 1990 | -3.0% | 6.3% | -13.7% | 9.0% | 14.5% | -0.2% | 5.3% | 8.4% |
| 1994 | -3.8% | 0.4% | 4.9% | 0.0% | 9.7% | 9.5% | 7.9% | 6.0% |
| 1998 | 13.9% | 3.3% | -9.9% | 21.3% | 5.0% | 7.0% | -6.2% | 14.9% |
| 2002 | 0.3% | -13.4% | -17.3% | 8.4% | -3.1% | 15.4% | 2.6% | 12.2% |
| 2006 | 4.2% | -1.4% | 5.7% | 6.7% | 0.6% | 6.3% | 2.0% | -3.3% |
| 2010 | 5.4% | -11.4% | 11.3% | 10.8% | 5.9% | 0.1% | -13.9% | 11.8% |
| 2014 | 1.8% | 5.2% | 1.1% | 4.9% | 1.0% | 0.3% | -6.4% | 7.0% |
| 2018 | -0.8% | 3.4% | 7.7% | -13.5% | 13.6% | 4.3% | 1.7% | 9.1% |
| 2022 | -4.6% | ? | ? | ? | ? | ? | ? | ? |
| Avg. Return | 1.0% | 0.3% | 0.8% | 6.3% | 6.6% | 5.5% | 1.8% | 3.5% |
| Avg. Positive | 7.7% | 8.0% | 8.9% | 9.3% | 8.9% | 6.8% | 7.9% | 6.7% |
| Avg. Negative | -5.1% | -10.3% | -12.7% | -8.7% | -9.7% | -3.5% | -8.3% | -9.1% |
| % Positive | 48.0% | 58.3% | 62.5% | 83.3% | 87.5% | 87.5% | 62.5% | 79.2% |

Source: Global Financial Data, Inc., as of 11/04/2022. S&P 500 Total Return Index, 31/12/1925 – 31/03/2022.

UNITED STATES COMMENTARY



BULLISH US POLITICAL GRIDLOCK AWAITS

As always, we are politically agnostic. We prefer neither party nor any politician and assess political events for their potential economic and market impact only.

As we wrote last quarter, we think US midterms will deliver gridlock, bringing powerful market tailwinds later this year. Based on recent chatter and polling, Republicans appear poised to win control of the House of Representatives—and potentially the Senate—though it remains too early to detail the races.

Our general outlook hasn't changed: Midterms will likely bring bullish gridlock. Voters hate gridlock because politicians struggle to pass much of consequence—yet that is the exact reason equities love it. An active Congress can stir legislative uncertainty, forcing markets to grapple with new laws' unintended consequences.

Gridlock dampens politicians' ability to push through legislative changes quickly, if at all, helping uncertainty fall—which boosts risk-taking.

While many anticipate the president's party will lose congressional seats—a historical fact—few see the investment-related benefits. Politics are heavy on emotion, and voters often get caught up in it. They don't appreciate the calm gridlock brings afterward—a big reason it doesn't get priced in advance, in our view.

FEAR'S UNDERAPPRECIATED SILVER LINING

Even the correction and fear of major economic fallout bring some silver linings. Recessions tend to focus businesses on survival. Typically, before an economy enters recession, euphoria runs wild—among investors and businesses. The latter tend to overinvest and expand too aggressively. But when companies see credit and capital dry up, they zero in on what is necessary to survive. They do as much as possible with as little as possible—maximising efficiency.

We don't have a recession today, but the correction and associated fears seem to be having a scaled-down version of that effect. Businesses fearing a downturn are likely to be mindful of bloat and seek ways to boost efficiency. For example, today many talk of labour shortages and costs hampering businesses. But companies are creative. A recent Bloomberg article found businesses big and small have been renting robots relatively cheaply to automate certain tasks—one way to improve productivity over the longer term and mitigate costs now.^{xxi} This fear feature is one beneficial aspect of corrections, keeping euphoria and excess at bay. Then too, companies seeking efficiency gains often invest in new technology—likely a boost for the many Tech and Tech-like companies emphasised in client portfolios.

THE STATE OF SENTIMENT TODAY

Based on the latest sentiment gauges, few fathom these positives. Several surveys plummeted after the Russian invasion. In the US, the University of Michigan's consumer sentiment index dropped to 59.4—near a decade low—on concerns about rising fuel prices.^{xxii} The Conference Board's March Consumer Confidence Survey found similar worries about higher costs and concerns over the war.^{xxiii} In Europe, Sentix's Investor Confidence Index for the eurozone plunged in March and April, with analysts saying a war-driven recession looms.^{xxiv} The European Commission's March Economic Sentiment Indicator suffered due to plummeting consumer confidence across the EU.^{xxv}

Dour moods are common among business leaders and market observers, too. A Goldman Sachs survey of insurance executives found 60% expect a US recession in the next two to three years.^{xxvi} Bank of America's April Global Fund Manager Survey showed record-low global growth expectations.^{xxvii}

With sentiment low, economic and market data should more easily deliver a positive surprise. Citigroup's US and Developed World Economic Surprise Indexes—which measure data releases against expectations—suggest they already are, with readings at historically high levels (outside of the immediate reopening pop).^{xxviii} This is how correction recoveries normally look, which may partly explain the bounce off of 8 March's low.

xxi "Robot Subscription Services Let Companies Automate on the Cheap," Thomas Black, Bloomberg, 31/03/2022.

xxii "Inflation: Top Consumer Issue, Top Policy Challenge," Staff, University of Michigan, 25/03/2022.

xxiii "Consumers' View of the Present Situation Brightens—but Expectations Continue to Grow More Pessimistic," Staff, The Conference Board, 29/03/2022.

xxiv "The Recession Begins," Staff, Sentix, 03/04/2022.

xxv "March 2022: Economic Sentiment Takes a Hit in the EU and the Euro Area, Employment Expectations Ease," Staff, European Commission, 30/03/2022.

xxvi "Goldman Poll Finds Insurers With \$13 Trillion Expect a U.S. Recession," Max Reyes, Bloomberg, 04/04/2022.

xxvii "BofA Says Fund Managers Most Gloomy on Record on Recession Woes," Nikos Chrysoloras, Bloomberg, 12/04/2022.

xxviii Source: FactSet, as of 15/04/2022.

Beyond sentiment gauges—which are never a complete view—our market views aren't hard to find. They litter the financial press, alternating between war fear and inflation worries. The gap between positive fundamentals and weak sentiment seems quite wide, which implies positive surprise should be easier to attain looking forward. In our view, that should fuel this bull market's next leg higher.

PROPOSED SEC CLIMATE DISCLOSURES' INVESTMENT IMPLICATIONS

On 21 March, the SEC proposed its first mandatory climate-related disclosure rules for US-listed companies. There is currently a comment period ending 20 May, after which the SEC may revise its proposal, but we don't think feedback will yield meaningful change. During the public consultation phase, 75% of 600 responses favoured the amendments and the Biden administration is pushing for them. This proposal is garnering a lot of attention—and the added disclosure brings valuable transparency, along with some potential unintended consequences. We support increased climate-related disclosure, however, we don't see the rules as hugely significant for markets.

// INCREASED DISCLOSURE IS POSITIVE, BUT IT IS WORTH CONSIDERING POTENTIAL UNINTENDED CONSEQUENCES. //

Some companies have issued climate-related disclosures since 2010, when the SEC issued guidance requiring it if the business deemed it a material risk. However, the SEC didn't significantly enforce this guidance until President Joe Biden's election brought the establishment of the SEC's new Climate and ESG (Environmental, Social and Governance) Taskforce. The proposed rules aim to create a more comprehensive, consistent reporting framework across companies and sectors, requiring regular disclosures on 10-Ks, as investors and asset managers have demanded higher quality and comparable ESG data.

The proposal would require US-listed companies, including foreign registrants, to disclose information in five main tranches:

- 1) Climate-related effects on business and risks to their outlook
- 2) How their corporate governance deals with these effects and risks
- 3) Their greenhouse gas emissions, both direct and indirect
- 4) Financial impacts from climate change
- 5) Information on any carbon reduction initiatives they may have

While observers mostly anticipated the required disclosures, the inclusion of broader so-called Scope 3 emissions—how much greenhouse gases companies emit indirectly—exceeded some expectations. Many expected the SEC's proposal to mandate reporting on Scope 1 (direct combustion) and Scope 2 (purchased power and heat) emissions. Indeed, the rules would require third-party verification of these (with exemptions for small companies). Somewhat surprisingly, though, the SEC also included Scope 3 (supply chains and end products) emission disclosures.

However, the impact from including Scope 3 emissions in disclosures seems limited. They don't require verification due to the difficulty measuring indirect downstream emissions. Also, reporting is discretionary, relevant only "where material"—which the rule doesn't define—and if a company has set Scope 3 reduction targets. We think requiring Scope 3 data may create winners and losers among sectors where companies have set goals—notably in Consumer Staples and Consumer Discretionary. Additionally, as written, the rules could discourage companies and sectors from setting further Scope 3 targets.

As previously noted, we welcome increased climate-related disclosure, but implementing the SEC's rule wouldn't be a huge game changer or sudden shock. Large institutional investors already have access to most companies' climate data through third-party provider estimates. Moreover, the new rule would just bring the US in line with other international carbon emissions disclosures already in effect—or planned to be soon. The SEC seems like it is formalising what is mostly a de facto practice among large multinational companies and institutional investors already.

Additionally, businesses have time to discover and address any potential reporting challenges. If the proposed rules took effect in December, the largest public companies (\$700 million-plus in market cap) wouldn't start reporting until 2024 and the smallest (less than \$75 million) in 2026. Then, too, depending on 2024 elections, the next administration could reverse current plans.

However, we see the potential for unintended consequences down the road. While we recognise investor demand for climate and other ESG-related disclosures to expose greenwashing—firms making unsubstantiated de-carbonisation claims—they aren't costless. If the rules are implemented in a strict form, compliance costs could create significant hurdles for small and mid-cap companies, possibly discouraging smaller private businesses from going public, similar to Sarbanes-Oxley's strict executive certifications on accounting accuracy. Mandatory climate disclosures could also drive companies with high carbon emissions to remain private—or public ones to delist. Rather than deal with potential reputational damage, some might seek to avoid the spotlight.

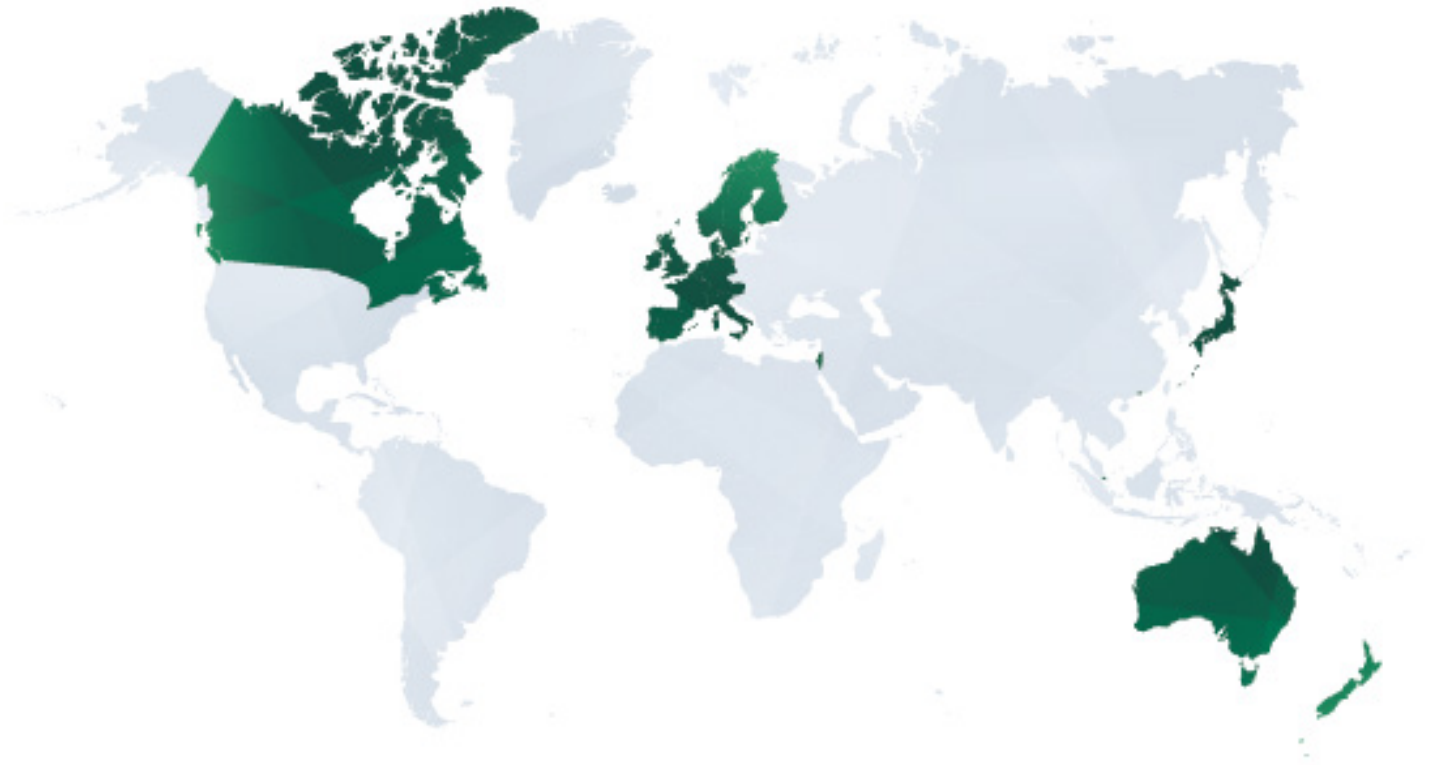
For the Energy sector, some suggest disclosures may make it harder for private oil and gas companies (about 30% of US shale production) to access public funding, potentially leading to underinvestment. We think this risk is overstated. Fossil fuel elimination is far from a dominant goal in the investing world. For example, since 2015's Paris Climate Accord, bank lending to fossil fuel projects has grown.^{xxix} Besides, if Energy share or debt prices fell, it is highly likely that value investors—seeing potential profits—would swoop in.

Overall, we think oil and gas pricing—based on supply and demand trends—likely have a far larger effect on investment and supply. That, in our view, explains underinvestment in recent years, too. After nearly a decade of underperformance from vast oversupply signaled by 2014's oil price collapse, companies understandably reined in investment. Similarly, management and long-term investors, stung by poor profits and returns over that stretch, argue for a cautious attitude toward investment to avoid overshooting again.

Increased disclosure is positive, but it is worth considering potential unintended consequences. In our view, though, none look very extreme. The case for a supply shock driven by investors recoiling from high emitters is slim. Nor are disclosure costs (and any deferred activity from them) that big for most firms. Moreover, given the attention on these issues and availability of emissions data today, while there may be some surprises at the margin, they aren't likely to greatly surpass expectations. As climate disclosures stand currently, while unintended consequences from them may present risks and are worth being aware of, if adopted, we don't think they will have much market-related impact over the next 12 to 18 months.

xxix "World's Top Banks Pumped \$742 Bln Into Fossil Fuels in 2021 - Report," Simon Jessop, Reuters, 30/03/2022.

GLOBAL DEVELOPED EX-US **COMMENTARY**



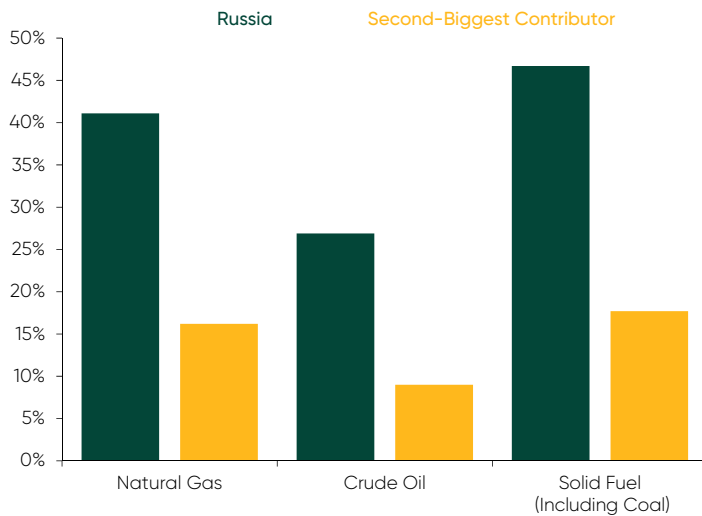
EUROPE'S ENERGY SITUATION

Entering 2022, Europe had spent about half a year dealing with spiking electricity prices tied to a lack of wind and solar generation and reports of restrained natural gas flows from Russia. That forced utilities to turn to oil just as China's banning Aussie coal imports had many Chinese utilities doing the same. Then came the Russia/Ukraine conflict, which added to worries, leading many observers to anticipate an energy-price driven recession. But global oil supply and demand drivers, along with the EU's political realities, suggest that dire economic projection is premature, in our view.

The European Union (EU) imports most of its fossil fuels. Its 2019 dependency rate (the extent to which an economy depends on imports to meet its energy needs) was 61%—with Russia a key supplier.^{xxx} (Exhibit 19, next page)

xxx Source: Eurostat, as of 26/04/2022. "Where Does Our Energy Come From?"

EXHIBIT 19: THE EU'S RELIANCE ON RUSSIAN ENERGY

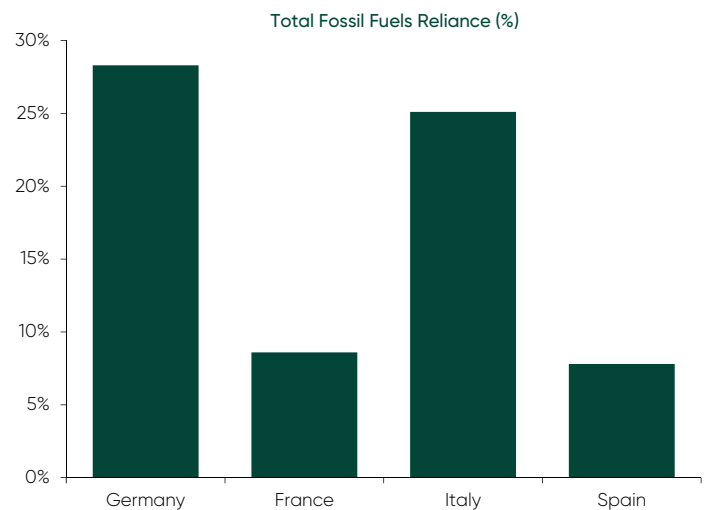


Source: Eurostat, as of 25/04/2022. "From Where Do We Import Energy?" Data are as of 2019. Note: Second-biggest contributors were Norway (natural gas), Iraq (crude oil) and the US (solid fuel).

The EU doesn't have easy ways of replacing Russian supply in the short term, as no new trading partners can step in right away to cover the shortfall. The EU is also increasingly reliant on wind and solar, which are intermittent—the lack of stable production can occasionally spike demand for replacement sources, as it did last year. Regardless, new plants would take years to bring online. Domestic energy production faces other constraints, too—Germany, for example, is set to close its three remaining nuclear plants by yearend as part of its long-running phasing out of nuclear power.

We can see a scenario in which a broad EU ban of Russian energy or Russia cutting Europe off drives an energy shortage—sending prices even higher and forcing consumers to reduce spending in certain areas. Such scenarios would likely be a broad negative for Europe, but the extent is likely to be more discreet, as not every EU nation has the same reliance on Russian energy. (Exhibit 20)

EXHIBIT 20: RUSSIAN IMPORTS' SHARE OF TOTAL FOSSIL FUEL SUPPLY FOR MAJOR EUROZONE NATIONS IN 2020



Source: IEA, as of 25/04/2022. "Reliance on Russian Fossil Fuels Data Explorer."

Among the eurozone's four largest economies, Germany and Italy are much more dependent on Russian fossil fuels than France or Spain—suggesting Russia doesn't have overwhelming influence on every European nation. That also suggests the possibility of new channels of energy opening up in time.

PERSPECTIVE ON TOUGH SANCTION TALK

While harsh talk about bans of Russian energy make headlines, the EU hasn't backed it with harsh action at the time of writing. While proposals regarding ending purchases of Russian crude oil by the end of 2022 are circulating, the EU hasn't banned oil and gas imports from Russia or sanctioned key companies in the oil trade. Additionally, these proposals are focused on crude oil, while gas seems a much bigger hurdle for the EU at this time. However, the EU did ban Russian coal imports, but this is a mostly symbolic move, in our view. Solid fossil fuels comprise about 13% of EU's primary energy sources, well behind petroleum products (36%) and natural gas (22%).^{xxxi} European energy firms also haven't bought much coal since the Russia-Ukraine conflict began, as banks have mostly refrained from financing commodities trading with Russia. The coal ban is also scheduled to be phased in through August—a months-long process subject to change.

xxxi Ibid.

A ban on more widely used oil and natural gas is possible, but politicians seem sensitive to the economic fallout on their constituents. For example, German Foreign Minister and former leader of the environmental Greens party Annalena Baerbock said the country would end Russian oil imports by yearend, with gas to follow after that—a point Finance Minister Christian Lindner of the pro-business Free Democratic Party walked back.^{xxxii}

For its part, Russia has threatened to block exports to the EU if companies don't pay for oil and gas in rubles. It actually followed through in late April, banning gas shipments to Poland and Bulgaria. Some see this as a threat to Germany, Italy and larger EU consumers. But we think there are reasons to doubt this conclusion. For one, Poland has ample stockpiles and already planned to phase out Russian gas by yearend 2022, as a new Norway-Poland pipeline starts flowing. Bulgaria is very reliant on Russia, but it is a tiny economy. Germany, Italy and the overall EU are far bigger consumers. With oil and gas accounting for more than a third of Russia's budget, cutting these larger customers off risks the country's finances.

SANCTIONS' MIXED IMPACT

Current sanctions are causing dislocations and have weighed on Russian production to an extent. Though non-sanctioning countries have jumped on discounted Russian energy products, some face pressure to cool that buying—e.g., the US has floated a possible sanctioning of India for its increase of Russian oil imports. Yet even beyond this, anecdotal evidence suggests Russia isn't shut out from oil and gas markets. One popular workaround: tankers marked as “destination unknown,” which obscures the origin of Russia's oil. European nations are also finding other sources of energy, as high prices have incentivised overseas producers to meet European demand. Both the US and Qatar have ramped up their liquefied natural gas (LNG) exports to Europe, and European Utilities set up purchases of South African coal even before the ban on Russian coal became official.^{xxxiii}

THE BROADER ECONOMIC FALLOUT?

Crimped energy supply driving high prices isn't great for the eurozone economically, and we don't dismiss the possibility of a regional recession. But a eurozone downturn (14.4% of global GDP today) isn't automatically a major blow to the global economy.^{xxxiv} A decade ago, eurozone GDP (then about 16.5% of global GDP) contracted -0.7%, which didn't prevent world GDP from growing 2.7%.^{xxxv} During the 1997 – 1998 Asian Financial Crisis, many Asian economies contracted, including Japan, Thailand and Korea.^{xxxvi} World GDP slowed but still expanded over that stretch: from 3.9% in 1997 to 2.8% in 1998.^{xxxvii} Nearly 30 years ago, EU GDP (24.5% of global GDP) contracted -0.6%, yet world GDP still grew 1.8%.^{xxxviii}

xxxii “Germany Rules Out Immediate End to Russian Oil Imports,” Staff, BBC, 20/04/2022.

xxxiii “European, Asian coal users scramble for new sources ahead of EU Russia ban,” Nelson Banya and Sonali Paul, Reuters, 08/04/2022.

xxxiv Source: The World Bank, as of 25/04/2022. Statement based on World GDP and eurozone GDP in constant 2015 USD for 2020.

xxxv Ibid. Statement based on annual percent change in World GDP and eurozone GDP in constant 2015 USD in 2012.

xxxvi Ibid. Statement based on annual percent change in Japan, South Korea and Thailand GDP in constant 2015 USD in 1997 and 1998.

xxxvii Ibid. Statement based on annual percent change in World GDP and eurozone GDP in constant 2015 USD in 1997 and 1998.

xxxviii Source: The World Bank. Statement based on annual percent change in World GDP and European Union GDP in constant 2015 USD in 1993.

Additionally, eurozone GDP grew at a modest pace so far this year, growing 0.2% in Q1. Eurozone GDP is benefiting from a widely overlooked offset to its energy crunch: economic reopenings as governments ease COVID restrictions. Eurozone purchasing managers' indexes (PMIs)—monthly surveys that track business activity—have pointed to growth in both March and April despite the Russia-Ukraine war.^{xxxix} While PMIs capture only the breadth of growth, not the magnitude, they haven't yet indicated an emerging recession. Business appears resilient, particularly in the services sector, which drives eurozone GDP.

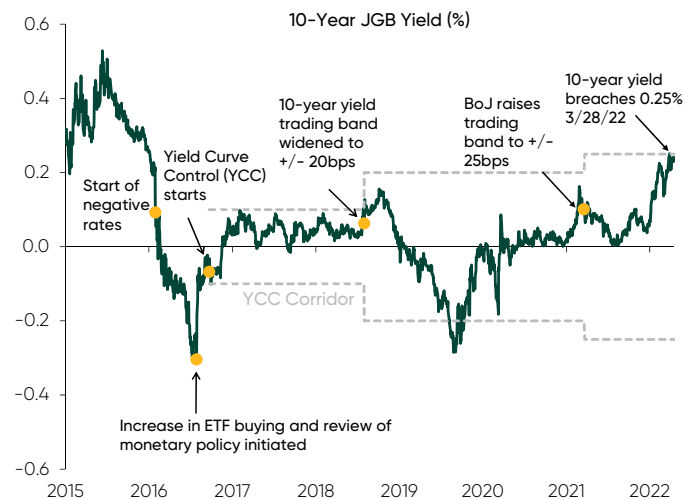
High energy costs are a headwind for the eurozone, but they are a well-known one at this point—and in our view, they lack the negative surprise power necessary to derail the bull market in developed markets. In our view, it is more likely the fear of shortages and bans fails to materialise, a positive, bullish surprise.

BANK OF JAPAN: RESULTS UNLIKELY TO DIFFER FROM DOING MORE OF THE SAME

Because the Bank of Japan (BoJ) was the first major central bank globally to deploy quantitative easing (QE) after short-term rates hit zero in late 1990s, many view it as the leading edge of global central banks' monetary policy. Its experiments with other unconventional actions like purchases of equity exchange-traded funds (ETFs), negative rates and yield-curve control (YCC) only add to the BoJ's experimental reputation. However, we think recent developments help illustrate the folly of its ways.

On 28 March, as 10-year Japanese government bond (JGB) yields breached the BoJ's 0.25% ceiling, the central bank intervened formally for the first time since 2018 and announced unlimited bond purchases under YCC—shaping the yield curve to its liking. (Exhibit 21) The BoJ's stated YCC policy is to pin 10-year JGB yields at a 0% target, plus or minus 25 basis points, with an emphasis on keeping rates below the upper limit.

EXHIBIT 21: JGB YIELDS AND BOJ EVENTS



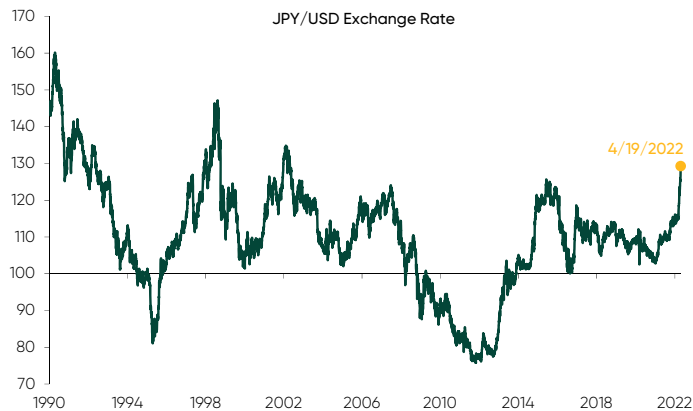
Source: FactSet, as of 20/04/2022. 10-year JGB yield, 01/01/2015 – 19/04/2022.

Last decade, amid falling global long-term rates, the BoJ employed YCC to let long-term JGB yields rise in an effort to steepen the yield curve in what amounted to stealth tapering of its QE bond purchases. Now, though, with rising global long rates pulling up JGB yields, the BoJ seems intent on pushing back. But fighting market currents in such heavy-handed fashion is causing other problems, testing the BoJ's resolve.

Namely, the BoJ's unlimited commitment to defend its yield cap is sinking the yen. As rates rise elsewhere and global money flows from relatively low-yielding JGBs to higher-yielding assets abroad, the currency has experienced another down leg, weakening from ¥124 per dollar to ¥129 currently, its weakest since 2001. (Exhibit 22, next page) This is after weakening sharply from ¥115 per dollar in early March as markets anticipated major global central bank moves. Given Japan's reliance on imported energy, the extremely weak yen is raising questions about YCC's sustainability, with many speculating the BoJ may abandon or adjust it—especially given rising energy prices tied to the Ukraine war.

xxxix Source: FactSet, as of 25/04/2022. S&P Global eurozone composite PMI for March (final) and April (flash).

EXHIBIT 22: JPY/USD WEAKEST SINCE 2001



Source: FactSet, as of 20/04/2022. JPY/USD, 01/01/1990 – 19/04/2022.

Some suggest the BoJ could shift its target to 5-year JGB yields, while others think it will widen its yield corridor to plus or minus 50 basis points, providing some relief for the yen. Whatever the case, we think this illustrates the downside of BoJ meddling. As it attempts to control one variable—10-year JGB yields—that is causing second-order effects with negative unintended consequences.

While many—including the BoJ—fret higher rates' effects, believing they "tighten" monetary policy and dampen economic activity, we think a steeper yield curve from letting long-term rates rise would boost Japan's moribund economy. Because banks borrow short and lend long, the yield curve approximates their profit margins on new loans. The steeper the curve, the more profitable lending is, expanding credit economy-wide.

In our view, depressing long-term rates, either through QE or YCC, doesn't stimulate. Flattening the yield curve constricts monetary policy. We think this is a big reason why the BoJ has consistently failed to hit its inflation target since BoJ head Haruhiko Kuroda launched "extraordinary" monetary easing in 2013, save for occasional sales tax hikes and energy spikes.

Also consider the BoJ's equity-buying programme under QE, which has gone further than others. After nine years, it owns 80% of Japanese ETFs, about 7% of Japan's \$6 trillion equity market.^{x1} But these purchases didn't yield the intended benefits of stimulating the economy through increased business investment. Nor did they boost Japanese equities. While research suggests BoJ ETF buying induced companies to issue more shares, they largely seem to have pocketed the proceeds versus investing in expansion. Outside rising global energy prices the weak yen turbocharges, Japan remains mired in deflationary stasis.

Instead of boosting markets, the BoJ's equity holdings are weighing on them. Although the central bank ceased its ETF purchases a year ago, as the country's largest equity owner—exceeding Japan's Government Pension Investment Fund, the world's largest pension—it is stuck. As equities don't mature, it can't unwind its positions without risking a selloff. The uncertainty about what the BoJ will do seems to be clouding normal market functioning. When investors must contend with the central bank's intentions along with companies' prospects, it could impair markets' ability to allocate capital efficiently.

We don't think this is the biggest anchor weighing on Japanese markets—labour reforms and other structural adjustments to increase competitiveness would do more to unlock Japan's economic potential, in our view. But the ongoing pursuit of monetary salves in lieu of tackling problems plaguing the economy directly points to why we don't expect Japanese equities—outside of their globally competitive, outward-facing multinational exporters—to lead the world any time soon. Japan's multi-decade experimentation in monetary policy aren't anything to admire or emulate, in our view. We see them more as a cautionary tale.

x1 "A \$430 Billion Habit Got Japan's Central Bank Hooked on ETFs," Min Jeong Lee and Toru Fujioka, Bloomberg, 07/04/2022.

EMERGING MARKETS COMMENTARY



CHINESE EQUITY VOLATILITY

Chinese equities had a volatile start to the year, falling -14.2% in Q1, with March featuring both a sharp slide on delisting concerns and the lockdown in Shenzhen—a major manufacturing hub—and fast rebound as the government announced measures addressing many of the issues that have plagued sentiment over the past year.^{xli} But the recovery seemed to stall out later in the month as Omicron ravaged the nation and lockdowns spread to Shanghai and several other major cities in late March and early April. The restrictions weighed on March economic data, and some analysts project a GDP contraction in Q2 due to their supply-chain impacts. Yet as equities look further ahead, falling uncertainty should help aid a recovery—enabled in part by the measures announced in March.

As written in past reviews, we think Chinese equities' bear market stems more from fears of draconian Tech regulation than reality. The most stringent measures announced over the past year targeted isolated industries—namely private tutoring—while measures targeting Internet companies were comparatively minor. Yet the Chinese Communist Party's rhetoric about "common prosperity" and reining in private companies set investors on edge, bracing for worse to come. Parallel to this, the US's Holding Foreign Companies Accountable Act threatened to delist Chinese companies from US exchanges if they didn't comply with American audit rules. These rules require inspection by auditors approved by the Public Companies Accounting Oversight Board (PCAOB), which would have been illegal under Chinese law.

^{xli} Source: FactSet, as of 25/04/2022. MSCI China Index return in USD with net dividends, 31/12/2021 – 31/03/2022.

While delisting shouldn't much affect equity prices, as Americans can access shares of Mainland companies traded in Hong Kong, it nonetheless weighed on sentiment. So did the troubles at China Evergrande and several other property developers, which many feared would ripple through the broader economy as real estate investment dried up.

This was the backdrop heading into March, when the US put the first round of Chinese companies on watch for potential delisting, starting a three-year countdown. Then came news of Shenzhen's lockdown, which led to a 13% decline in the MSCI China Index on 14 March and 15 March.^{xlii} The following day, The Chinese State Council's Financial Stability and Development Committee (FSDC) held a special meeting to address these and many other concerns. On the delisting front, Chinese policymakers backed letting Mainland companies continue listing overseas, stating the US and China maintain a dialogue on this matter, have achieved progress and would unveil plans in due course. Days later, several outlets reported that China's securities regulators reached a compromise with the SEC and PCAOB to allow most US-listed Chinese companies to open their books to US-approved auditors, with only a handful delisting in order to safeguard information Chinese officials deemed sensitive to security and to comply with Chinese data privacy rules. While this isn't final—and could be subject to Congressional approval—it is a step toward resolution. Notably, when ride hailing app Didi Global decided in mid-April to delist from the New York Stock Exchange, Chinese regulators stressed that the situation was separate from the ongoing audit discussions and didn't affect other companies' future. In our view, there is strong potential for falling uncertainty on this front to help foment a recovery in Chinese equities.

Elsewhere in the FSDC's statement, officials said Tech regulation should be transparent, predictable and completed as soon as possible, indicating the associated uncertainty should end soon. They also reiterated their focus on managing risks in the property sector and announced plans to facilitate a new development model that wouldn't rely on local government financing—another positive step.

Lastly, they reiterated monetary and fiscal policy would remain accommodative, with an aim of keeping economic and loan growth steady. Chinese equities rallied 21.5% in two days on the announcements, erasing that sharp two-day slide prior.^{xliii}

However, the rally lost momentum as the new lockdowns forced markets to price in the likely hit to economic activity in the near term. Dashed expectations for stimulus also seemed to hurt sentiment, most notably when the People's Bank of China (PBOC) cut reserve requirement by just 25 basis points (versus expectations for 50 bps) and refrained from cutting rates. With the National Party Congress looming later this year—and President Xi Jinping reportedly seeking an unprecedented third term to cement himself as president for life—many hoped policymakers would adopt a “whatever it takes” approach to ensuring GDP growth matched the official 5.5% full year target. The PBOC's move seemingly cut against that, hitting sentiment.

In our view, that reaction may be overwrought. Perhaps in response to the disappointment, the PBOC and State Administration of Foreign Exchange announced a comprehensive guideline on increasing support to the real economy. The guidelines urge financial institutions to accelerate credit extensions and increase lending to property developers as relax fiscal restrictions on local government financing, among other provisions. In the property sector, they would enhance credit support, including customising down payment requirements and mortgage rates depending on local conditions, ensuring credit availability for high-quality development projects and satisfying construction companies' working capital needs. On the monetary policy front, new re-lending programmes will boost funding for technological innovation and elder care, while a transport-focused re-lending programme is designed to ease supply chain issues. Officials also encouraged financial institutions to support local government investment by purchasing bonds and meeting reasonable funding needs for Local Government Financing Vehicles (LGFVs)—signaling a potential relaxation of restrictions on LGFV financing—important, as officials try to boost growth.

xlii Ibid. MSCI China Index return in USD with net dividends, 14/03/2021 – 15/03/2022.

xliii Ibid. MSCI China Index return in USD with net dividends, 15/03/2021 – 17/03/2022.

Lastly, the guidelines named select industries hit hard by anti-pandemic measures, as well as food security and cleaner usage of coal, as “key areas of credit support,” implying targeted stimulus looking forward.

Overall, while monetary easing looks unlikely to accelerate meaningfully, targeted support looks set to continue. Yet it may not show up in economic data immediately. The new support guidelines appear focused on improving end demand, which is frozen by lockdowns in much of the country. Yet they should bear fruit as more cities reopen, and additional measures as the NPC approaches wouldn't surprise. Also noteworthy, March's economic data showed an acceleration in infrastructure investment, suggesting the recent funding push is showing signs of working.

We think GDP growth likely will struggle to hit the government's target, as Q1's 4.8% y/y mostly pre-lockdown figure suggests.^{xliv} This—plus monetary policy disappointments—have clearly weighed on returns lately. Yet we also don't think massive upside surprise in economic growth is necessary for Chinese equities to recover. COVID lockdowns' impact is likely already reflected in equity prices given the sideways chop over the past month. Uncertainty over when lockdowns will ease might weigh on sentiment for a while longer, but eventually, equities should price in the lifting restrictions and accompanying improving economic drivers.

RUSSIA RECLASSIFICATION

The deluge of Western sanctions against Russia hit markets in many ways—most of them indirectly, via the economic dislocations caused by financial and economic embargoes.

But there was also a direct hit, courtesy of index provider MSCI's decision to reclassify Russia as “standalone” and remove it from all subsets of its Emerging Markets and All Country World indexes. While reclassifications typically don't have much impact on returns, this one's unique speed and operational quirks made it more disruptive, making it worth a closer look.

Investors punished Russian equities in the run-up to and immediate aftermath of President Vladimir Putin's invasion of Ukraine, apparently pre-pricing the high likelihood of stiff sanctions packing a big local economic punch. In response to Russian equities' sharp negativity, the Moscow Exchange closed on Monday, 28 February. At the time, officials said the exchange would be closed for at least a week, but there was no firm end date. The Nasdaq and New York Stock Exchange also suspended trading of US-listed Russian companies that day, citing regulatory concerns. US-listed Russian ETFs could still trade and took a pounding—recalling US-listed Greek ETFs' plunge while the Athex was shut for six weeks in summer 2015—as did London-listed Russian companies. The combination of the closures and negativity led several analysts and an MSCI executive to deem the country uninvestable, setting expectations for a reclassification.

As Exhibit 23 shows, there is normally several weeks' or months' worth of lag between when MSCI announces a reclassification to standalone status and implementation of the change. The time—and widely publicised announcement—limits market impact. But in Russia's case, there were mere days. The announcement came on Wednesday 2 March and became official on Wednesday 9 March.

xliv Source: China National Bureau of Statistics, as of 22/04/2022.

EXHIBIT 23: DURATION BETWEEN ANNOUNCEMENT AND EFFECTIVE DATE OF PAST MSCI MOVES TO STANDALONE

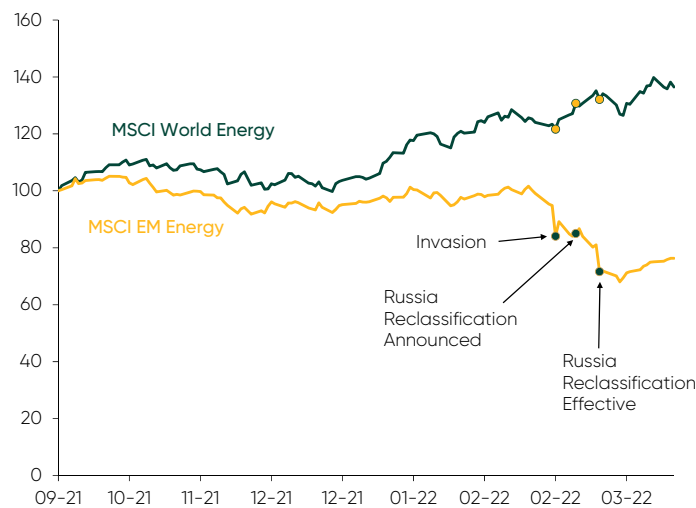
| Country Index | Market Reclassification | Announcement | Effective | Duration (Months) |
|-----------------------------|-------------------------------------|--------------|------------|-------------------|
| MSCI Russia | From Emerging Markets to Standalone | 3/2/2022 | 3/9/2022 | 0.2 |
| MSCI Argentina | From Emerging Markets to Standalone | 6/24/2021 | 11/30/2021 | 5.2 |
| MSCI Lebanon | From Frontier Markets to Standalone | 12/17/2020 | 2/26/2021 | 2.3 |
| MSCI Bulgaria | From Frontier Markets to Standalone | 6/30/2016 | 8/31/2016 | 2 |
| MSCI Ukraine | From Frontier Markets to Standalone | 5/28/2015 | 8/31/2015 | 3.1 |
| MSCI Trinidad & Tobago | From Frontier Markets to Standalone | 2/10/2011 | 5/31/2011 | 3.7 |
| MSCI Venezuela | From Emerging Markets to Standalone | 4/25/2006 | 5/31/2006 | 1.2 |
| Average (Ex. Russia) | | | | 2.9 |

Source: MSCI, as of 19/04/2022.

Complicating matters, MSCI said it would remove Russia at an effective price of \$0. Normally, reclassified countries are moved at the current market value and share price, which limits the immediate impact on the index's returns. However, by dropping all Russian stocks to \$0 before removing them, it incorporated a steep decline into index returns.

Russia was only 3.1% of the MSCI Emerging Markets (EM) Index's market capitalisation when 2022 began, so zeroing out Russian companies had a limited impact on its overall returns.^{xlv} However, the impact on Energy sector returns was striking. At 2021's end, Russia accounted for over 30% of the MSCI EM Energy sector's market capitalisation. Normally, EM and advanced-economy Energy equities move together. Their correlation coefficient over the past 20 years is a strong and positive 0.77.^{xlvi} This is logical for Energy securities, considering Energy firms' earnings are tied to oil prices. Yet from the invasion through the reclassification's effective date, EM and MSCI World Energy equities diverged sharply—culminating in EM Energy's steep drop on the reclassification effective date. (Exhibit 24)

EXHIBIT 24: EM AND DEVELOPED WORLD ENERGY EQUITIES



Source: FactSet, as of 18/04/2022. MSCI EM Energy and MSCI World Energy Index returns in USD with net dividends, 30/09/2021 – 31/03/2022. Indexed to 100 at 30/09/2021.

xlv Source: FactSet, as of 19/04/2022.

xlvi Source: FactSet, as of 18/04/2022. Correlation between weekly price returns in USD for the MSCI EM Energy and MSCI World Energy Indexes, 12/04/2002 – 14/04/2022.

xlvii Ibid. MSCI Brazil returns in USD with net dividends, 01/01/2022 – 31/03/2022.

What comes next isn't clear. Unlike other standalone indexes, the MSCI Russia remains set at \$0. The Moscow Exchange reopened in late March, but on a limited basis, with short-selling and all sales by foreign stockholders banned. Russian companies listed in London have been suspended from trading since 3 March, and the Nasdaq and NYSE suspensions remain in force. We will continue to monitor this ongoing situation.

BRAZIL'S SENTIMENT DRIVEN RALLY

Brazil re-entered recession in 2021's second half. Yet Brazilian equities were EM's best performer in Q1, rising 35.9%.^{xlvii} Like EM's broader downturn, we think this rally stems mostly from sentiment. In 2021's second half, Brazilian equities sank on economic and political fears as recession set in and former President Luiz Inácio "Lula" da Silva dominated polling for this year's election, sparking worries of a leftist turn. But those fears appeared to ease in January as Chile's leftist president elect took a more moderate turn, selecting a centrist cabinet and finance minister. Pundits have long viewed Chile's election as a precursor for Brazil's, hence the relief once the new administration started showing signs of not being as extreme as feared.

KOREA'S ELECTION

Another major development in EM was Yoon Seok-yeol of the center-right People Power Party (PPP) narrowly winning Korea's 9 March presidential election, edging out the ruling Democratic Party's Lee Jae-Myung. President-elect Yoon is widely seen as the more market-friendly of the two, as his campaign platform featured deregulation and a focus on broadening Korea's Tech sector, while Lee focused on measures like universal basic income. While we agree Korean markets would likely benefit from a streamlining of regulations, we don't think there is a high likelihood of change in the near term. The PPP has a minority in the National Assembly, which is likely to limit legislative action until 2024's general election at least. Accordingly, we don't view the election as a major policy catalyst or market driver in the near term. While Korean equities did spike relative to EM in the week following the vote, this seems like part of the broader, Tech-led bounce from this year's early weakness than a move motivated by local politics.^{xlviii}

xlviii Source: FactSet, as of 30/03/2022. MSCI Korea returns in USD with net dividends, 08/03/2022 – 30/03/2022.

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