

Portfolio and Market Review

1st Quarter 2022



Market Commentary

By Daniel Rawlinson

Schwarzenegger By Summer

If you are anything like me, 2022 was the year you had been waiting for. After two years of uncertainty, caused by the pandemic, lockdowns, and multiple false starts, it finally looked like things were finally going to return to normal.

The return to normality would be a catalyst for big changes for me, healthy eating, back to the gym, by summer I'd be on the beach looking like Schwarzenegger. I even broke my rule of never making new year's resolutions. I never follow them for more than a few days, especially anything related to chocolate. I see, I eat, it is that simple. But this year, I thought, given the last two years, 2022 would be the year! Well, unfortunately, despite the burst of motivation and the rationale that investing in a spin bike would make me use it, the healthy lifestyle has yet to materialise.

The financial markets, much like my plans to obtain a physique like Schwarzenegger, have also faced challenges over the first quarter. While the pandemic and its impact on the economy continued to wane as the year began, increasing inflationary pressures, and the prospects of increasing interest rates, weighed on investors' minds. In the background were growing tensions in Eastern Europe, as Russian troops amassed on Ukraine's borders.

Geopolitical Risk: Ukraine

Throughout January, Russia-Ukraine tensions contributed to a decline in stock markets in both Europe and the US. While most hoped the troop build-up was just another case of sabre-rattling on the part of President Putin, intelligence agencies warned that a full-scale invasion was imminent. Despite the annexation of Crimea in 2014 and Russia's support of separatist forces in eastern Ukraine, together with all manner of Russian-linked aggression over the years — attacks on dissidents with radioactive isotopes and nerve agents in the UK, the downing of Malaysia Airlines Flight 17 and support of the Assad regime in Syria — to most, a full-scale war in Europe was unthinkable.

On 24th February, Russia did invade. The reason? No one truly knows, President Putin would have us believe that, among many objectives, it is to de-nazify the country, to protect Russian speaking civilians, and prevent NATO expansion. Whatever the reason, the belief that the troops would be welcomed with open arms and the "Special Military Operation" would be over within days, as we know, has not been the case. Ukrainian forces, armed with anti-aircraft and anti-tank missiles have inflicted heavy losses on the invaders.

Unsurprisingly, the invasion caused global stock markets to tumble. On the day of the invasion the FTSE 100 index fell 3.9% and the STOXX 600 index, which represents 600 firms of varying sizes across 17 European countries, dropped 3.2%. US stocks fared better, while initially seeing losses, the S&P 500, finished the day with a 1.5% gain. The losses were short lived. It



took the FTSE 100 just over a month to return to its pre-invasion level, the STOXX 600 managed it in twenty-two days. The S&P 500 was 8.8% up a full month after the invasion.

Whenever markets drop, investors understandably worry, but we have seen the impact of wars on stock markets before and know that, from a historical perspective, their impact is short-lived. Let us consider the impact that several conflicts have had on the world's largest equity market, the US.

In the six months after war broke out in Europe in 1914, the Dow Jones fell more than 30%. The impact of the war and a reduction of liquidity in the markets resulted in the stock market being closed in July 1914. The markets reopened in January 1915, and over that year the Dow Jones rose 88%. Over the entire period of the war, the Dow Jones gained 43%, or about 8.7% annually.

In 1939, the first day that markets opened for trading following the invasion of Poland and subsequent declaration of war, the Dow Jones gained 10%. When the US was subsequently attacked at Pearl Harbour two years later, the Dow Jones dropped 2.9% but regained those losses within a month. From the start of the war in 1939, to its finish in 1945, the Dow Jones was up 50%.¹

Lastly, a slightly more recent conflict, the 2003 invasion of Iraq. In this instance, the Dow Jones rose 3% the day after the invasion. A year later it was 6.5% higher. Of course, the past is no guarantee of how events will play out in the future, but a bit of perspective can help calm the nerves. Interestingly, although wars have caused markets to drop, historically, it has been in peacetime that the greatest declines in financial markets have occurred.

1987 Black Monday crash Pinancial crisis 1929 Stock market crash Pot-com bubble Coronavirus crash

Biggest Stock Market Crashes in History

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Source: Betafolio (2022)

 $^{^{1}}$ Fortune (2020).



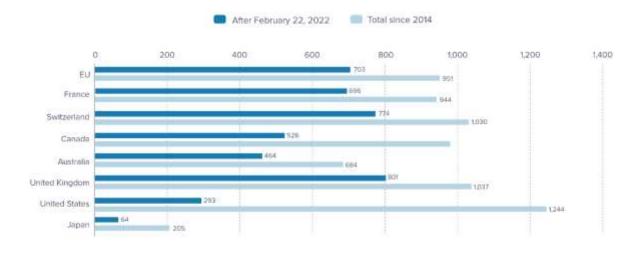
Economic War

The political response faced by Russia, with few exceptions, has been universal condemnation. At the UN General Assembly 141 countries voted to condemn the war, and at the UN Security Council, only Russia voted against a resolution intended to end the military offensive in Ukraine.

Western nations, short of deploying troops or enforcing a no-fly zone, which would undoubtedly escalate the situation and could ultimately result in a nuclear confrontation, are supporting Ukraine by supplying weapons systems, logistics and intelligence. Instead, economic war has been declared, in the form of a wide range of economic sanctions, designed to reduce Russia's ability to fund the war and punish those individuals in power or positions of influence within the regime.

This is not the first time that Russia has attracted sanctions in response to acts of aggression. Following the illegal annexation of Crimea in 2014, Western nations imposed a raft of sanctions. Although the exact impact of these sanctions is debated, since 2014 the global economy has grown on average 2.3% per year while Russia's economy has only grown 0.3%. The Atlantic Council, a US think tank published a report in May 2021, estimating that sanctions had "slashed foreign credits and foreign direct investment, and may have reduced Russia's economic growth by 2.5% to 3% a year; that is, about \$50 billion per year"².

Number of Sanctions Imposed on Russia since 2014 and after 22nd February 2022³



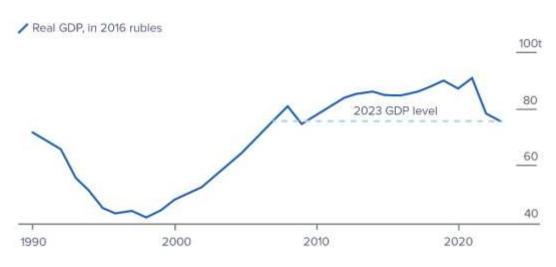
Source: Castelllum.AI (2022)

² Atlantic Council (2021).

³ As of 16/03/2022.



Now Russia's invasion of Ukraine has resulted in more sanctions. The response by the international community has been unprecedented in terms of the breadth of sanctions applied and the multilateral coordination. Undoubtedly this will have a dramatic impact on the Russian economy. The Institute of International Finance estimates that sanctions will erase 15 years of economic growth by the end of 2023⁴ and expects the Russian economy to contract by 15% this year.



Putin's War - 15 Years of Russian Economic Growth Lost

Source: Institute of International Finance (2022)

In Russia, analysts polled by the Central Bank of Russia forecast GDP to drop 8% in 2022. The Treasury Committee's report on *Defeating Putin: The development, implementation and impact of economic sanctions on Russia* made similar predictions, with expert witnesses predicting a contraction in the Russian economy of between 5% and 10%. The estimates of the impact of sanctions vary and it's impossible to predict with accuracy, but it's clear the Russian economy and ordinary Russians are going to face economic hardship because of the actions of President Putin.

The impact of sanctions on Russia's economy, however, is small compared to the potential impact on Ukraine's economy. The International Monetary Fund (IMF) estimates that Ukraine's economy could shrink by 35% this year, if the Russian invasion becomes a protracted conflict.⁷ If the fighting were to end quickly and financial aid provided then this decline may be limited to 10%. Oxford Economics, makes an even more dire prediction, suggesting that a 60% decline in economic output is possible this year, given the massive infrastructure damage and disruption that has been caused.⁸

⁴ Institute of International Finance (2022).

⁵ Bank of Russia (2022).

⁶ House of Commons Treasury Committee (2022).

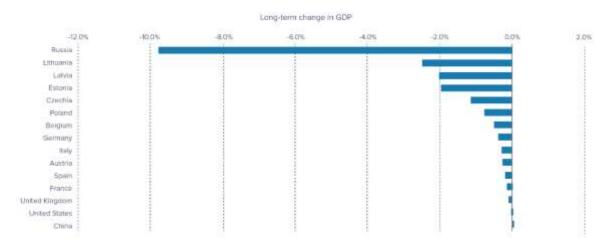
⁷ International Monetary Fund (2022).

⁸ Oxford Economics (2022).



Regrettably, the impact of sanctions applied to Russia will also affect other countries and will be more acutely felt by the Baltic states of Estonia, Latvia, and Lithuania than those in Western Europe and the United States. However, the Baltic states may see this as a price worth paying to deter further aggression against the former Soviet Union states.

Estimated Long-term Change in Annual GDP due to Western Sanctions

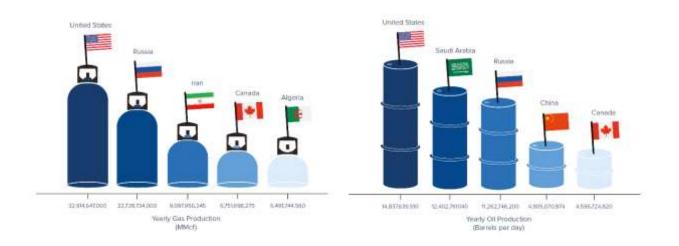


Source: Kiel Institute for the World Economy (2022)



The Elephant in the... Gas?

Oil and gas have been central to the Russian economy for decades. In 2021, revenue from oil and gas made up 45% of Russia's federal budget. Therefore, an obvious target to reduce Russia's ability to finance hostilities is to apply sanctions on oil and gas exports. However, Russia is an "energy superpower" and with the world's largest gas reserves it is the second-largest producer after the US. Russia also has the eighth-largest reserves of oil and is the third-largest producer after the US and Saudi Arabia.



Source: Worldometer (2022)

While the level and coordination of sanctions have been unprecedented, there has been divergence amongst countries when it comes to sanctions on energy products. In March, the US banned all imports of Russian energy products, while the UK announced it would phase out imports by the end of 2022, allowing time for alternative supplies to be sourced. The EU announced plans to cut Russian gas imports by two-thirds by the end of the year.

Why the difference in response? Essentially, reliance on Russian energy varies between the US, UK, and EU. The US, for example, has not imported Russian gas since 2019, in the UK only 3% of gas imports are from Russia, while in the EU it makes up 41.1%¹⁰. The EU also imports 36.5% of its oil products from Russia, while the US and the UK import 8% and 6% respectively. Estimates vary, but the economic impact for the EU of an outright and immediate ban on Russian energy products would be substantial.¹¹

However, the impact on the member states would not be uniform and this is reflected in their position on sanctions. Germany's economy is particularly vulnerable, receiving 55% of its gas and 35% of its oil from Russia. Vice-chancellor Robert Habeck warned a ban on Russian energy products would endanger "social peace" in the country and pose a "real danger of energy undersupply in certain sectors." France is open to imposing sanctions but is less exposed,

⁹ International Energy Agency (2022).

¹⁰ Eurostat (2022).

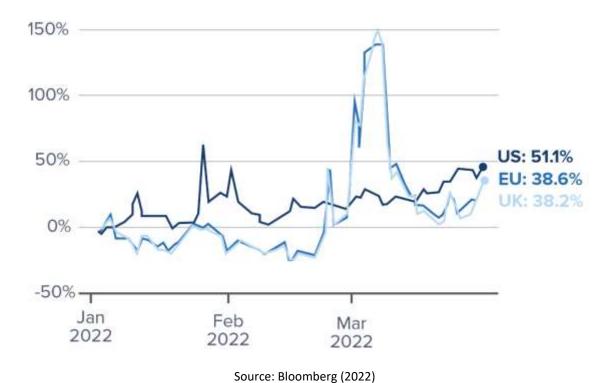
¹¹ Euronews (2022).



importing 17% of its gas and 7% of its oil from Russia. Poland receives 61.5% of its oil from Russia and 55% of its gas. Despite this high reliance on Russia for energy, Poland believes that the economic pain of increased energy prices is a price worth paying, "Billions are flowing to Russia via Nord Stream 1," a Polish diplomat said, "These are billions for which today Ukrainians are paying with their own blood." 13

The impact of supply-side bottlenecks, following the pandemic, had already put upward pressure on energy prices. The outbreak of the Russia-Ukraine war and subsequent sanctions have only exacerbated the situation. As energy prices are set globally, even those countries that do not import energy products from Russia face increasing energy prices.

Global Gas Price Changes – Percentage Change Since 1st January 2022



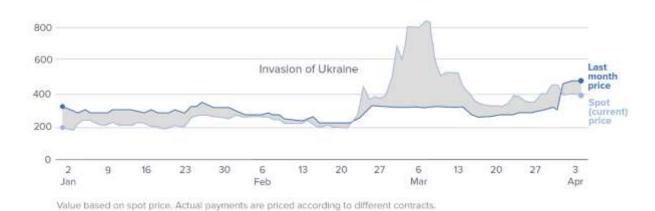
¹² Euractiv (2022).

¹³ Reuters (2022).



And, of course, Russia benefits from increasing energy prices. Exactly how much is open to debate. One estimate suggests that at the start of the year Russia was earning \$200m per day from gas, by 3rd March this had increased to \$720m.¹⁴

Estimated Daily Import Cost of Russian Gas (€m)



Source: Breugel (2022)

Bruegel, a Belgium based think tank, looked at the value of EU imports of Russian gas since the start of the year. Estimating the exact amount that has been paid to Russia is difficult, as gas is sold at different prices on different contracts. The actual daily price is believed to fall between the two lines of the chart above. What is clear is that prices have remained above their pre-war levels. Bruegel, using current gas prices, estimates that the EU has imported €18bn of gas since the start of the war. Using an average of the price over the last month reduces the figure to €12.7bn.¹⁵

In addition to increased revenue from gas, oil prices have also increased. The Russian Finance Ministry estimates the country will earn an additional \$9.6bn¹⁶ in revenue from increased oil prices alone in April, this, with the increasing price of gas will help to alleviate some of the pain caused by the raft of other sanctions that have been imposed on the country.

Rising energy prices are a concern for consumers, businesses, and governments, as they increase inflation and ultimately constrain economic growth. In the short term, it is clear that increasing energy costs are unavoidable. Investors with exposure to the energy sector are well-positioned to benefit from these increasing energy prices and will likely welcome the rebound given the lacklustre performance of the energy sector over the last few years. Longer-term, investors with exposure to renewable energy are likely to benefit, as the incentive to move away from fossil fuels is no longer driven purely by environmental concerns but also financial and political considerations.

¹⁴ Umland (2022).

¹⁵ The New Statesman (2022).

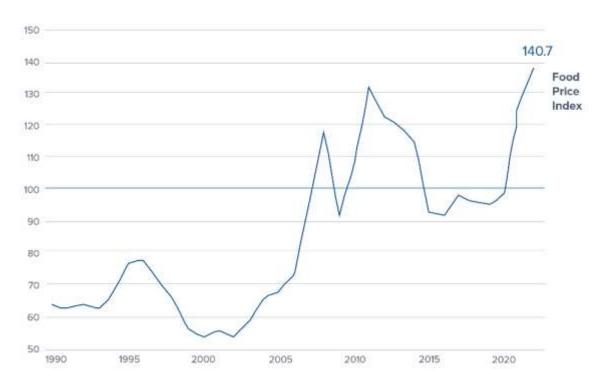
¹⁶ Reuters (2022).



From Breadbasket to Battleground

While rising energy prices have dominated the headlines, the impact on food prices has received somewhat less attention. Even before the war began, global food prices were at an all-time high, due to pressures on supply chains caused by the pandemic.¹⁷

World Food Prices a Record High in February 2022



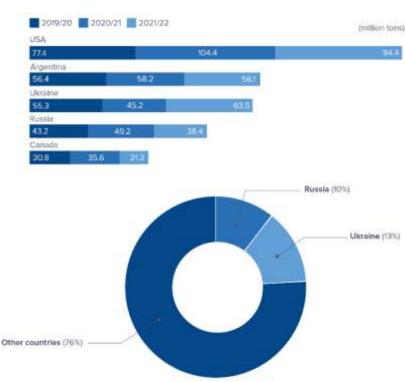
Source: Food and Agricultural Organisation of the United Nations (2022)

While the UK does not import large quantities of food directly from Russia or Ukraine, prices are likely to rise because associated costs, for example, materials for packaging, energy used in production, and transport costs, are all increasing.

¹⁷ Food and Agricultural Organization of the United Nations (2022). The FFPI measures the monthly change in international prices for a basket of agricultural commodities. It represents the average of five commodity group price indices weighted by the average export share of each group over 2014*2016 (2014—2016=100).



The "breadbasket of Europe," Ukraine boasts some of the most fertile land on earth. Chernozem, Russian for "black earth" is a rich black soil, known to produce high agricultural yields, due to its high moisture storage capacity. With 42 million hectares of agricultural land, the country is well placed to capitalise on its Chernozem. In the 2020/21 season, Ukraine, together with Russia, accounted for 23% of global grain exports.



Top Five Global Grain Exporting Countries

Source: International Grains Council (2022)

Now exports have stalled. In Ukraine, the invasion has resulted in the destruction of the country's infrastructure and the closure of its ports. Additionally, in early March the Ukrainian government banned the export of a number of agricultural goods, including millet, oats, and wheat.²⁰ In Russia, while agricultural products have not been directly targeted by sanctions so far, other sanctions are making it more difficult and costly to export goods. While some shipping companies have withdrawn from the country completely, others have suspended training on equipment or withdrawn other essential services, such as the ship certification needed for gaining access to ports and securing insurance. The most recent development has seen all Russian waters deemed high risk for the purposes of marine insurance. All ships will need to notify their underwriter when sailing to Russian ports as well as having to pay an additional premium for a seven-day cover period.²¹ This will increase the cost and complexity of trading with Russia.

¹⁸ Faming Life (2022).

¹⁹ Agricultural Attaché Network (2022).

²⁰ Ministry of Agrarian Policy and Food of Ukraine (2022).

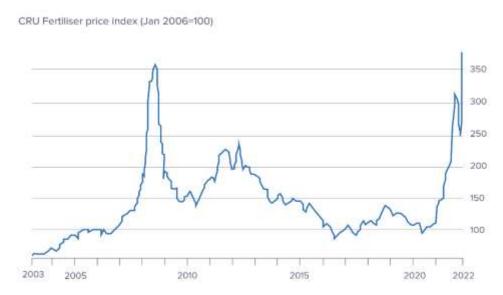
²¹ Reuters (2022).



In 2021, 40% of Ukraine's wheat and corn exports went to the Middle East or Africa. These countries will find it challenging to keep up with increasing food prices and will inevitably be outbid by richer countries. Historically, high food prices have led to civil unrest. In fact, the last time prices were this high, in 2008 and 2009, there were riots in Haiti, South America and South Asia.²² To compound any future humanitarian crisis, the United Nations World Food Programme, which provides food aid to struggling countries, buys more than half of the grain they distribute from Russia and Ukraine²³ and wheat prices rose 30.5% in the first quarter of 2022, after a 20.3% gain in 2021.²⁴

Could other countries make up the shortfall? Under normal circumstances, perhaps. However, the conflict in Ukraine has caused additional pressure on agricultural production in the form of record-high fertiliser prices.

Fertiliser Prices Hit New Highs



Source: Financial Times (2022)

Global fertiliser prices were already high before the conflict began. Manufacturing fertiliser is energy-intensive and as energy prices rose, when the global economy began to reopen in 2021, so did the cost of production. Some producers reduced output, while others passed on the costs to farmers. In addition to rising energy costs, sanctions imposed on Russia, the largest fertiliser exporter in the world, have reduced supply, further increasing prices and more importantly, reducing the ability of the rest of the world to make up the shortfall in agricultural production caused by the war in Ukraine. ²⁵

²² Wired (2022).

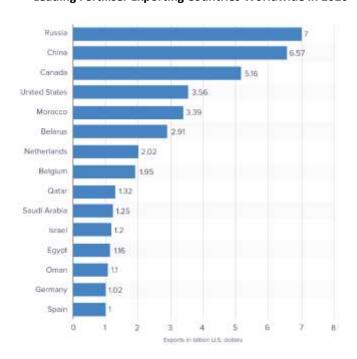
²³ The Washington Post (2022).

²⁴ Barchart (2022).

²⁵ OEC (2022).



Leading Fertiliser Exporting Countries Worldwide in 2020



Source: Statista (2022)

The response from farmers has been to switch to crops that require fewer nutrients, cultivate less land, or simply use less fertiliser. The latter two options will of course reduce yields, further increasing food prices.



A Safe Time to Invest?

Investors understandably witness events such as those in Ukraine and wonder if it is a "safe" time to invest and remain invested globally. Maybe if they hold off for a few months it might be safer? The reality is, there is never a safe time to invest, we cannot predict the future.

The recent events of the pandemic serve to highlight this. At the start of the pandemic in 2020 the S&P 500 lost 9.5% in one day, on 12th March - its steepest one day fall since 1987. By 23rd March, from a 19th February high, the S&P 500 had declined 34%. To both new and seasoned investors, such a drop was somewhat of a shock to the system. However, almost as quickly as they dropped, the markets reversed, and by summer the S&P 500 was back to old highs. A year later, in March 2021, powered by both fiscal and monetary policy, the S&P 500 was up 80% from the previous year's low.

An investor waiting for the pandemic to subside, in the hope of investing in safer, less risky times would have missed the significant rebound of 2020 and, in the long term, be worse off. In fact, markets reward investors for taking risks. That is not to say that risks should not be managed.

Risk management is the most essential step of the investment process. What is one of the simplest ways for an investor to manage risk? By investing in a well-diversified portfolio for the long term and not reacting to crises. In terms of diversification, investors should not only diversify across asset classes, bonds, and equities, but also geographically, across both developed and emerging markets and various industries. This is one of the best ways to weather any short-term market headwind.

Something that should help to calm investors' nerves is that the risks we see today are not new and have been seen before. Policymakers have experience and tools at their disposal to mitigate these shocks.



Asset Class Returns

As the year began, several headwinds weighed on investors' minds. Inflation continued to rise across both developed and emerging markets, caused by a combination of rising energy prices, food prices and supply bottlenecks. The new Omicron COVID-19 variant was still of concern and many economies still had restrictions in place, hampering economic activity.

In January, the IMF and World bank published their updated forecasts for global economic growth during 2022. The World Bank forecast of $4.1\%^{26}$ was $0.2\%^{27}$ lower than its June 2021 projection. The IMF was a little more optimistic, with a forecast of $4.4\%^{28}$, this had also been revised down from a forecast of $4.9\%^{29}$ made in October 2021.

Compared to the estimated achieved rates of global economic growth during 2021, made by the World Bank of 5.5%³⁰ and the IMF of 5.9%³¹, the forecasts for 2022 predict somewhat of a slowdown. This should not be entirely unexpected. After the lockdowns and negative growth in 2020, the global economy did benefit from a sharp rebound in economic activity when economies reopened in 2021. This rebound was always expected to slow.

The IMF and World Bank forecasts were made before the Russian invasion of Ukraine. In March, IMF Managing Director Kristalina Georgieva announced that it would be revising its global economic growth forecast down in April, due to the conflict, but gave no further details.³² The President of the World Bank, David Malpass also commented that the "war in Ukraine is a catastrophe for the world which will cut global economic growth"³³ but did not provide more details. The OECD, however, has published data, and estimates a reduction in global economic growth of -1% in 2022.³⁴

With forecasts of economic growth for 2022 already below those estimated to have actually been achieved in 2021, before the outbreak of war in Ukraine, investors may be concerned. Why? Because economic growth is the key driver of long-term equity market performance. But, investors, as always, need to consider the long term.

The economic growth rates observed in 2021 and forecast for 2022 are above the long-run average. Looking back at the full dataset available from the World Bank, a period of 61 years, the highest rate of global economic growth was 6.7%, achieved back in 1964. The lowest, unsurprisingly more recent, was -3.6%, in 2020. Over the entire period, from 1961 to 2022 the average global rate of economic growth was 3.4%.³⁵

²⁶ World Bank (2022).

²⁷ World Bank (2021).

²⁸ International Monetary Fund (2022).

²⁹ International Monetary Fund (2021).

³⁰ World Bank (2022).

³¹ International Monetary Fund (2022).

³² International Monetary Fund (2022).

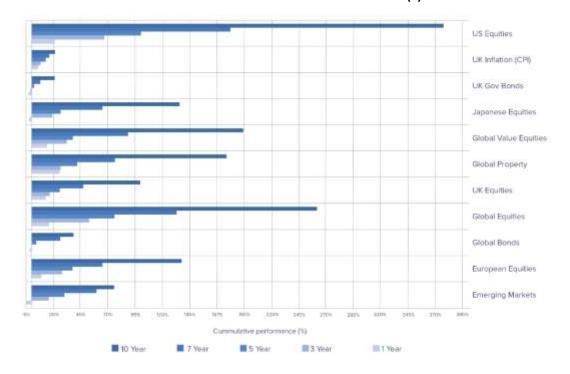
³³ BBC News (2022).

³⁴ OECD (2022).

³⁵ World Bank (2022).



Asset Class Cumulative Performance to Last Month End (£)



Source: Betafolio (2022)³⁶

Prices were already rising and at a pace not seen for decades before the Ukraine war, driven by supply-side bottlenecks, rising energy costs and rising food costs. The war has only increased these inflationary pressures.

Unexpected inflation is rarely welcomed, it is the ultimate tax, eroding the real value of money. What I can buy this year with £100 is less than what I could buy last year with the same amount, due to inflation. Moderate, expected inflation is not an issue. Prices that rise slowly can help an economy, it encourages consumers to spend now, giving businesses the money, they need to grow. Workers, businesses, and investors build inflation expectations into their wage negotiations, product prices and investment returns. If inflation rises more quickly than these expectations, that's when people become poorer in real terms and problems start.

It is not all bad news though. For value investors, those that seek out firms trading at a price that would suggest they are currently undervalued by the market, with the intention to buy these "cheap" stocks and profit from an increase in their price, inflation can be beneficial. Value companies, tend to be less glamorous than their growth counterparts. Sector-wise, think financials, utilities, and energy. To understand why, we need to consider the opposite strategy of growth investing and then how inflation can impact on each strategy. Growth

³⁶ Emerging Markets: GFD Indices Emerging Markets Return Index; European Equities: GFD Indices Europe Return Index; Global Bonds: GFD Indices World Government Bond Equity Market-Cap-weighted Return Index; Global Equities: GFD Indices Developed World Return Index; Global Property: S&P Global REIT Index; Global Value Equities: Dimensional Global Large Value Index (up to Feb 2022) & iShares Edge MSCI World Value Factor UCITS ETF, net of fees (for March 2022); Japanese Equities: Japan Topix Total Return Index (with GFD Extension); UK Equities: UK FTSE All-Share Return Index (with GFD extension); UK Gov Bonds: GFD Indices United Kingdom 10-year Government Bond Total Return Index; UK Inflation (CPI): UK Inflation (CPI); US Equities: S&P 500 Total Return Index (with GFD extension). Performance periods: 1 Year: 1/04/2011 - 31/03/2022; 3 Year: 1/04/2019 - 31/03/2022; 5 Year: 1/04/2017 - 31/03/2022; 7 Year: 1/04/2015 - 31/03/2022; 10 Year: 1/04/2012 - 31/03/2022.



investors seek out firms that they believe will grow revenue and earnings more quickly than the market average. Think the technology and biotechnology sectors.

The impact of inflation on company valuation comes via the policy response of central banks to rising prices, that of increasing interest rates. How does raising interest rates curb inflation? The idea is to make it more expensive to borrow and more beneficial to save money, reducing the amount of money in the economy, so less money is chasing the goods that are available. The result? Hopefully, price increases slow.

Interest rates feed into company valuations. When companies are valued, financial analysts look at all the future cashflow, or income, that the company will receive in perpetuity. Each one of these cashflows will be discounted by an appropriate discount rate. This discount rate will be based upon the risk-free interest rate, the "base rate," plus additional risk factors specific to that firm. Once applied to all expected cashflows, the present, or current value of the firm can be calculated.

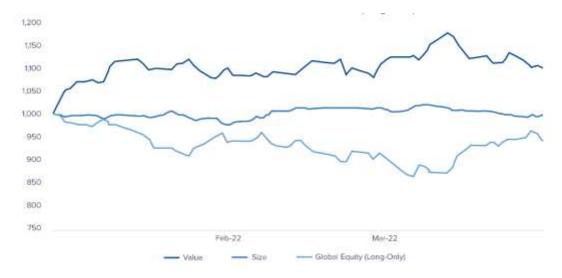
Those cashflows received further in the future are discounted by a larger amount due to the passage of time. Why? Because a cashflow received in the future is not worth as much to an investor as a cashflow received today. Value firms, being somewhat boring and consistent tend to have current cash flows that are stable, or likely to grow only slowly. Growth companies may be fast-growing but not currently profitable, so an investor will not receive any cashflow, or income for a while. Therefore, when a company is valued, growth firms' cashflows are discounted over a longer period and when interest rates rise, by higher amounts compared to their value counterparts. Hence growth firms become less "valuable" on paper.

Last year saw a resurgence of value stocks. As inflationary pressure continued to increase over the first quarter, value stocks have been well-positioned to benefit and build on the momentum that started last year. Quarterly returns of global value were 1.9%, compared to -7.1% for global growth.³⁷

³⁷ Global Value: MSCI ACWI Value; Global Growth: MSCI ACWI Growth. Performance period: 31/12/2021 – 31/03/2022.



Global Factor Performance – First Quarter 2022



Source: FactorResarch (2022)

Financial markets do not like uncertainty, and over the first quarter of 2022, uncertainty was in abundance. The result, both equities and fixed income struggled. In the US, the S&P 500 returned -2.2%. In Europe, the STOXX 600, fared even worse, with a return of -5.3%.³⁸

Closer to home, the UK equity market performed better. While the FTSE All Share, a broad equity market index, struggled to remain in positive territory, returning 0.5%, the FTSE 100 managed 2.88%. The FTSE 100 index was well-positioned to benefit from the economic and geopolitical uncertainty over the quarter. The index has significant exposure to financial firms, which benefit from higher interest rates, consumer staples, which provide a haven during economic slowdowns, and energy firms that have benefited from rising oil and gas prices. Developed markets fared better than their emerging counterparts, returning -2.4% and -4.3% respectively, globally, equity returned -2.56%.³⁹

The first quarter was tough for Chinese markets, which in turn, given its high weighting, 31%⁴⁰ in emerging markets, acted to suppress overall performance. The re-emergence of the Omicron variant and the government's zero-COVID policy saw lockdowns in Shenzhen, Shanghai, and other cities. Disruptions impact not only China, but the worldwide economy, as a third⁴¹ of global manufacturing capacity is based in the country. With factories closed, further pressure was placed on global supply chains adding yet more inflationary pressure. Economic growth forecasts for 2022, made by the World Bank for China, have also been revised downwards from an estimate of 5.4%, made in October 2021, to 5%. A significant reduction from the 8% growth rate estimated to have been achieved in 2021, but still impressive.⁴²

³⁸ Performance period: 31/12/2021 – 31/03/2022

³⁹ Developed Markets: MSCI World; Emerging Markets: MSCI Emerging Markets. Performance period, 31/12/2021 – 31/03/2022.

⁴⁰ MSCI Emerging Markets.

⁴¹ BBC News (2022)

⁴² World Bank (2022)



Reviewing equity returns over the first quarter of 2022 highlights the importance of investing for the long term and not being concerned with short term downturns. Using the last quarter, in isolation, as an argument for the benefits of equity investing would be difficult. However, investors are rewarded for taking on risk and for investing over the long term. A three-month period does not do justice to the benefits of equity investing. Instead, let us consider the returns over a longer period. Over ten years the S&P 500 returned 290.3%, the STOXX 600, 143% and the FTSE All Share 99.6%. Three months? Yes, not ideal. Ten years? Not so bad.

Fixed income investments have also struggled over the quarter. Seen as a safe haven, when the war in Ukraine began there was a brief flight to these "safe" assets, which caused a momentary reprieve for bond investors. However, inflation soon returned to dominate investors' concerns and bonds came under pressure again.

To combat increasing inflation, central banks increase interest rates, which in turn decreases the values of bonds. There is an inverse relationship. The reason? Essentially, bonds pay a fixed rate of interest. If interest rates fall, a bond paying a higher rate of interest becomes more attractive, demand increases, and whenever there is greater demand for any product or service, this results in higher prices. If interest rates increase, the fixed rate being paid by the bond becomes less attractive, when something is not in demand, its price drops.

When the pandemic began in early 2020, governments and central banks enacted policies to safeguard their economies from lockdowns. Unprecedented levels of financial support were provided in the form of stimulus packages and interest rates were cut to almost zero. Inflation became a secondary consideration to protecting economies. When lockdowns started to end in the mid to latter part of 2021, consumers began to spend the income they had accumulated. Demand for many goods was greater than supply, which caused an increase in prices.

Central banks at first argued that inflation was merely transitory as the world economy reopened, but it became clear that inflationary pressures were increasing and not abating. As the year ended the Bank of England became the first central bank to raise rates from a historic low of 0.1%, first to 0.25% in December, again in February to 0.5% and yet again in March to 0.75%.

In the US, the Federal Reserve, appeared at first slow to respond. In March, interest rates were increased by 0.25%, to 0.5%, the first time in three years. In a move suggesting growing concern with the pace of the inflation, the Federal Reserve⁴⁴ hinted a desire to raise rates more quickly, by 0.5% in March but held off because of concerns relating to the economic repercussions of the invasion of Ukraine. Both the Chair of the Federal Reserve, Jerome Powell⁴⁵ and Governor Lael Brainard⁴⁶ have signalled their openness to more aggressive 0.5% rate rises. It is apparent, more rate rises are on the way.

 $^{^{43}}$ Performance period: 31/12/12 - 31/03/22.

⁴⁴ Federal Reserve (2022).

⁴⁵ The Wall Street Journal (2022).

⁴⁶ The Wall Street Journal (2002).



Global bonds returned -3.5% over the quarter, global corporate bonds -4.78%, and global inflation-linked bonds -1.7%.⁴⁷ Like equity returns, a short time period of three months gives investors cause for concern. But again, over the longer term, ten years, returns are positive with global bonds returning 32.8%, global corporate bonds 50% and global inflation-linked bonds 52.7%.⁴⁸

Reviewing both short term and long-term performance, shows the importance of holding a diversified allocation within the bonds in the portfolio. Each sub-asset class has different exposure to a particular risk factor. When one type of bond struggles because of this exposure, others may be well placed to take advantage. An example of the benefit of diversification can be seen when comparing the performance of inflation-linked bonds, which have performed better than global corporate and global bonds over the last quarter. As inflation has risen, so have interest rates but the reduction in the value of the bonds caused by increasing interest rates has been partially offset by the valuable inflation-linked protection.

Another consideration is the rationale for holding bonds. Bonds are held in a portfolio not to drive returns, which is the job of equities, but to provide a cushion when equity markets drop. This is exactly what bonds did during the downturn in 2020. As equities fell in value, bond prices increased, acting to offset the overall decline in portfolio values.

⁴⁷ Global Bonds: Bloomberg Global Aggregate; Global Corporate Bonds: Bloomberg Global Aggregate; Global Inflation-linked: Bloomberg Global Inflation-Linked. Performance period, 31/12/2021 - 31/03/2022.

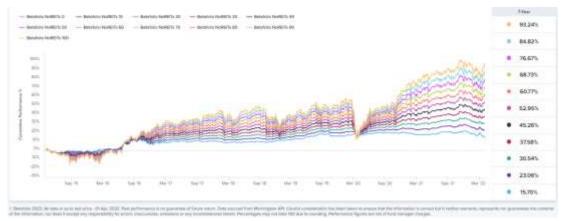
⁴⁸ Performance period: 31/03/2021 - 31/03/2022.



Portfolio Performance⁴⁹

Betafolio (NoREITs) Cumulative Gross Performance

With the exception of Betafolio 0 and Betafolio 10 over the 1-year time horizon, all other Betafolio portfolios over the 1-, 3-, 5-, and 7-year horizon remain in positive territory. Betafolio 0 and Betafolio 10 have moved from positive returns over the 1-year period of 0.2% and 2.1% at the end of the last quarter to -1.5% and -0.3% at the end of this quarter. This return is driven by the negative returns on fixed income investments over the quarter, as discussed above.



Source: Betafolio (2022)

	1-YEAR	3-YEAR	5-YEAR	7-YEAR
Betafolio (NoREITs) 0	-1.5	1.9	5.7	15.7
Betafolio (NoREITs) 10	-0.3	5.8	10.0	23.1
Betafolio (NoREITs) 20	0.8	9.7	14.2	30.5
Betafolio (NoREITs) 30	1.8	13.2	17.8	37.6
Betafolio (NoREITs) 40	2.8	17.0	22.1	45.3
Betafolio (NoREITs) 50	3.8	20.8	26.2	53.0
Betafolio (NoREITs) 60	4.7	24.6	30.3	60.8
Betafolio (NoREITs) 70	5.5	28.3	34.6	68.7
Betafolio (NoREITs) 80	6.4	32.0	38.6	76.7
Betafolio (NoREITs) 90	7.2	36.0	42.8	84.8
Betafolio (NoREITs) 100	7.9	39.6	46.9	93.2

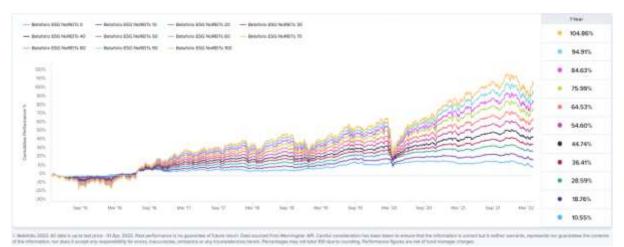
Source: Betafolio (2022)

⁴⁹ All data is up to the last price - 01 April 2022. Past performance is no guarantee of future return. Data sourced from Morningstar API. Careful consideration has been taken to ensure that the information is correct but it neither warrants, represents nor guarantees the contents of the information, nor does it accept any responsibility for errors, inaccuracies, omissions, or any inconsistencies herein. Percentages may not total 100 due to rounding. Performance periods: 1 Year: 01/04/2021 - 01/04/2022; 3 Year: 01/04/2019 - 01/04/2022, 5 Year: 01/04/2017 - 01/04/2022, 7 Year: 01/04/2015 - 01/04/2022. Additional performance periods may be accessed with the help of your adviser via the Betafolio Control Centre: https://app.betafolio.co.uk.



Betafolio ESG (NoREITs) Cumulative Gross Performance

With the exception of Betafolio ESG 0, Betafolio ESG 10 and Betafolio ESG 20, over the 1-year time period, all other portfolios, over all time periods remain in positive territory. The portfolios with negative returns have a large allocation to fixed income, which as discussed above have struggled over the first quarter. Compared to the previous quarter, only Betafolio ESG 0 was in negative territory, returning -1% over the 1-year time period.



Source: Betafolio (2022)

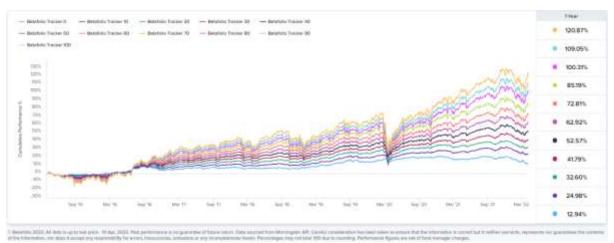
	1-YEAR	3-YEAR	5-YEAR	7-YEAR
Betafolio ESG (NoREITs) 0	-2.7	0.6	4.5	10.6
Betafolio ESG (NoREITs) 10	-1.5	4.7	9.7	18.8
Betafolio ESG (NoREITs) 20	-0.4	10.0	16.0	28.6
Betafolio ESG (NoREITs) 30	0.8	13.1	20.3	36.4
Betafolio ESG (NoREITs) 40	1.9	17.3	25.1	44.7
Betafolio ESG (NoREITs) 50	3.1	21.9	30.7	54.6
Betafolio ESG (NoREITs) 60	4.1	26.2	36.7	64.5
Betafolio ESG (NoREITs) 70	5.0	32.3	43.6	76.0
Betafolio ESG (NoREITs) 80	6.1	35.9	48.1	84.6
Betafolio ESG (NoREITs) 90	7.2	40.6	53.8	94.9
Betafolio ESG (NoREITs) 100	8.4	44.9	59.2	104.9

Source: Betafolio (2022)



Betafolio Tracker Cumulative Gross Performance

Over the 1-year time period, Betafolio Tracker 0, Betafolio Tracker 10 and Betafolio Tracker 20 provided a negative return. The high allocation to fixed income securities in these portfolios and the challenges faced by these types of investments, discussed above helps to explain this performance. Compared to the end of the previous quarter, only the Betafolio Tracker 0 portfolio was in negative territory over the 1-year time period, with a return of -1.8%.



Source: Betafolio (2022)

	1-YEAR	3-YEAR	5-YEAR	7-YEAR
Betafolio Tracker 0	-3.7	1.9	6.3	12.9
Betafolio Tracker 10	-0.8	8.8	14.6	25.0
Betafolio Tracker 20	-0.4	11.6	18.4	32.6
Betafolio Tracker 30	1.6	15.4	23.6	41.8
Betafolio Tracker 40	3.7	20.9	30.2	52.6
Betafolio Tracker 50	5.3	25.6	36.1	62.9
Betafolio Tracker 60	6.4	29.4	41.5	72.8
Betafolio Tracker 70	7.5	35.3	48.5	85.2
Betafolio Tracker 80	10.8	43.0	57.8	100.3
Betafolio Tracker 90	11.4	45.9	61.7	109.1
Betafolio Tracker 100	12.8	50.3	67.7	120.9

Source: Betafolio (2022)



Closing Comments

The year stared with renewed optimism. The pandemic was for most, coming to an end. There were headwinds on the horizon, inflationary pressures building as the world economy woke from its two-year slumber and the realisation that an era of low interest rates was coming to an end. Although not welcomed, this was not unexpected.

What was unexpected was a war in Ukraine. Few believed President Putin would start a full-scale war in Europe, instead believing it was more sabre-rattling. Markets dislike uncertainty, and there is little that brings more uncertainty than war, and so predictably markets tumbled but soon regained those losses. The war acted to unite the global community in both its condemnation and response via unprecedented sanctions, restoring, at least somewhat, my faith in humanity.

Events in Ukraine are made more unnerving by modern day communications, 24-hour news and live streams via social media. The war is being played out in real time in our homes while Russian leaders casually talk of using nuclear weapons, and such talk is likely to cause anxiety in us all. As awful as the situation is, investing is a long-term game and wars litter our past but their impact on financial markets have been shown to be short lived.

The short-term impact of the conflict will impact us all, via increased commodity prices and ultimately a decrease in our real wealth as inflation rises. While some will be able to absorb those costs, others will undoubtedly struggle.

Unfortunately, the team here at Betafolio have little influence on geopolitical events. But what we can do is build the most robust portfolios for you, so that when events such as war do occur, you are positioned to weather the storm and achieve your long-term financial goals.



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