



Foreword:

New perspectives

We need to remain humble and nimble as we assess the changing investment landscape and seek to fulfil our purpose: to create a better future through responsible investing.



In addition to precipitating a devastating humanitarian crisis, Russia's invasion of Ukraine has sent ripples across markets and raised significant questions for investors over the long term. To name but a few:

Can the US dollar retain its dominant reserve currency status? How should responsible investors approach geopolitical risk? And how will de-globalisation shape the world economy?

We continue to research the many possible answers – and assess what they mean for how we invest on behalf of our clients, with the aim of meeting their long-term objectives.

In this CIO spring update, teams from across LGIM share some of our analysis. These include the following key points:

- To avert the threat of stagflation, central bankers face their biggest dilemma since the 1970s
- The US dollar is likely to remain the reserve currency of choice for the foreseeable future, but faces a long-term challenge
- We see the overall impact of de-globalisation as higher costs and lower margins

Regarding long-term political trends, whose intersection with markets can reshape the investment landscape, we expect populism, and populist leaders, to remain a force even as NATO and European unity strengthen.

We also note that the conflict has presented significant challenges for policymakers as they seek to balance the squeeze on consumers, and the urgent need for energy security, with the mission to avert a climate catastrophe.

Country risk

These challenges clearly have important implications for responsible investors, such as LGIM, as we assess the climate strategy and action undertaken by companies in which we invest on behalf of our clients.

At the same time, many investors are re-thinking how they judge defence companies against environmental, social and governance (ESG) standards, as the conflict shifts perceptions around national and international security. A similar process is underway regarding the question of how to assess countries against ESG metrics; a key task for the entire asset-management industry is to ensure any framework used to this end is transparent, robust and can be applied to all countries.

At LGIM, our Investment Stewardship and Investment teams are researching how just such a framework could operate in practice, covering areas from human rights, to conflicts and sanctions, to the rule of law. Given the sensitive and often complex nature of these issues, this work will involve discussions with our clients, industry peers and leading non-governmental organisations.

What is clear now, though, is that we need to remain humble and nimble as we utilise our evolving opportunity set, informed by the long-term perspectives detailed in this document, and seek to fulfil our purpose: to create a better future through responsible investing.



Sonja LaudChief Investment Officer



The recovery from the pandemic continues apace across much of the world as the ability to live with each successive COVID-19 wave improves and most economies reopen services. However, the Russian invasion of Ukraine is adding to inflation pressure, economic uncertainty and threatening growth.

The primary negative growth channel of the invasion has been through higher energy prices. Europe has been especially impacted as natural gas prices have soared, but the global consumer is also feeling the squeeze from the rise in crude oil prices.

The impact of the war is likely to be felt well beyond the conflict. Russia's isolation could persist for years and – as discussed on page 10 – this is upending supply chains. Deglobalisation, fiscal support to cushion the energy shock and increased defence spending are adding to structural inflation pressure. For the near term, the potential for energy sanctions on Russia poses a significant downside risk to growth, as this action could lead to further large price spikes and an ugly stagflationary mix.

Economics:

The threat of stagflation

As the Ukraine shock drives up interest rates, monetary policy may be forced to walk a very tight line between growth and inflation.

Recession risk

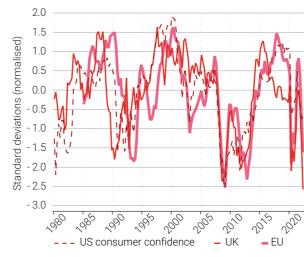
Ukraine was mentioned 37 times in the Federal Reserve's (Fed) April Beige Book, which is a collection of reports from the 12 Federal Reserve Districts. This suggests the disruption has broadened beyond energy into many other commodities. Renewed lockdowns in China have exacerbated the global supply-chain challenges, as the country persists with its zero-COVID policy despite the increasing economic cost.

Central banks now face their biggest dilemma since the 1970s. The US was already moving towards late cycle before this latest shock. The immediate policy objective for the Fed is to get rates quickly back to neutral; markets now price in this path over the next four meetings.

Growth is being fuelled by pent-up demand from the pandemic, strong labour incomes, large gains in wealth and an excess savings buffer. But this is colliding with supply shortages in an economy already at full capacity.

Inflation is set to remain far above target all year, even if it moderates from its current peak. Our research suggests the US is not especially sensitive to higher rates, so it now looks increasingly likely the Fed will need to move rates into restrictive territory to cool an overheating labour market. History suggests it will be tricky to pull off a 'soft landing'; we believe a recession within the next couple of years is more likely than not.

Consumer confidence slips



Source: Macrobond, as at 1 April, 2022.

Consumer confidence index data is normalised at period average and presented in units of standard deviation. Values above/below zero signify levels of consumer confidence above/below the period average.

Yield-curve control

The immediate situation in Europe is more difficult because growth, once the reopening bounce fades, is set to slow sharply in the face of a dramatic squeeze in real incomes.

Central banks will likely feel compelled to raise interest rates to prevent second-round effects on wages, despite weak output. The recession risk is greater in the near term than the US, but further out, there is less need for policy rates to become restrictive to drive up unemployment to create some slack, as these economies don't appear to be as overheated as the US.

The Bank of Japan, meanwhile, is maintaining its yield-curve-control framework despite mounting global inflationary pressure and a widening interest rate gap, which is driving the yen down. The risk of being forced to abandon this policy and a disorderly move in Japanese government bonds and global markets is increasing, in our view.

Chinese policymakers are also trying to balance economic support with rising inflation pressure and a desire to avoid the moral hazard of bailing out overindebted property developers. Their task has been made even more difficult by the latest infection wave and associated lockdowns. As a result, we think China's growth risks are to the downside.

Given this difficult macro backdrop, our outlook for equity and credit markets has become increasingly cautious. That said, valuations have already adjusted to some degree, and history suggests that late cycle is typically still a reasonably good period for equity returns. We therefore maintain our preference for equities over credit.

Our Asset Allocation team's key views



Fixed income		Currencies	
Government bonds Investment grade High yield EM USD debt EM local debt		US dollar Euro Pound sterling Japanese yen EM FX	

This schematic summarises the combined medium-term and tactical views of LGIM's Asset Allocation team as of 27 April 2022. Asset allocation is subject to change. The midpoint of each row is consistent with a purely strategic allocation to the asset/currency in question. The strength of conviction in our medium-term and tactical views is reflected in the size of the deviation from that mid-point. The value of an investment and any income taken from it is not guaranteed and can go down as well as up, you may not get back the amount you originally



= Strategic allocation

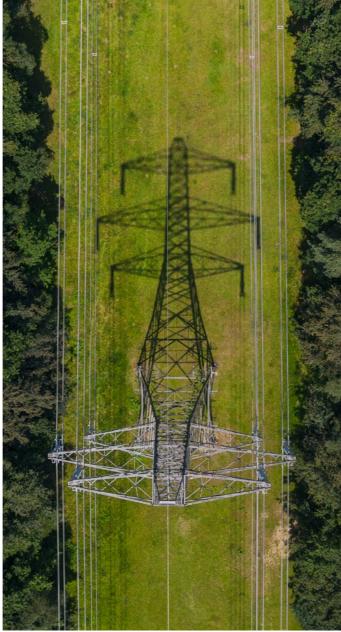
Climate change:

Energy security versus the energy transition

The conflict has presented significant challenges for policymakers as they seek to balance the squeeze on consumers and need for energy security with the mission to avert a climate catastrophe.

Commodities were the markets most rattled by Russia's invasion of Ukraine, given the outsized roles of both countries within the asset class. While higher prices for fossil fuels should have some positive consequences for the fight against climate change, we worry that the most potent ramifications are negative.

Before the conflict began, commodity prices were already at high levels for a number of reasons. These included pandemic-related stresses, under-investment and the very early stages of the emergence of some of the pricing pressure that we think will result from the energy transition.



The outbreak of war, unsurprisingly, pushed those markets in which Russia and Ukraine are most dominant even higher – not least oil and gas, but also agricultural commodities and metals.

All other things being equal, higher fossil fuel prices raise the economic competitiveness of what would otherwise be more expensive, lower-carbon choices. For a consumer, buying an electric car looks like a much more compelling choice when oil is at \$110 a barrel than at \$30. So we do anticipate greater consumer demand for low-carbon alternatives.

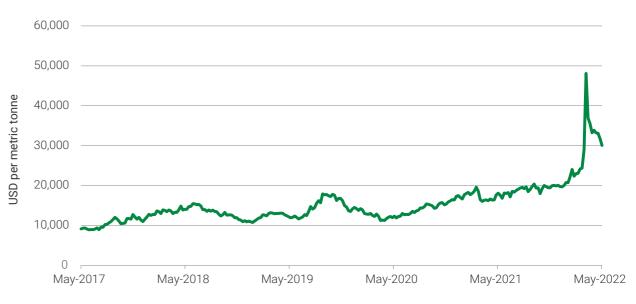
But high commodity prices also reduce the available pool of surplus income and capital to devote to the energy transition.

The nickel pickle

Our concern is that of these two factors, the negative driver is probably the stronger. Indeed, the squeeze on incomes, alongside concerns over energy security as countries seek to wean themselves off Russian energy, have prompted some policymakers to back away from previous commitments. For example, several EU nations have <u>put on hold</u> plans to phase out coal.

Another source of concern is Russia's role as a supplier of enormous importance into the battery metals market, which is critical to the energy transition; the nickel market, in particular, has seen extreme volatility.

Three-month nickel futures prices over the past five years



Source: Bloomberg data LME nickel three-month prices (LMNIDS03), data covers the period of 5 May 2017 until 6 May 2022.

Challenges for policymakers

In order to propel the energy transition forward, we need to see a sort of 'Goldilocks' environment for fossil fuel pricing – not so high that it raises consumer stresses, but also not so low that it under-prices carbon.

The Russia-Ukraine war has meant that we have shot way through these levels.

We believe there are going to be significant challenges for policymakers ahead, as they seek to balance the short-term squeeze on consumers, and the urgent need for energy security, with the mission to avert a climate catastrophe.

And we know that the longer the delay to the energy transition, the greater the cost, and the more challenging it's going to be.





Asset allocation:

A weaponised currency

Have sanctions actually put the US dollar's global pre-eminence at risk?

The war in Ukraine is being fought on many fronts: besides conventional warfare, the modern battlefield now includes cyber-attacks and financial sanctions.

The scale of sanctions and solidarity across the West is unprecedented and is causing serious damage to Russia's economy and financial markets, to the point where Russia has already been ruled to be in potential default.

Frozen assets

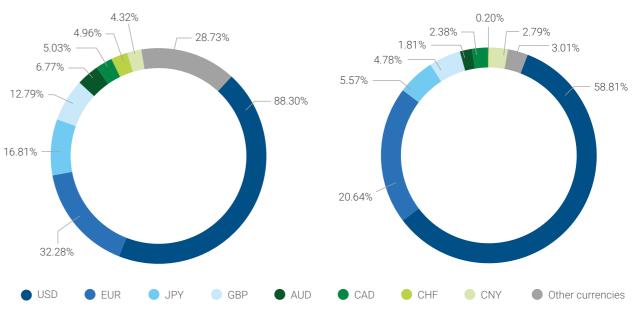
What makes financial sanctions so powerful? The main reason is the world's reliance on the US dollar-based international financial system. This can be seen in the majority of global trade and payments settling in US dollars, and the majority of most investment portfolios being invested in US securities given the size and depth of US financial markets.

The freezing of Russia's foreign-currency reserves is a further escalation in sanctions. This new development will worry other countries and central banks that hold large amounts of US dollar securities, in particular America's adversaries. The supposedly safest and most liquid assets may become inaccessible to them, encouraging them to diversify away from the US dollar.

It doesn't require much imagination to see gold and bitcoin as beneficiaries here but, given the quantities involved, neither will be able to satisfy every need. There is also a limit to holding coins and bank notes in your own vault.

So, despite frequent calls for the end of the dollar-based international financial system, the greenback remains the dominant reserve currency and 'safe-haven' asset in our view.

% of foreign exchange turnover



Source: Currency Composition of Official Foreign Exchange Reserves (COFER) Q4 2021, IMF

Backing away from the greenback

The overall direction of travel away from the dollar is nevertheless clear, but it won't be a rapid change.

There is a lack of alternative safe-haven assets and, with geopolitical relationships changing, what's 'safe' changes too. For the Chinese yuan to become an important reserve currency, China probably needs to run a persistent current account deficit, which goes contrary to China's reliance on exports.

What we should expect to see are new alliances being formed. In that light it's not surprising that China, Russia, India and Saudi Arabia – all large owners of US securities – are weighing using currencies other than the US dollar for oil purchases and sales.

Current account (% of GDP)

% of foreign exchange reserves



Source: Bloomberg, as at 31 December, 2021

The US dollar will remain the reserve currency of choice for the foreseeable future, but the world will try to become less dependent on it.



Active Strategies:

Shaky supply chains and deglobalisation

While some industries may benefit in the short term from the unwinding of elements of globalisation, we believe the longer-term implications for most involve higher costs and lower margins.

Over recent years, corporations have faced numerous assaults on the decades-old order that allowed global supply chains to flourish. First came Brexit, then the US-China trade war, followed swiftly by the pandemic, which skittled trade links.

Due to these disruptions, themes such as reshoring and supply-chain resilience have become widely discussed topics in corporate boardrooms. The Russian invasion of Ukraine lends yet more weight to the narrative of a less globalised world, which is only likely to accelerate corporate action to reshape supply chains.

Stockpiling components

In the short term, some companies are being forced to react to the invasion by duplicating existing supply chains. For example, some vehicle suppliers are replicating Ukraine-based wire harness production to other regions to ensure continuity of supply to the automotive industry. In theory, this could be a blueprint for other companies, but it is unclear what will happen to the additional capacity in the long term, which may result in increased inefficiency.



An alternative strategy could be stockpiling of key materials. Toyota,¹ ironically the pioneer of the Just-In-Time manufacturing blueprint, originally coped admirably well at the onset of the semiconductor shortage that has plagued the industry post-pandemic. In the wake of the Fukushima disaster in 2011, the company had learned that it needed to increase resilience for key components, such as semiconductors, and pre-emptively built a stockpile that allowed it to avoid cutting production as shortages began to impact competitors.

The war in Ukraine may encourage others to follow the Toyota model by increasing inventory of key materials, increasing supply security at a cost to working capital.

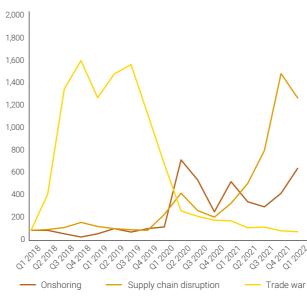
A new capex cycle?

Russia's invasion of Ukraine has highlighted supply vulnerabilities in other geopolitical hotspots.

Governments across the world are, therefore, increasingly keen to promote capability in strategic segments, such as rare earths and semiconductors.

Some corporate executives expect a shift to reshoring – shortening supply chains by moving production closer to end markets – though in our view it is still unclear that the tide has truly turned here. This topic is certainly up for debate by management teams across our investment universe, but so far we have only seen relatively small-scale changes to operating models.

Earnings call discussion topics (rebased to Q1 2018)



Source: LGIM, Bloomberg as at 31 March, 2022

In the short term, several industries are positioned to benefit from these trends. Inventory building would help ensure that component makers gain from elevated demand, even after supply chain bottlenecks have been unblocked. Similarly, we believe capital goods manufacturers would be a beneficiary of reshoring capex; some executives in this segment have already identified what they see as a "multiyear capex cycle."

However, as the benefits of several decades of globalisation unwind, the longer-term implications for investors in most industries are gloomy: higher costs and, therefore, lower margins.



Madeleine King
Head of Research and Engagement



James Odemuyiwa Senior Credit Analyst

^{1.} For illustrative purposes only. References to this and any other security is on a historical basis and does not mean that the security is currently held or will be held within an LGIM portfolio. Such references do not constitute a recommendation to buy or sell any security.

Long-term trends:

A new political paradigm?

While military alliances and European unity could continue to strengthen, we think the potential for populism to weaken and a growing acceptance of refugees will likely ebb in time.

Both Russia's invasion of Ukraine and the global response to COVID-19 have had a major, near-term effect on long-term political themes, with important macroeconomic implications. But some of this impact will likely fade in the coming months as we all adapt to a new normal.

First, a recent study² found strong evidence that the pandemic has reversed the rise of populism, whether measured using support for parties, approval of leaders, or agreement with populist attitudes. A key driver was the sight of unconventional pandemic responses, taken in some countries, resulting in poor health outcomes for the population. Other contributing factors were declining political polarisation and a reduced economic divide (perhaps thanks to the generous fiscal response).

It's not hard to see why the conflict in Ukraine compounded this trend, particularly for populist leaders who had previously expressed admiration for President Vladimir Putin.

2. Foa, R.S., Romero-Vidal, X., Klassen, A.J., Fuenzalida Concha, J., Quednau, M. and Fenner, L.S. 2022. "The Great Reset: Public Opinion, Populism, and the Pandemic." Cambridge, United Kingdom: Centre for the Future of Democracy.



But perhaps people also felt safer with a conventional unified response to the war, in which Western nations showed far fewer of the divisions displayed in recent years.

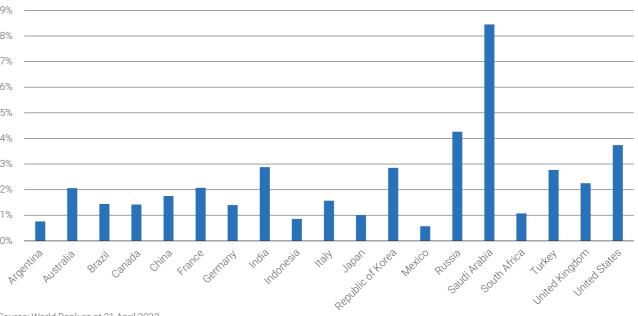
The second implication is a more compassionate response towards refugees in Europe, with many countries opening up borders to deal with the 4.9 million people estimated by the United Nations to have fled Ukraine. While this is only around 1% of the population of the European Union, it's a more meaningful proportion of the countries closest to Ukraine. Successful integration of refugees could reduce current labour-market tightness and be a positive precedent in the event of future humanitarian crises.

The third is increasing unity within political bodies and alliances. The most obvious are NATO and the European Union. Sweden and Finland have both indicated their interest in joining the former, having been non-aligned during the Cold War. There has also been a significant shift in attitudes towards defence spending within the EU. This was highlighted by Chancellor Olaf Scholz of Germany's announcement in February of an increase in defence spending to more than 2% of GDP.

Potential for populism

However, we are already seeing evidence that these dynamics will prove temporary. In terms of populism, far-right challenger Marine Le Pen still managed a strong French presidential campaign; Hungary's prime minister Viktor Orban easily won a fourth term; and betting markets (e.g. the UK's Betfair Exchange) make Donald Trump the favourite for the 2024 US presidential election.

G20 military expenditure in 2020 as a percentage of GDP



Source: World Bank as at 21 April 2022

On the question of refugees, Ukraine will probably turn out to be a special case. There has not been a universal acceptance of refugees from other war-torn countries, and the UK has even just announced a programme to send asylum seekers to Rwanda.

Looking at unity within NATO and the European Union, higher European defence spending comes after a long period of underinvestment – the US already spends over 3.5% of GDP on defence.

That said, it adds momentum to the relaxation of fiscal rules within the euro area, which already started during the pandemic.

So while we could see strengthening military alliances and European unity, to counter the threat posed by Putin, we think the potential for less populism and greater acceptance of refugees will likely ebb in time. This suggests we are witnessing more of an adjustment to the current political paradigm, rather than a fundamental shift.



Ben BennettHead of Investment Strategy
and Research

Contact us

For further information about LGIM, please visit lgim.com or contact your usual LGIM representative











Key risks

Past performance is not a guide to the future. The value of an investment and any income taken from it is not guaranteed and can go down as well as up, you may not get back the amount you originally invested.

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