Research Institute

DWS Long View

July 28, 2022 Marketing material



Long View Q2: The risk of the 'new normal'

Implications on the global macroeconomy and financial markets

IN A NUTSHELL

- Return forecasts for the next decade have moved materially higher, reflecting higher risk premia amid heightened macroeconomic risk and less accommodative central bank policies.
- However, realising these higher return forecasts is predicated on the broad structural contours of the global economic model not being upended. That is not an easy assumption to make in the face of emerging paradigm shifts across geopolitical, environmental, and macroeconomic landscapes.
- In an alternate scenario, the destructive consequences of climate change manifest themselves starkly over the coming decade. Resulting problems like water scarcity and famines feed into further geopolitical instability.
- There is additional risk that the flow of investment capital as well as goods and services may be encumbered by further geopolitics dynamics, with the reshoring of manufacturing activities a potential outcome. Deglobalisation entrenches higher inflation, restricting the ability of central banks to ameliorate economic and market stress.
- To be clear, these structural trends are still nascent and by no means inevitable that they
 may negatively affect returns as we saw during the Euro crisis and the COVID pandemic.
 Hence they are not reflected, yet, in our central base case return forecasts for financial
 assets. However, it is prudent to explore these trends, which is what this report does.

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Summary

In this report, we present the DWS long-term capital market assumptions for major asset classes as of the end of June 2022 while exploring the risks to these forecasts.

Global financial markets continued to experience elevated volatility during the second quarter of 2022. Persistent inflationary pressures forced global central banks towards monetary tightening, which in turn pulled forward the risks of a global recession. While interest rates moved higher, weakening economic data and declining consumer sentiment weighed on risk markets. Furthermore, the ongoing war in Ukraine continues to threaten economic disruption in Europe.

The resulting weakness in both risk-on and risk-off assets has improved the longer-term prospects for investment returns in nominal terms. Real interest rates across developed economies are now moving toward, or back in, positive territory for the first time since before the COVID-

19 crisis, and valuations on equities and credit pose less of a hurdle to strategic investors. Hence, our core set of nominal return expectations for the next decade are higher versus the previous quarter.

However, theses higher return forecasts are accompanied by higher uncertainty. The potential for a 'new normal' across geopolitical, environmental, and macroeconomic landscapes are increasingly important considerations to our outlook over the coming decade. While these nascent longer-term trends do not feed into our return forecasts yet, exploring these risks is prudent and, therefore, the theme of this newsletter.

Our models now forecast an annual return of 6.6% from the MSCI All Country World Index ("ACWI") over the next decade, versus 5.6% three months prior. At an aggregate level, we estimate the forecasted rate of return on a diversified portfolio of assets at 5.9%, also up by one percentage point from the level at the end of Q1*.

^{*}DWS Calculations for a strategic asset allocation that targets volatility of 10%

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Table 1: DWS Ten-year annualized forecasted returns

	As of 30 Jun 2022	Δ since 31 Mar 2022
ACWI Equities	6.6%	1.0%
World Equities	6.5%	1.0%
EM Equities	7.0%	0.7%
US Equities	6.6%	1.0%
Europe Equities	6.4%	1.1%
Germany Equities	7.3%	1.7%
UK Equities	6.4%	0.4%
Japan Equities	4.7%	1.1%
EUR Treasury	1.3%	0.9%
EUR Corporate	3.2%	1.7%
EUR High Yield	6.4%	2.5%
US Treasury	3.1%	0.7%
US Corporate	4.1%	1.1%
US High Yield	7.0%	2.9%
EM USD Sovereign	7.6%	1.9%
EM USD Corporate	7.1%	1.5%
World REITS	4.2%	0.5%
United States REITS	4.6%	0.4%
Global Infra. Equity	5.9%	0.5%
US Infra. Equity	 5.9%	0.6%
Private RE Equity US	5.6%	-1.5%
EUR Infrastructure IG	3.3%	1.6%
Private EUR Infra. IG	4.3%	1.5%
Hedge Funds: Composite	4.0%	0.9%
Broad Commodities Futures	1.8%	1.4%

Source: DWS Investments UK Limited. Forecasts from of 30 June 2022 to 30 June 2032. Due to various risks, uncertainties and assumptions made in our analysis, actual events or results or the actual performance of the markets covered may differ materially from those described.

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Any hypothetical results presented in this report may have inherent limitations. Among them are the sharp differences which may exist between hypothetical and actual results which

Any hypothetical results presented in this report may have inherent limitations. Among them are the sharp differences which may exist between hypothetical and actual results which may be achieved through investment in a particular product or strategy. Hypothetical results are generally prepared with the benefit of hindsight and typically do not account for financial risk and other factors which may adversely affect actual results of a particular product or strategy. Any forward looking statements (forecasts) are based on but not limited to assumptions, estimates, projections, opinions, models and hypothetical performance analysis. All of which are subject to change at any time, based upon economic, market and other considerations and should not be construed as a recommendation. Past performance is no guarantee of future results.

1 / The risk of the 'new normal'

The emergence of structural megatrends

Systemic risks & transformational investment

The impact that megatrends have on financial assets is best highlighted by Table 2, which shows the contribution to the total cumulative return of the S&P 500 of the various equity sectors from 2012 to 2022. This figure leaves investors under no doubt that recognizing the expanding role of IT and Communications in the global economy was an important trend worth taking seriously over the past decade.

Table 2: S&P 500 Sector Return Contribution (2012 to 2022)

Sector	June 2012 to June 2022
Communication Services	22.69%
Consumer Discretionary	23.39%
Consumer Staples	16.24%
Energy	4.52%
Financials	30.02%
Health Care	36.90%
Industrials	19.84%
Information Technology	65.97%
Materials	5.68%
Real Estate	4.31%
Utilities	5.69%

Source: S&P Global Indices from 30 June 2012 to 30 June 2022.

Indices exist in perpetuity, but their underlying compositions may not be so stable. Emerging trends have the potential to transform the composition and function of financial assets. While investors sometimes overlook these trends when constructing broad asset allocations, we believe it is always worth assessing whether these dynamics have the potential to impact expected returns structurally.

The World Economic Forum has has identified a number of systemic global risks and opportunities that should be prioritized to create long-term value, as shown in Table 3. They include climate change, water security, geopolitics, technology evolution, and demographic shifts¹. These

risks have long time horizons with global impacts and are not easily captured within existing investment and risk management frameworks.

Furthermore, the interrelated nature of the systemic risks can make it more difficult to identify and quantify drivers of risk and sustainable returns. There is a clear interconnection between climate change and water security, for example. But water security is also an essential factor in defining geopolitical stability as famines and access to water can cause regional conflicts.

In the current environment, characterised by increasing uncertainty about inflation, interest rates, and new geopolitical alliances, it is particularly opportune to assess such risks and opportunities with a new perspective, informed by recent dynamics.

Table 3: Global systemic risks for asset owners identified by the World Economic Forum (WEF)

Global sys- temic risk		Investment gap (per annum)	Transformational investment examples
Climate change	·ÿ;	\$2.4 trillion	Cleantech infrastructure, renew- able energy, sustainable natural resources
Water security	٥٥	\$0.67 trillion	Food production, energy production, water quality infrastructure
Geopolitical stability		Cross-trend oppor- tunities	Infrastructure, renewable energy, climate-resilient infrastructure, automated manufacturing
Technological evolution		\$1.7 trillion	Tech-related venture capital, electric vehicles, renewable en- ergy, global connectivity, battery storage, mobile networks, fintech
Demographic shifts		\$1.5 trillion	Education, healthcare, infrastruc- ture, care of ageing populations
Total		\$6.27 trillion	

Source: World Economic Forum (May 2020). Transformational Investment: Converting Global Systemic Risks into Sustainable Returns.

¹ The WEF identifies low and negative real long term interest rates as the sixth risk. However, rates and inflation have shown evidence of normalization at the time of this publication.

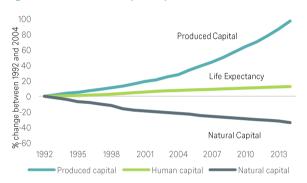
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New Normal - Environment no longer a source of free return

No chart shows the impact that our current economic model has had on the environment better than the one produced in Professor Dasgupta's report, 'The Economics of Biodiversity: The Dasgupta Review'. Figure 1 clearly shows that, while the standard of living have increased, this has been detrimental to the stock of natural capital.

A 2021 research report² published by DWS in collaboration with CERES and BlueRisk shows that if one was to compute the full price of water (which includes the costs of remediation and overuse), the entire profitability of the apparel sector would be wiped out.

Figure 1: Global wealth per capita, 1992 to 2014



Source: UK HM Treasury (February 2021). Dasgupta Review: The economics of biodiversity. https://www.gov.uk/government/publications/final-report-the-economics-of biodiversity-the-dasgupta-review.

The concept of double materiality is slow to take hold, but the principle is about creating a balance in capital markets between (i) the sustainable investor, defined, as the investor who wishes to avoid economic capital having a negative material impact on the environment and society, and the (ii) the historical investor that has been happy to push these impacts onto society and the environment. If the path, as defined by Professor Dasgupta, needs to move towards a more sustainable path (where the full costs of the impact that capital has on the environment are borne by investors), it is inevitable that expected financial return will be lower than in the past. Possibly investment returns will be more sustainable, a trade-off that will become increasingly important in the coming decade.

As part of our annual DWS Long View report³, we leveraged the Bank of England's (BoE) 2021 Climate Biennial

Exploratory Scenario ("CBES") analysis to quantify the potential impact of adverse climate scenarios on investment returns over the coming decades⁴. By translating the BoE assumptions into the Long View return forecasting methodology, we produced the below forecasts for the three respective scenarios, shown in Table 4. The conclusion is that climate action is required. It may take place early or late, but action is essential. It is evident that "there is no option for no action", as investors expected returns would be impacted in a significantly negative manner.

Table 4: Climate scenario return forecasts p.a. for 2020-2050

	Early Action	Late Action	No Additional Action
Equity			
US Equities	4.1%	4.2%	2.5%
Eurozone Equities	3.3%	3.4%	2.1%
UK Equities	6.0%	5.9%	5.0%
Japan Equities	3.1%	3.1%	1.6%
Fixed Income			
US Treasury	1.8%	1.6%	1.6%
Germany Treasury	0.3%	0.2%	0.2%
US Corporate	2.4%	2.3%	2.2%
US High Yield	3.7%	3.4%	1.4%

Source: DWS Investments UK Limited. Data as of 31 December 2021. See appendix for the representative index corresponding to each asset class. For ecasts are not a reliable indicator of future performance. For ecasts are based on assumptions, estimates, views and hypothetical models or analyses, which might prove inaccurate or incorrect.

The issue for investors is not just about recognizing but also understanding when the market will start pricing climate risk. When comparing our 10-year return forecasts across traditional asset classes to climate risk (see Table 5), one can argue that the market is taking the view that no action will occur. Taking the view that constituents will effectively manage climate transition risk presents investors with some attractive investment opportunities, as Emerging Markets Equities, US High Yield and EM USD Sovereigns, have both the highest expected returns and the worst weighted-average CTRR rating.

² Financial implications of addressing water externalities in the apparel and meat industries - https://www.dws.com/en-us/insights/dws-research-institute/financial-implications-of-addressing-water-externalities-in-the-apparel-and-meat-industries/
³ DWS Long View – 2022 - https://www.dws.com/en-us/insights/dws-research-institute/dws-long-view-2022/

⁴This analysis lays out 3 scenarios: early action (early/orderly climate transition), late action (late/disorderly climate transition), and no additional action (no new policies). At a high level, delayed or no policy changes to address climate change results in higher global temperatures, lower terminal growth rates, and higher levels of risk premia across asset classes. This results in lower nominal and real potential returns in advance climate scenarios.

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Table 5: DWS Ten-year annualized forecasted returns and climate transition risk ratings

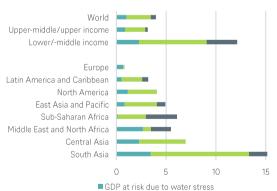
	As of 30 Jun 2022	Weighted average CTRR of constituents
ACWI Equities	6.6%	low C
World Equities	6.5%	low C
EM Equities	7.0%	high D
US Equities	6.6%	С
Europe Equities	6.4%	low C
Germany Equities	7.3%	С
UK Equities	6.4%	borderline C/D
Japan Equities	4.7%	borderline C/D
EUR Corporate	3.2%	С
EUR High Yield	6.4%	borderline C/D
US Corporate	4.1%	low C
US High Yield	7.0%	D
EM USD Sovereign	7.6%	D
EM USD Corporate	7.1%	high D

Source: DWS Investments UK Limited, Data as of 30 June 2022.

Paradigm shift - Assessing the interconnection between Environmental Risks

Another study by the S&P Global Ratings finds that physical climate risks could expose 3.3%, 4%, and 4.5% of world GDP to losses by 2050 under climate pathways RCP2.6 (Paris Agreement), RCP4.5 (current policies), and RCP8.5, assuming no adaptation and all risks materialize simultaneously (see Figure 2).5

Figure 2: 2050 combined GDP risk under RCP4.5 (current policies) scenario



Source: S&P Global Ratings (April 2022); Weather warning: Assessing counties' vul-

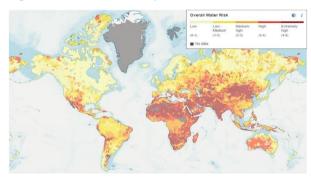
Regional impacts from climate hazards differ and are most pronounced in South Asia (10%-18% of GDP at risk) and

are high for Central Asia, Middle East and North Africa, and Sub-Saharan Africa. The economic loss estimates show that lower- and lower-middle income countries are likely to see 3.6 times greater losses on average than higher-middle- and higher-income countries.

While the focus of the S&P report is on climate, it brings the dimension of water risk as one of the primary focuses of physical climate risk in the aforementioned S&P Global Ratings report related to potential GDP loss due to water stress. Water security is sometimes viewed within the broader climate change risks. More violent storms, flooding and longer droughts are the manifestation of climate change risks. However, societal effects from water risks often emerge locally and require different transformational solutions compared to the climate risks that are more global in nature. The United Nations predicts a 40% global shortfall in water supply by 2030 if current consumption and production patterns do not change.⁶ The outlook is likely to be one which features a greater competition for clean fresh water, particularly in locations where existing supplies are already in decline or water quality does not satisfy the required users' standards.

In a 2020 DWS Research paper titled 'A transformational framework for water risk7' we proposed a transformational framework to facilitate investors moving from an 'outside-in' focusing on how sustainability issues affect financial risk management, to an 'inside-out' approach which includes using investor influence for a positive, transformational change. This is becoming an important issue in Europe and the U.S. with the drying up of major rivers and in India where crops are below normal. This issue presents an important geopolitical risk.

Figure 3: Global water risk profile



Source: World Resources Institute Aqueduct Annual Temporal Resolution (snapshot as of July 20, 2022). Aqueduct is comprised of tools that help companies, govern ments, and civil society understand and respond to water risks – such as water stress, variability from season-to-season, pollution, and water access.

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⁵ S&P Global Ratings (April 2022); Weather warning: Assessing counties' vulnerability

to economi losses from physical climate risks.

World Could Face Water Availability Shortfall by 2030 if Current Trends Continue

Press Releases (un.org) Water Resources Management Overview: Development

^{&#}x27;A transformational framework for Water Risk (November 2020)

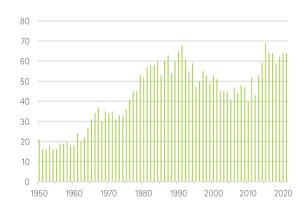
1.1 New Normal and the new geopolitical realities

The changing global geopolitical landscape

The framework presented by the World Economic Forum is one of Global Markets characterised by a global equilibria and stable geopolitical interests. However, the year of 2022 will be possibly recognised as a marking point in the history of this century where the rational expectations about the world geopolitics was thrown out of the window.

Within this context, it is important to highlight that the requirement for transformational investment is particularly evident among emerging and frontier countries. Most of these countries continue to struggle to attract the required capital for planned sustainable development due to an inability to mitigate local political risk, ensure protection of ownership rights for investors, and otherwise give investors confidence about the "rule of law". Unfortunately, some of the geographies that most need transformational investment, and which could produce the strongest risk-adjusted returns for investors if political risk could be effectively mitigated, are the least able to attract investment.

Figure 4: Number of wars and armed conflicts per year



Source: UCDP/PRIO Armed Conflict Dataset. Data until 2021

While the theme of geopolitical fracturing and the rise of nationalism across the globe has dominated headlines, we would argue that the real change is in perception, with old realities being rediscovered. The most imminent geopolitical risks or questions, we believe, can be

simplified into three key features of today's world that are highly relevant to investors:

- 1. the risks of continued economic disruption to Europe in the wake of Vladimir Putin's latest war:
- 2. the impact of China's shift toward common prosperity; and
- 3. the the possibility of further geopolitical fracturing to economic growth, trade, the mobility of labor and perhaps, most importantly, the free flow of ideas and technological knowhow across national borders.
- The risks of continued economic disruption to Europe in the aftermath of Russia's latest war on Ukraine

Once one thinks of "Russia" not as a Western-European nation state, but as a different, more archaic type of geopolitical entity, Putin's actions remain just as controversial but become a lot less puzzling.

Under its current president, "Russia" has become even more imperial, in the sense non-Marxist historians might use the term. ⁸ Moscow now rules over the Russian Federation's vast territory in an increasingly centralized fashion and without the explicit consent of many of the people and peoples inhabiting the country (including, as it happens, many Russian speakers, especially in Central Asia)⁹. Such an approach is seen as necessary to maintain the unity of what may be perceived as an unstable economic system given its vast boundaries and ethnic and societal differences.

To maintain such an empire tends to dictate certain ideological and policy choices. Even a small neighbor, such as Estonia, which has managed to establish strong institutions and achieve a transition to freedom and prosperity, will appear a threat to internal Russian stability – hence, Russia's disposition toward all the Baltic states, especially since Putin came to power in 2000.

A large, distinct, culturally but fraternal people, such as the Ukrainians poses a greater threat. Such threats invite constant meddling, even if the result, decades later, is likely to cause exactly the national awakening and unity these tactics are trying to prevent.¹⁰

[®] Empires: Perspectives from Archaeology and History. Alcock, Susan. Cambridge University Press, 2009.

⁹ Oliphant, Craig. Russia's Rule in Central Asia.Saferworld (October 2013

¹⁰ Ukrainian Nationalism in the 1990s: A Minority Faith. Wilson, Andrew. Cambridge University Press, 1996.

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None of these dynamics, nor even some of the goals, tactics and miscalculations since the start of Russia's latest war on Ukraine would come as much of a surprise to an historian familiar with the late Austro-Hungarian or Ottoman empires.¹¹ What they might, instead, find somewhat puzzling, is the widespread hope that "Russia's" ambitions will not extend beyond "its current goals".

Throughout history, this is not how most empires tend to behave. They shrink or grow or, every once in a while, disintegrate. Given Russia's institutional legacies and the unrelenting "facts" of natural and man-made geography, "success" in Ukraine would, in our view, dictate further expansion, sooner or later. Fortunately, it seems likely, as of July 2022, that Ukraine may win this latest, unprovoked war of "Russian" aggression. In the long-term, unwavering support for Ukraine is also the least risky path to avoid continued economic disruption to Europe, which otherwise would loom large for many years to come.

Finally, geopolitics, properly understood, also casts some light on why Putin decided to launch his war now, by helping us understand domestic dynamics within the Russian Federation better. Namely, by thinking about "Russia" simply as one of many polities within the geographic area that was once the Soviet Union. They all share a similar institutional legacy inviting comparative analysis. It is as close as one can get to natural experiment in the study of political institutions. A couple of years ago, Henry Hale did just that. Anyone thinking or writing about Russia would do well to read his book. 12 Much of what seems puzzling is a lot less so, once Putin is seen trying to maintain power and influence within a post-Soviet society. In particular, he will have been well aware, at the turn of the year, that his regime was showing many of the traits that have frequently preceded presidential ousters. He is approaching his 70th birthday, typically a point at which elites get restless. A constitutional amendment allowing him to run again in 2024 was widely unpopular. Russia's ruling party has come to be increasingly seen as a collection of "Crooks and Thieves". 13 A "small, successful war" before 2024, paired with domestic repression,

presumably seemed especially timely to regain lost legitimacy.

2. The impact of China's shift towards common prosperity

In financial markets, much concern has recently centered around President Xi Jinping's common prosperity agenda¹⁴.

China's success story was built on the exclusive usage rights, initially for property and then for fixed capital and real estate. The ownership of land is still with the state and the focus now is on sharing some of the benefits created by such ownership.

Given the various policy measures of recent years aimed at the reining-in the country's tycoons such worries are understandable enough. Seen against the framework outlined in the previous sections, though, we wonder whether investors might be missing the forest for the trees. Compared to authoritarian regimes in other countries, China's Communist Party has mostly been ruled with the usual amount of checks and balances at various levels. To be sure, as a mechanism to mitigate against corruption and other forms of malfeasance, governance was far from perfect. In particular, scandals involving skimping on quality were quite common.

Such an outcome now seems all but certain, barring some unforeseen event preventing President Xi from serving an unprecedent third term in office. Moreover, many of the policies he has pursued over the past decades, including popular campaigns to stamp out corruption and curtail alternative centers of power need not be detrimental to economic performance, at least in the short-to-medium term

In the longer term, though, the abolition of presidential term limits is almost inevitably going to lead to some instability, if and when the question of succession starts to loom. Beyond that, there is a cost to too much power being too concentrated and criticism is silenced, even behind closed doors. Quite apart from specific policy

 $^{^{\}rm II}$ Towards the Flame: Empire, War and the End of Tsarist Russia : Lieven, Dominic. Allen Lane, 2015.

¹² Patronal Politics: Eurasian Regime Dynamics In Comparative Perspective (Problems of International Politics): Hale, Henry E. Cambridge University Press, 2014.
¹³ Navalny Must Pay for 'Crooks and Thieves' Comment - The Moscow Times; Not so lonely anymore Here's what speakers told more than 22,000 Muscovites who gathered on Saturday to demand fair elections in September – Meduza; 'There's no such thing as an accidental repost' How Russia punishes people for likes, retweets, and

 ¹⁴ Xi Jinping's talk of "common prosperity" spooks the prosperous | The Economist
 ¹⁵ Lieberthal, K. and Lampton, David (eds), Bureaucracy, Politics, and Decision Making in Post-Mao China, University of California Press. esp. pp. 1–30

The Party: The Secret World of China's Communist Rulers: McGregor, Richard. Harper Perennial, 2012.
 Poorly Made in China: An Insider's Account of the China Production Game. Midler,

¹⁷ Poorly Made in China: An Insider's Account of the China Production Game. Midler, Paul. Wiley, 2011. -

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changes, overall governance performance is likely to deteriorate. 18

 How further geopolitical fracturing could harm economic growth, trade, the mobility of labor and perhaps, most importantly, the free flow of ideas and technological knowhow across national borders.

How realistic are market fears of further geopolitical fracturing permanently harming the world's economic growth prospects? Given the approach outlined above, it should come as no surprise that we would insist this cannot, and should not be analyzed at a global level. Instead, domestic dynamics need to be taken into account. We have already outlined the somewhat idiosyncratic prospects for China and the Russian Federation. Beyond that, we are cautiously optimistic that lasting damage to trade and the mobility of labor can largely be avoided, despite the strains the pandemic has introduced, and the energy and food crisis are more recently putting on governance mechanisms around the world.

The reasons for this cautious optimism can be summed up with two words, or rather our interpretation of them: Trump and Brexit. With the benefit of six years of hindsight, these look less like harbingers of a whole-sale unravelling of liberal democracy in an age of rage. And more like perhaps unusually sudden and ferocious of the sorts of populist movements that regularly occur in democratic societies. These typically reflect not just economic grievances, but also the tendency of narrow, special interest groups to over time come to dominate policymaking in stable societies. In short, while polarization and cultural alienation are real enough, we increasingly think that these will be self-correcting leaving

governance structures in the West stronger – as frequently has happened in the past.²¹

There are some important caveats, however. The outlook is a lot more varied and less certain, overall, in many of the worlds younger, and poorer democracies. We are especially concerned about Latin America, where a new cycle of left-wing populism may loom.²² Parts of continental Europe could see renewed waves of populism too, depending in part on how and when the war in Ukraine ends.²³ And in many poorer countries in the rest of the world, it is not so much a matter of further geopolitical fracturing harming economic growth, but, the progress of recent years becoming undone, further undermining the already and always difficult prospect of building institutions.

At least from an investment perspective, there are, however, some potential silver linings from the sober analysis – past performance is usually quite a good indicator of future prospects. As we enter a potentially darker age, in which large chunks of the globe, including China, may once again cut themselves off from the free flow of ideas and technological knowhow across national borders, we can still be reasonably confident that the rest will remain interconnected and vibrant enough to deliver innovation. This is critical, not just for economic growth, but also the increasingly obvious challenges the world faces, most notably from climate change.

¹⁸ As Poorly Made in China: An Insider's Account of the China Production Game - Mid ler, Paul. Wiley, 2011.

¹⁹ The Rage: The Vicious Circle of Islamist and Far-Right Extremism. Ebner, Julia. I.B. Tauris & Co Ltd, 2018.

²⁰ The Rise and Decline of Nations: Economic, Growth, Stagflation, And Social Rigidities. Olson, Mancur. Yale University Press, 1984.

²¹ The Rhetoric of Reaction: Perversity, Futility, Jeopardy. Hirschman, Albert O. Belknap Press: An Imprint of Harvard University, 1991.

²² Left Behind: Latin America and the False Promise of Populism. Edwards, Sebastian. University of Chicago Press, 2012.

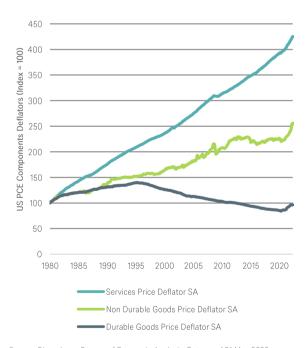
²³ Das andere Ende der Geschichte: Über die Große Transformation (edition suhrkamp) Ther, Philipp. Suhrkamp Verlag AG, 2019.; and Die Politische Ökonomie des Populismus (edition suhrkamp). Manow, Philip. Suhrkamp Verlag AG, 2018.

1.3 New Normal and the potential impact on the global macroeconomy

Macroeconomic developments

Recent developments across the globe have perhaps signified a seachange in the composition and distribution of global economy growth going forward. Decades of globalisation to the benefit of corporate sector profitability kept price pressures low, leading to low inflation, which in turn was an argument for moderate wage settlements. Prices for consumer durables, particularly in the USA, have been falling since the mid 1990s (see Figure 5), helping to fuel concerns about weak demand that ultimately contributed to the implementation of creative stimulus measures, from subsidies sent out via checks to private households, through zero and negative interest rate policy all the way to multi-trillion dollar purchasing programs by central banks

Figure 5: US Personal Consumption Expenditures Components (1/30/1980 – 5/30/2022, Index=100)



Source: Bloomberg, Bureau of Economic Analysis. Data as of 31 May 2022.

The deflationary pressure on consumer goods was driven by the globalisation of the manufacturing basis, which allowed companies to successfully relocate manufacturing activities out of Western Europe and Americas to Asia and East Europe, while maintaining steady prices. The benefits of such process are all clear when one looks at micro data of listed companies, such as the one highlighted in Table 6, which shows how the offshoring of manufacturing activities, had minimal impact on profitability but significantly lowered operational leverage and capital investments

Case Study: Texas Instruments

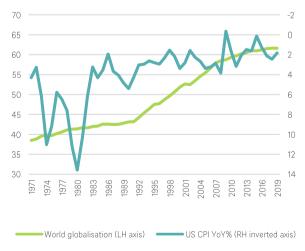
Between 2000 and 2009, Texas Instruments moved a significant part of its manufacturing operations offshore. This resulted in lower fixed capital and lower number of employee. It is normal for companies offshoring operations to see a lower EBITDA margin is a function of capital intensity. However, Texas Instruments was able to retain the high margin. The net result was a higher level of profitability and a loss of the operational leverage to downturns, which was a characteristic of the previous period. It is one of the characteristics brough by globalisation of the supply chain!

Table 6: Texas Instruments comparative analysis

	2000	2001	2006	2009
Sales	11.875	8,201	14,185	10,427
EBITDA Margin	32.4%	15.4%	33.3%	30.4%
Headcount	42,481	34,724	30,986	26,584
Sales per em- ployee	279k	236k	458k	392k
NTFA	5,447	5,589	3,950	3,158
Capex	-2,762	-1,790	-1,272	-753
Capex/Sales	23.3%	21.8%	9.0%	7.2%

Looking at a single global market for manufacturing and consuming where is required has been one of the characteristics of the past few decades.

Figure 6: World globalisation index and inflation



Source: UCDP/PRIO Armed Conflict Dataset. Data until 2021.

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Globalisation has been a key attribute of the stable economic growth and low inflation environment experienced across regions of the world. As globalisation has marched forward, this has helped to anchor inflation. Figure 6 illustrates the relationship between the KOF globalisation index²⁴, which combines measures of economic financial, and social openness, and inflation in the United States.

This measure of globalisation appears to have begun plateauing since the financial crisis and will reasonable reflect the continued impact of COVID-19 and the Russia-Ukraine conflict over the coming years. This plateauing or perhaps reversal of the globalisation creates opportunities, but also poses risks for corporate profitability.

Globalisation has allowed companies to retain their pricing power while reducing labour and capital costs. From an economic theory standpoint, this is inherently contradictory as gross margins ought to be a function of capital intensity. Utilities have high margins because they are capital intensive; some service companies have lower margins because their capital requirements are lower. Thus, in an efficient market, a company shedding capital to third parties should see their margins coming down. Nevertheless, margins in corporate America have been rising at the same time as companies shed capital. With globalisation, companies have been able to have their cake and eat it too.

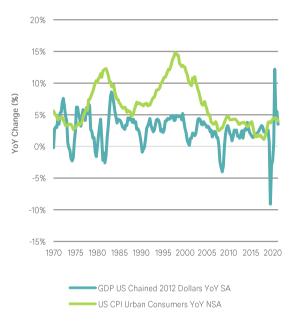
Inflation may be harder to cap

It is hence not a surprise that, in recent quarters, the narrative has changed, with inflationary pressures surpassing estimates from central bankers and economists. Accelerated by the trade war, following by the corona pandemic and asynchronous lockdowns of the economy throughout many countries, and finally the Ukraine war, severe logistical issues and a surge in economic activity have created significant supply-side challenges. In combination with longer term structural challenges such as demographic change, shrinking workforce, and the need to accelerate climate change policy, these shifting economic realities have the potential to impact the trajectory of growth and inflation over a longer time horizon.

Although we do not perceive the magnitude of these effects to be significant in our base case, the potential macroeconomic paradigm shift, in which robust demand meets constrained supply, would imply structural changes. After years of concern about the risks of deflation, consumers, policymakers, and investors alike will have to adjust to structurally higher inflation levels. This

change in the relationship between growth and inflation-where the two are no longer positively correlated, could adversely impact the effectiveness of monetary policy to address both inflation and growth issues simultaneously. A slowdown in economic growth in tandem with heightened inflation a la the 1970s inhibits the effectiveness of central banks to mitigate downside risks to economic growth and risk assets. Said otherwise, market participants may have to deal with the new reality of a non-existent, or at least farther out-of-the-money "Fed put".

Figure 7: YoY Change in US GDP and CPI (December 1970 to March 2022)



Source: Bloomberg, Bureau of Economic Analysis. Data as of 31 March 2022.

While the change in macroeconomic expectations, particularly as it relates to price pressures, has been influenced by recent idiosyncratic events, the persistence of this environment is indicative of the potential long-term impact of key global megatrends. As these megatrends continue to materialize, understanding their impact on the ecoomy and on capital markets is essential to strategic investors.

In our estimation, these structural megatrends have the potential to influence our strategic macroeconomic outlook, both in terms of changes to structural growth and to structural inflation dynamics. Table 7 outlines how these megatrends might, on average, potentially impact global growth and inflation on a long term basis.

 $^{^{24}\,}https://kof.ethz.ch/en/forecasts-and-indicators/indicators/kof-globalisation-indicators/indicators/kof-globalisation-indicators/indicators/kof-globalisation-indicators/indicators/kof-globalisation-indicators/indicators/kof-globalisation-indicators/indicators/kof-globalisation-indicators/indicators/kof-globalisation-indicators/indicators/kof-globalisation-indicators/indicators/kof-globalisation-indicators/indicators/kof-globalisation-indicators/indicators/kof-globalisation-indicators/indicators/kof-globalisation-indicators/indicators/kof-globalisation-in$

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Table 7: Megatrends and their potential implications for the global economy

Trends Ca			Potential Impact (average)	
	Cause	Outcomes	GDP	Inflation
	Global warmingEnvironmental risksLaws/regulationSocial change	 Extreme weather causing high damages Droughts reducing food supply Moving climate zones Migration Asset allocation changes Regulatory costs increase 	\rightarrow	↑
Water risk	Water quality infrastructureGlobal climate change	Food production impairedEnergy production impaired	\downarrow	1
Geopolitical Stability	 Protectionism Military conflicts Strengthening supply chains Covid Wealth distribution Increasing political polarization 	 Global trade suffering Weakening of global rule based framework, less reliability Reshoring, diversification Profit margins decreasing Inventories increasing Political fragmentation 	\rightarrow	↑
Technological evolution	Technological innovationRegulation	Industry 4.0Digital learningCrypto/Tokenization	\	\
Demographic shifts	Aging populationHigher life expectancyDeclining birth rate	 Dependency ratio worsening Asset allocation changes Demand for health services increases Migration 	\	1

Source: World Economic Forum (May 2020). Transformational Investment: Converting Global Systemic Risks into Sustainable Returns., DWS Investments UK Limited.

2 / Long View Forecasts

2.1 Equity Forecasts

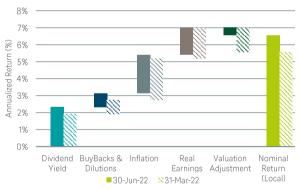
For our equity return forecasts, Figure 9 illustrates the changes to our return pillars for 10-year MSCI All Country World local currency return forecast. Our return forecast for global equities have increased to 6.6% from the 5.6% level at the end of Q1. The increase in the nominal return forecast is largely driven by less challenging valuations. The valuation pillar is now -0.5% per annum versus -1.4% at the end of March.

Figure 8: Pillar decomposition for equities



Source: DWS Investments UK Limited.

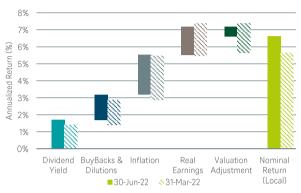
Figure 9: MSCI All Country World: Contribution to 10year forecasted hypothetical annualized returns



Source: DWS Investments UK Limited. Data as of 30 June 2022

We see similar changes in the US, with our return forecast for MSCI USA (see Figure 10) increasing from 5.6% to 6.6% in Q2. As with global equities, valuation adjustment, going from -1.7% to -.6%, was the most significant driver of this increase in forecasted returns.

Figure 10: MSCI USA: Contribution to 10-year fore-casted hypothetical annualized returns



Source: DWS Investments UK Limited. Data as of 30 June 2022

2.2 Liquid Real Assets Forecasts

While REITs and Infrastructure both leverage very similar pillars to equities (see Figure 11), returns are derived largely from income via dividend distributions as shown in Figure 12 and. Figure 13.

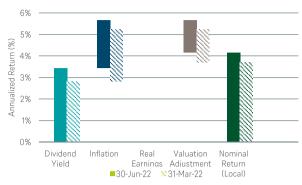
Figure 11: Pillar decomposition for REITs and Infrastructure



Source: DWS Investments UK Limited.

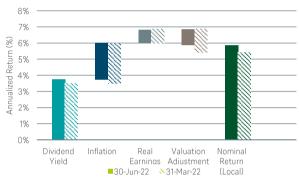
Across liquid real assets, our return forecasts are slightly lower versus traditional markets. Particularly as real interest rates have moved higher, REIT dividend yields provide less of a buffer. Our infrastructure equity outlook provides modestly higher return prospects commensurate with traditional equities.

Figure 12: Global REITs: Contribution to 10-year forecasted hypothetical annualized returns



Source: DWS Investments UK Limited. Data as of 30 June 2022.

Figure 13: Global Infrastructure: Contribution to 10year forecasted hypothetical annualized returns



Source: DWS Investments UK Limited. Data as of 30 June 2022.

2.1 Fixed Income Forecasts

As interest rates and credit spreads have moved materially higher throughout the first half of the year, our fundamental rerurn outlook across fixed income asset classes has changed materially. While the risks of paradigm shifts have the potential to impact growth and inflation, higher real interest rates provide a greater buffer for fixed income investors going forward. Looking over a strategic time horizon, these higher starting yield levels across both core and credit markets has improved the prospect for nominal and real returns going forward. Starting yield is by far the most important driver of return contribution in our building blocks shown in Figure 14.

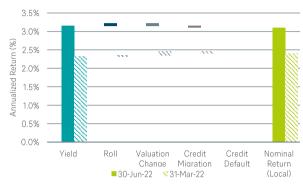
Figure 14: Pillar decomposition for Fixed Income



Source: DWS Investments UK Limited.

Over the second quarter, the selloff in both shorter term and longer-term US Treasury yields continued. The 10-year US Treasury yield moved from 2.34% at the end of March to 3.01% to close out Q2, which has significantly increased yield contribution to our nominal return forecasts shown in Figure 15.

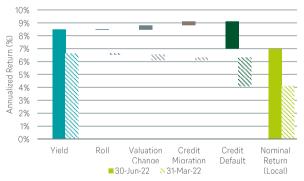
Figure 15: US Treasury Bond Index: Contribution to 10-year forecasted hypothetical annualized returns



Source: DWS Investments UK Limited. Data as of 30 June 2022

Widening in corporate bond spreads has also increased starting yield levels across credit markets versus the previous quarter. Corporate credit spreads across both high yield (244bps increase) and high grade (39bps increase) increased materially. Valuations commensurately look less expensive versus their history than they did to start the year. Figure 16 shows US High Yield return forecasts.

Figure 16: US High Yield Bond Index: Contribution to 10-year forecasted hypothetical annualized returns



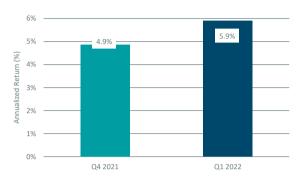
Source: DWS Investments UK Limited. Data as of 30 June 2022

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3 / Conclusion

The second quarter of 2022 was characterized by persistent weakness across risk markets as inflationary pressures remained stubbornly high. Global central banks continued to pivot toward quantitative tightening and interest rate hikes to the potential detriment of economic growth and risk premia. While these risks still exist, and the prospect of structural megatrends complicates the long-term picture for capital market returns, higher starting yield levels and less challenging valuations relative to history paint a rosier picture for strategic investment returns relative to the beginning of the year. As a result, despite, our 10-year return forecasts have moved notably higher Figure 17 illustrates how our 10-year return forecasts for a moderate strategic asset allocation multi-asset²⁵ have changed over the most recent quarter.

Figure 17: 10 year forecasted hypothetical annualized returns of moderate strategic asset allocation



Source: DWS Investments UK Limited. Data as of 30 June 2022.

²⁵ Moderate strategic asset allocation refers to a portfolio that targets annualized volatility of roughly 10%

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