AEGON Asset Management

LONG-TERM OUTLOOK

Macroeconomic Scenarios And Expected Returns 2024-2027

Beyond borders™

Contents

Foreword

As a global asset manager with a strong history in managing long-term pension and insurance assets, we try to look beyond the issues of the day. In our latest Long-Term Outlook paper, we draw upon the expertise of our worldwide investment teams and consider the challenges and opportunities facing financial markets. By combining our macroeconomic expectations with an examination of key global trends and financial asset pricing, we construct a coherent and time-tested outlook for financial markets.

It has always been important to study underlying trends, as these can shape economies and markets. In this outlook we describe four trends and their implications for investors. These “ESG megatrends” are the rise of AI, climate change, water scarcity and demographics. These are likely to impact our daily lives, but will also have implications for productivity, resource availability and economic growth in the long run.

The medium term is shaped by recent economic developments and foremost in everyone’s mind is the outlook for inflation and, in response, central bank policy. So far, economies have weathered the unprecedented tightening of monetary policy relatively well. At the same time, the impact of the energy crisis has been much milder than initially feared. The key question is whether economies can stay resilient, or will they enter a more pronounced slowdown or recession?

Longer-term interest rates have grinded higher in 2023 and, as a result, have pressured returns on fixed income markets. Despite these higher rates and the challenging economic outlook, equity markets have marched higher. This move has been driven mainly by large-cap tech rebounding and - more recently - enthusiasm about the prospects of AI. Again, this highlights the need to look beyond economic factors; in the years ahead structural trends will be responsible for large shifts in the distribution of wealth.

Given the impact of these factors, it is important for investors to tune-out the background noise and commotion of the daily newsflow and assess the longer-term opportunities.

I hope this Long-Term Outlook provides you with a valuable tool to help shape your asset allocation decisions.

Bas NieuweWeme
Chief Executive Officer,
Aegon Asset Management

Executive Summary

A turbulent world

The last few years have again been turbulent, even though the pandemic is now far behind us. The invasion of Russia into Ukraine has exposed key dependencies in the supply of energy and goods. In response, many countries have accelerated the development of renewable energy sources and have tried to find alternative supplies.

Fears of conflicts in other parts of the world have also led to a scramble to reallocate and diversify supply chains of goods. This trend will likely continue in the coming years. The economic effects are uncertain and will depend on the efficiency of these new sources of supply.

Politics remains a key driving force behind the development of economies and financial markets. Populists seem to be gaining a larger share of the vote in democratic countries. Going forward coming elections might further amplify this trend, while other countries seem to opt for an increasingly authoritarian model. Historically, populist governments have led to a decline in economic growth. This is one of the reasons this should be closely followed.

Even the most ardent climate change deniers must have had a difficult year. Again, the world climate broke several records as global temperatures rose, and more extreme weather events have taken their toll across the world. In our ESG megatrend section we describe its impact on economies and markets. Other megatrends are also relevant for investors to explore - for instance, the rise of AI has already had significant investment implications. Demographic changes too will result in shifts in the world order, as aging countries will find it more difficult to grow their economies.

Economy: all about inflation?

The sharp rise of inflation and its persistence have defined the economic debate in 2023. Central banks have been trying to put the genie back in the bottle. So far, economies have held up better than expected despite the unprecedented sharp rise in policy rates. The big question is, how much will economies slow down going forward? We are of the view that economies will slowdown and many developed economies will enter a recession. However, due to underlying strength, this recession will be relatively shallow.

This outlook is about more than the near-term slowdown. An improving energy situation in Europe and dissipating headwinds from the Chinese slowdown are likely to push economies back towards their trend growth rates.

Financial markets: resilience to last?

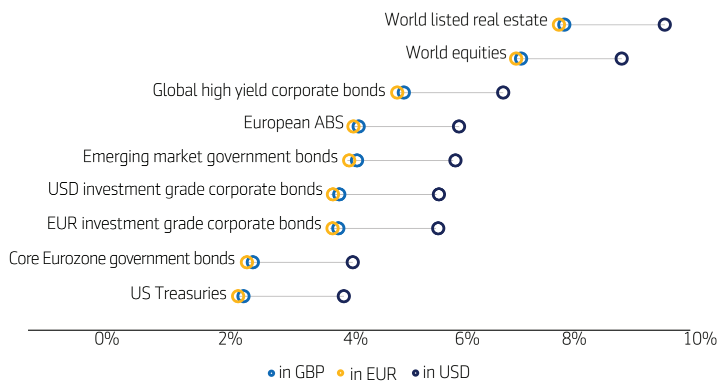
After years of expecting low or negative returns on fixed income markets due to low interest rates, the outlook going forward is completely different. High rates will likely imply relatively high returns going forward on highly rated government debt.

Credits spreads on corporates imply a decent yield pick-up, but corporate markets will be more vulnerable to an expected slowdown. Within alternative fixed income, we see many opportunities for investors to lock-in high returns.

Equity markets seem to have priced in a very rosy economic scenario. However, looking a bit deeper it is only the big technology-related holdings which have driven indices higher. Many other sectors do seem to price-in an economic slowdown. In the medium term, companies are likely able to price through higher labor and goods cost. This will mean that profits will likely grow in line with nominal growth over time. On that measure, the world economy, measured in nominal terms, is 15 to 20% larger. So, there is some scope for corporate profits to catch-up, and hence for equities to perform reasonably well.

The graph below summarizes our total return expectations over the next four years.

Figure 1: Expected returns in USD, EUR and GBP for major asset classes (As of Sep-23)



Source: Projections provided by Aegon Asset Management[1]. Hypothetical example for illustrative purpose only.

[1]Return and volatility estimates are based on economic and market outlook, which combines quantitative and qualitative factors. Inputs are amongst others expected fiscal and monetary policy, economic growth, central bank policy, interest rates, spread, default expectations, recoveries, rating migrations, dividends, buybacks, earnings growth, multiple changes, interest rate differentials, basis spread, supply and demand factors and curve shapes. These estimates are inherently highly uncertain and should not be directly relied upon.

ESG Megatrends

Beyond the traditional economic trends, certain issues not necessarily strictly economic in nature, are rising in importance. Environmental, social, and governance (ESG) factors are increasingly gaining prominence across the globe. From social unrest in the form of protests for democracy, or against discrimination; to pandemics and lockdowns; to environmental degradation and climate change; to the adoption of AI; we expect the current paradigm will be transformed by ESG megatrends as we progress through the 21st century.

We believe awareness of ESG megatrends may significantly enhance institutional investors' decision making. Understanding long-term global shifts with a potential to turn into systemic risks can help inform investment decision-making today, to help mitigate risks in the future. These ESG megatrends also present investment opportunities. Identifying the potential for long-term structural changes could yield opportunities through early investments in expected upcoming transformations.

Below, we will discuss 4 selected ESG megatrends:

- AI & Automation
- Climate change
- Water scarcity
- Demographics

For each of these subjects a more detailed paper is available on our website.

AI & Automation

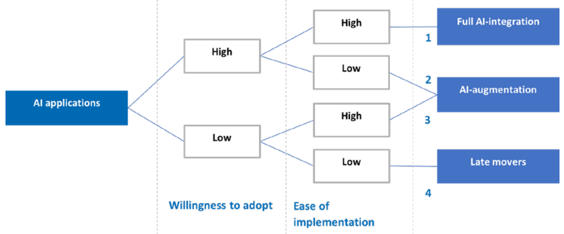
Technological improvements such as automation have existed for a long time. Where automation used to refer to technologies more physical in nature, such as dishwashers or robotization, nowadays the term implies a much wider range of technologies, including robotic process automation (RPA), machine learning (ML) models as well as certain applications of artificial intelligence (AI).

With recent advances in the field of artificial intelligence (AI) and the increasing use of automation across many industries, there is potential to revolutionize the economy as we know it. Simultaneously, as AI technologies advance, they raise significant Environmental, Social, and Governance (ESG) considerations. These factors should be integrated into the investment decision-making process.

AI adoption and macroeconomic consequences

The field of AI is developing at a staggering pace, making it challenging to oversee and capture all consequences in the short term, let alone the long-term. Presuming that technology and society are able to address the (ESG) risks, the increasing attention on AI regulation, adoption and implementation could significantly influence future developments of AI. Through a framework of adoption pathways, we aim to provide insights into the possible relationships and consequences of AI within the economy. The willingness to adopt AI and the ease of AI implementation will drive the competitive advantage that firms are able to achieve. In the figure below, we present four pathways which firms could take with respect to AI adoption.

Figure 1: Illustration of AI adoption pathways



Source: Aegon Asset Management

Short-term implications

Considering that in the short term, most organizations will primarily be exploring the use and implementation of AI as a way to augment their workforce, we anticipate marginal short-term labor market effects of AI. Quantifying job creation and replacement due to these technologies remains challenging, although early indications suggest that even in the short-term certain occupations are already becoming redundant.

Early adopters who effectively implement AI within their organization, could gain a competitive edge over their peers who are less willing to adapt. If implementation, albeit with varying impact, leads to increased efficiency and the automation of laborious tasks, this is likely to have a positive impact on the Gross Domestic Product (GDP). However, as we expect that most companies are still exploring the potential of AI in the short term, this is likely to only produce incremental productivity gains and therefore minor GDP growth.

Economic theory suggests a positive relationship between economic growth (GDP increase) and the level of the real interest rate curve. That said, until recently interest rates have been historically low, leaving some to wonder whether markets have truly priced in future growth due to AI. Due to these conflicting theories, in our view the short-term effect of AI and automation on interest rates are unclear.

Figure 2: Illustration of estimated short-term economic effects

Short-term effects	Unemployment	GDP	Real Interest Rates
AI-augmentation scenario	⇩/⇧	⇧	⇩/⇧

Source: Aegon Asset Management

Long-term implications

As businesses become increasingly familiar with the potential of AI and workplace automation, we foresee more profound effects on the real economy in the long-term. A full AI-integration scenario may be accompanied by significant changes in the labor market. The number of new occupations resulting from AI integration may be outpaced by the number of redundant jobs.

Research in the field of AI illustrates that integration could have (strong) positive effects on global GDP. A study by PWC (2018) stressed these possible effects by arguing that AI adoption could lead to an increase of 14% of global GDP by 2030[1]. Recently, Goldman Sachs stated that generative AI could lead to a rise in global GDP by up to 7% and increase productivity by 1.5%-point over a 10-year period[2]. They further estimate that two-thirds of US occupations are exposed to some degree of automation by AI. Organizations in the early stages of implementing AI and workplace automation may face significant capital expenditures. However, the long-term returns from these investments are likely to outweigh the initial costs and create significant potential to gain a competitive edge over late movers. As a result, in the long run, we expect the differences across organizations to widen due to the beneficial impact of early capital expenditures that facilitate rapid AI implementation. Overall, the ultimate real-world significance relies primarily on how these implementations benefit productivity.

In accordance with economic principles, a positive GDP effect of the full AI-integration scenario is expected to result in real-interest rates trending upward over the long run. However, according to the unbiased forward rate hypothesis, current forward rates can be interpreted as unbiased predictors of future spot rates. If that view is followed, given the fact that current yield curves are flat or inverse at the time of writing (quarter two, 2023), the forward rates do not imply higher spot rates in the future. As interest rate dynamics are complex to forecast and heavily depend on central bank policy, we expect the effect of AI & automation on interest rates in the long run to remain uncertain.

Figure 3: Illustration of estimated long-term economic effects

Long-term effects	Unemployment	GDP	Real Interest Rates
Full AI-integration scenario	⇧	⇧	⇩/⇧

Source: Aegon Asset Management

Conclusion

In a rapidly changing economy, with increased focus on cost competitiveness, sustainability and mental well being, AI and advanced workplace automation may become an integral part of society. Despite valid concerns surrounding AI safety, regulation, and risks, there is a general consensus that these technologies eventually have the ability to impact productivity and the economy in a positive way. Organizations and economies that are able to adapt smoothly and effectively are likely best positioned to reap a competitive advantage.

Climate change

Possibly the most discussed ESG megatrend is climate change. Climate change has a major impact on the global environment and economy. In addition, there is also a direct or indirect relationship with many other ESG megatrends. Transitioning away from fossil fuels and carbon-intensive production and consumption requires a significant shift towards zero -emission alternatives across the globe. We covered this ESG megatrend in last year's Long-Term Outlook. In this section, we focus on the implications of climate change for institutional investors. For the complete article, we refer to last year's Long-Term Outlook.

In our analysis, we make a distinction between two types of risks involved in climate change; transition risks and physical risks. To meet the goals in the Paris Agreement there is a need for immediate policy commitment, technological change, carbon removal, and a coordinated global approach. However, all of this might not be enough to stop current trends in weather changes. These are **transition risks** for the economy and financial markets. The **physical risks** caused by climate change arise due to real-world environmental hazards, such as an increase in extreme weather events. These physical risks have both real-world and financial implications, for example, due to supply chain disruptions, changes in commodity prices, and physical damage to assets.

Economic impact

There are many possible pathways along which the physical and transitional risks might develop, each driven by choices made by governments and society. This is a structural shift that is longer term in nature, and with several tipping points along the way. Climate risk scenario analysis complements our economic views where we focus on a shorter horizon. We don't believe they should guide the asset allocation decisions on a standalone basis, but may serve as a compass to gain a better understanding of the transition channels and potential portfolio impact of climate risk.

We use carbon pricing as a key policy measure and an element in modelling **transition risks scenarios.** Carbon pricing may have positive economic impacts by driving investment and spurring innovation. A key question is if government investment can stimulate technological change, and offset the potential negative impact of stranded assets and the crowding out of private investments.

Financial impacts from **physical climate risk** could arise from both an increase in the frequency and severity of extreme weather events, and the gradual rise in temperatures. The higher probability of damages acts as a drag on long-term growth. Higher average temperatures decrease the amount of labor that can be performed and depresses labor growth. This results in resources diverting away from, for example, R&D into adaptation and reconstruction, which lowers productivity growth.

A closer look at how interest rates can be influenced reveals several opposing forces. In general, transition risks may lead to rising rates, while physical risks will likely put downward pressure on rates. On the one hand, the transition may lead to higher interest rates, because demand for capital for (government) investments in new technologies increases. It could therefore cause some inflationary pressure in the short run, because of cost pass-through. On the longer run we expect higher initial rates will likely be more than compensated by a decrease in energy prices. Moreover, we expect increased uncertainty brought about by extreme weather events (EWE), possibly leading to reduced growth prospects. This, in turn, puts downward pressure on long-term interest rates.

[1]Sizing the Prize What's the Real Value of AI for Your Business and How Can You Capitalise?
[2]"Generative AI Could Raise Global GDP by 7%." Goldman Sachs

Implication for institutional investors

To get a grasp on the potential impact of climate risk on expected returns, we use a trackable framework that estimates the impact of three key distinct transition impact channels (direct carbon costs, abatement (costs), and changes in product demand). Capturing the aggregated impact of these impact channels on future earnings, and subsequently via a stylized discount model on market value, enables us to estimate expected return deviations from climate-agnostic projections across asset classes. At the heart of a transition climate risk assessment is the belief that in the long run, equity markets will align to their fundamental value. From an investor perspective, exposure to physical risk and subsequently long-term valuation will necessarily be subject to larger margins of error giving a rise to higher required compensation for risk. Combining this with the aggregated impact of asset damage cost distribution ultimately supports our efforts to project expected annual return deviations.

Equities

We project an annual deviation from a climate agnostic scenario of around -0.4% to -0.8% for developed equities on a 20-year horizon. The outlook for US equities is somewhat better (lower deviations from a climate agnostic scenario) compared to Europe, mainly caused by a difference in industry weights in both regions. In our projections we expect the largest potential deviations occurring in the early years.

In an orderly transition scenario, assuming Paris Agreement goals will be met, we project an annual deviation from a climate agnostic scenario of around -0.8% to -1.5% for emerging markets equities on a 20-year horizon. Emerging markets are more exposed to climate risks than developed markets. On the other hand, the long-term growth prospects for emerging markets provides quite some room to offset the potential negative aggregated impact of transition risks. Emerging market equities could still deliver investors higher returns than developed market equities. Especially, a disorderly transition will put the additional returns from emerging markets at risk. On an aggregated level, the carbon intensity of emerging markets is higher compared to developed markets. This is a disadvantage in a world that is transitioning towards net-zero. Furthermore, emerging markets seem more exposed to the risks of extreme weather events.

Fixed income

Fixed-income investors are much better positioned than equity investors to bear the risks of capital destruction and climate costs caused by extreme weather events based on the capital structure of the companies. Our expectation is that a slight downward pressure of climate risk on rates will positively contribute to fixed income returns in the short term. Following the same rationale as with equities, we expect an increase in spreads across fixed income. Combining this with creditworthiness and duration leads to expected return deviations from a climate agnostic scenario.

The projected annual deviations for (global) high yield is around -0.2% to -0.6% and for Euro credits is around -0.1 to -0.2%. Financials have a significant weight in euro credits universe, and on top of our current projections, these could be negatively impacted by financed emissions or insurance claims caused by extreme weather events.

Water scarcity

Climate change and water scarcity are closely intertwined with one another and could create a self-reinforcing feedback loop, exacerbating both issues. As global temperatures continue to rise, the hydrological cycle would intensify, leading to events of heavy rainfall as well as droughts, the latter limiting the availability of fresh water. The repercussions of droughts and diminishing water availability would be severe, as water-intensive processes such as food production and the energy sector would be heavily impacted. Alternatively, water scarcity could also fuel climate change, as water would now have to be sourced through sub-optimal methods like energy-intensive desalination or over-extraction of ground water, which disrupts the earth's natural water cycle. Additionally, reduction in the availability of water would lead to over exhaustion of other water catchments such as peatlands; the largest terrestrial carbon sink which is essential in removing carbon from the atmosphere.

Investors should perceive water management as a distinct and crucial component in a climate change mitigation and adaptation strategy. Effective water management (preservation of water resources and more efficient use) can help to mitigate and adapt to the impacts of climate change and provide resilience against future water shortages. From an investors' perspective, supporting technologies aimed at efficient water management can yield both financial returns and environmental and social benefits.

For an estimation of global losses due to water shortages, we can refer to the analysis conducted by the Taskforce on Water Security and Sustainable Growth, which was established by Global Water Partnership (GWP) and the Organization for Economic Co-operation and Development (OECD)[3]. This analysis provides partial estimates of the scale of global economic losses related to water insecurity:

- USD 260 billion per year from inadequate water supply and sanitation,
- USD 120 billion per year from urban property flood damages, and
- USD 94 billion per year of water insecurity to existing irrigators.

Further, water-related losses in agriculture, health, income, and property could result in a decline of as much as 6% of GDP by 2050 and lead to sustained negative growth in some regions of the world. Water scarcity is an issue that should become of high importance to investors due to the risks it poses. The table to the right shows the main risks associated with poor water management.

Sectors that would be most impacted by water shortages include agriculture, energy, and manufacturing. However, the impact of water shortages would be widespread and extend beyond the aforementioned sectors.

To indicate the macroeconomic effects of water scarcity, we could translate the 6% fall in global GDP by the World Bank discussed earlier into a hypothetical economic scenario. A fall in GDP in some regions around the world could potentially lead to a decrease in interest rates, which would be necessary to revive the economy. However, widespread shortage of water would result in the rise of the price of goods and services as increase in costs of production would be passed on to the consumer. Water-intensive sectors such as agriculture, the meat industry, and other industrial sectors would be negatively impacted. This effect would lead to an increase in inflation causing a negative setback on real interest rates and investments.

Financial risks	Potential knock-on effect onto all other resources, as water shortages would translate into higher costs. This could mean higher energy prices, higher insurance and credit costs, lower investor confidence, all of which would impact companies' financial viability.
Physical risks	Droughts, floods, and increased water stress would directly affect business operations and supply chains. Recovering from any of these incidences would incur additional costs.
Regulatory risks	Regulatory requirements such as water pricing and allocation can impact all businesses and industries. Failure to quickly adapt to the new regulations and requirements could mean that companies may not be able to operate in the long-term.
Reputational risks	Negative public sentiment and backlash against companies that are perceived to be having poor water management practices or fail to address water scarcity issues. This would reduce competitiveness of a company within the market and potentially affect the firm's 'social license to operate'.
Humanitarian risks	Widespread water shortages can trigger health issues, lead to hunger, create poverty and induce social migration in some regions around the globe. Aside from the moral perspective of preventing water shortage, social impacts such as these would also carry macroeconomic impacts.
Geopolitical risks	Water scarcity is likely to fuel larger issues such as geopolitical tensions and political disruptions, particularly in riparian countries that share access to river basins. The localized political unrest and disharmony could potentially have implications on a global scale.

[3]Source: Sadoff et al, 2015. Securing Water, Sustaining Growth: Report of the GWP/OECD Task Force on Water Security and Sustainable Growth

	Savings	Investments	Real Interest Rates
Water scarcity	↓	↓	↓/↑

While water scarcity poses a huge challenge, there are ways for investors to manage this risk. Investors can either incorporate water management as a prominent criterion of their ESG framework (mitigation), raise this issue with investee companies through constructive dialogue (reduction), exclude companies from the portfolio with excessive water-consumption compared to peers (avoidance), or directly pursue opportunities in water-related investments.

There are a number of investment strategies that target water scarcity issues, such as strategies investing in the listed equity of companies in water infrastructure, technology, and utilities. In addition, opportunities could also arise outside of typical large-cap equity or bond portfolios, such as within the private equity space. Accessible through venture capital or via direct investment into companies that focus on innovative technological developments, these opportunities can be globally diverse, including both developed and developing markets such as the BRICS economies. Currently, investment for water-related projects is mostly conducted through impact investing whereby investors can direct their funds to support specific companies or projects.

Demographics

Demographic changes have the potential to affect regions' populations and consequently their economic environments in the upcoming years. Indeed, population growth and changing age structures are likely to have implications on spending trends, labor markets, and overall economic growth. How does the ageing of populations in developed countries, and around the globe in the long-term, impact macroeconomic variables such as interest rates, and how could investors' portfolios be adapted?

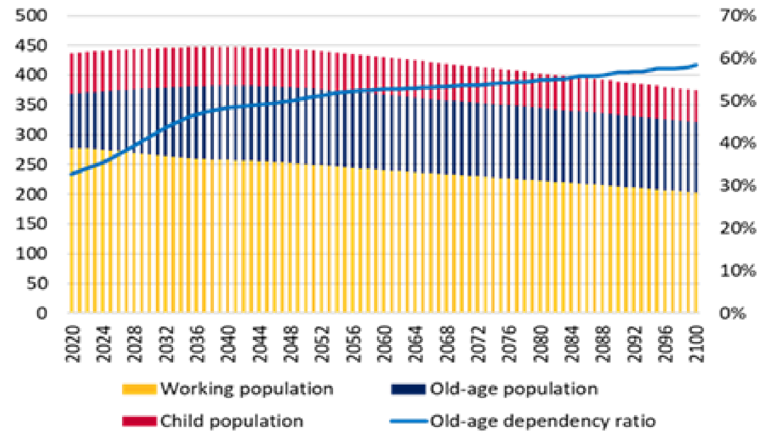
Demographics constitute a key structural factor that affects the economy. Through the impact on aggregate desired savings and investments, demographic changes affect interest rates. This in turn influences expected returns of bonds and equities in the longer term, which can affect the Strategic Asset Allocation (SAA).

	Savings	Investments	Real Interest Rates
Rising old-age dependency	↓/↑	↓	↓/↑
Falling youth dependency	↑	↓	↓

The broad consensus from the literature is that the demographic transition is incomplete, largely pre-determined and, on current trends, can be expected to depress real interest rates in the developed world further. On the other hand, in their efforts to increase portfolio resiliency investors should be mindful that the majority of the literature on demographics relies upon similar assumptions and methodologies, which can therefore also lead to comparable outcomes. We think that the future of personal savings and consumption dynamics in an ageing society possesses lots of uncertainty. For instance, savings could fall especially if the current high inflation environment turns out to be persistent.

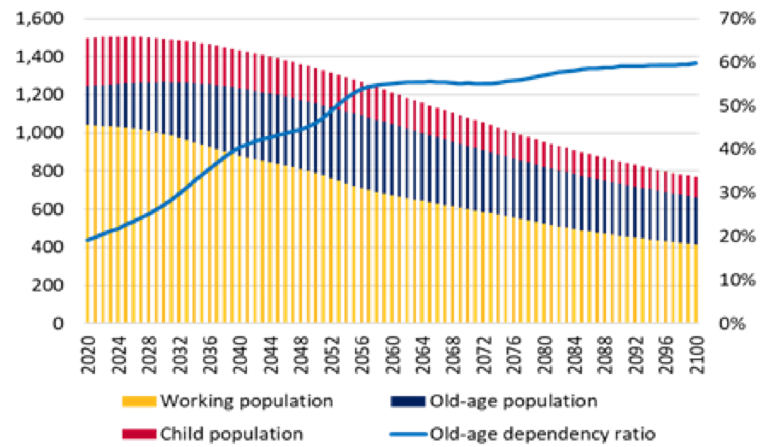
The focus of recent studies, and of policy-makers' attention, has been the population dynamics in the developed world, which has been undergoing a shift in population age distribution for quite some time. However, it should be noted that many emerging markets have started their demographic transition, with various degrees of advancement. The sharp decline in fertility rates and the pressure from a changing age structure on investment rates possesses challenges for several emerging countries' economies. In turn, these dynamics could also lower expectations for bonds and equities in countries that will increasingly dominate the emerging markets landscape.

Figure 4: Projected demographics trends for Europe (2020-2100)



Source: United Nations Projections, Aegon Asset Management, July 2022

Figure 5: Projected demographics trends for East Asia (2020-2100)



Source: United Nations Projections, Aegon Asset Management, July 2022

What could this entail for long-term economic projections?

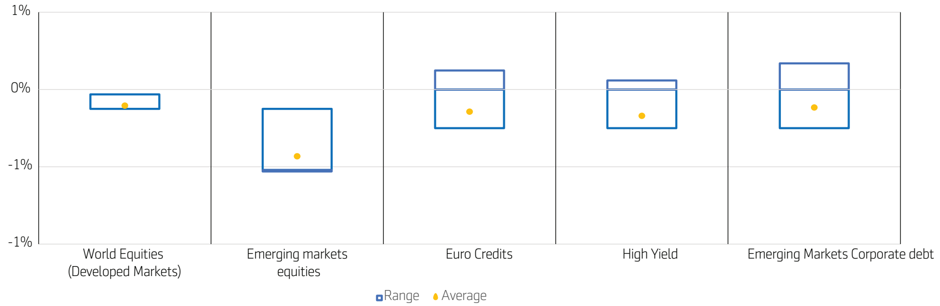
Real interest rates are driven by both cyclical and structural factors. Demographics are widely recognized as an unobservable slow-moving secular force and one of the key explanatory factors for the trend in (real) interest rates. Interest rate projections can serve as the baseline for longer-term expected returns of riskier bonds and equities through the addition of various risk premia.

Actual risk premia can deviate from their long-term equilibrium level during a significant period of time. During periods when real interest rates fall unexpectedly, this will tend to provide an immediate boost to asset prices and hence returns, even though prospective returns will have been lowered in that case. Research suggests a positive relationship between current real interest rates and subsequent real returns for both equities and bonds.

However, the correlation between interest rates and the equity risk premium is not perfect. Equity risk premiums tend to be higher with lower interest rates. Combining this with our alternative view on demographics leads to the projected deviations from a market implied scenario shown in the graph below.

On an annual basis deviations seem relatively small, but on longer horizons the cumulative differences of the potential impact could be quite significant. This could lead to additional considerations in the SAA. Using these projections as inputs in scenario analysis can support in making portfolios more resilient to weather these trends and could increase its robustness.

Figure 6: Projected change in annual return over a 20-year time horizon versus a scenario in which rates develop according to forwards[1]



Source: Aegon Asset Management, September 2022. For illustrative purposes only.

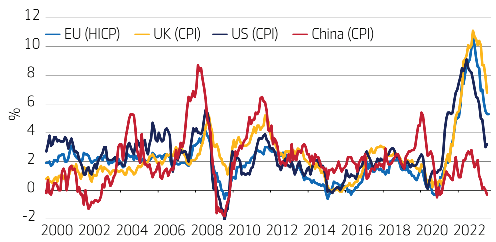
[1]Return and volatility estimates are based on economic and market outlook, which combines quantitative and qualitative factors. These estimates are inherently highly uncertain and should not be directly relied upon.

Macro-economic Outlook

All about Inflation?

The combination of the large fiscal boost, dislocated supply chains, and the energy blackmail by Russia, led to a sharp spike in inflation. Headline inflation reached levels of over 10% in many developed markets. More recently inflation has fallen sharply but remains well above recent historical averages.

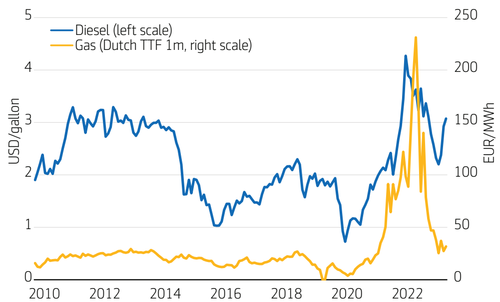
Figure 1: Inflation - US, EU and UK (As of Sep-23)



Source: Bloomberg

This is partly due to the workers demanding higher wages to compensate for the increased living costs. This has led to second round effects. This recent episode is a classic example of how inflation shocks can lead to structurally higher inflation.

Figure 2: Gas and diesel prices UK (As of Sep-23)



Source: Bloomberg

High and volatile inflation can lead to economic costs as it becomes harder for economic actors to plan ahead, save, or invest. Central banks are therefore eager to push inflation back to their targets, which are typically around 2%.

Central banks have been caught by surprise. And in response have sharply increased interest rates. Tight monetary policy will reduce demand and hence it should also lower demand for labour, thus lowering wage inflation. Clearly, this is quite a blunt process as sectors which are particularly interest rate sensitive are impacted - especially housing and construction, both of which are vulnerable to higher rates.

Many economists had predicted a recession in 2023, however economic growth overall has been stronger than expected. Considering the energy crisis and the unprecedented sharp rise in interest rates, this is actually quite remarkable.

The most likely explanation is that consumers started 2023 in a very strong position. Due to the large support packages during the pandemic, consumers had accumulated a vast amount of savings, especially consumers in the US who benefited from an overly generous government. As a result, they were able to absorb the increase in (energy) costs and keep consumption on a similar level. As well as this, the desire for holidays and recreation after the pandemic led to a prolonged period of strong demand in the services sector. In essence, there are two opposing forces, with the net effect of continued growth in the economy.

Going forward, consumers will have largely depleted their savings pile. However, due to rising wages they might (just) be able to sustain consumption. Our expectation is that we will have a slowdown, but that it will be a relatively shallow one.

In the end, we have to acknowledge that any forecast is highly uncertain as so much depends on the reaction of people to these shocks. A negative reaction would amplify this shock, but it's equally possible that people largely ignore these negative headlines and continue with their consumption patterns.

We therefore think it is also important to keep an eye on the underlying structural trends, as opposed to focus on the short term cyclical developments. Examples of these structural trends are the accelerated build-out of renewable power, technological advancements, and the last but certainly not least; geopolitics.

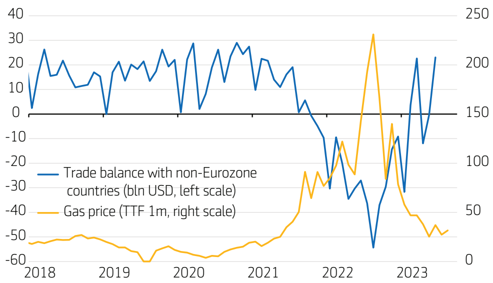
Accelerating renewables

The invasion of Russia in Ukraine and its subsequent energy blackmail to Europe has exposed significant dependencies in the supply of energy. This is especially true for gas, to which Europe was dependent on Russia for around 40% of its consumption, but also for oil products as it is almost fully dependent on imports.

The use of energy as an economic weapon has also resulted in a broader discussion about vulnerabilities in trade flows. In some areas, China has a near monopolistic position. For instance, Europe is very dependent on various rare earth minerals and solar panels on Chinese imports. There have therefore been various initiatives to reduce these dependencies.

The sharp rise in gas prices led to a terms-of-trade shock as the price of its imports sharply increased relative to the price of its exports. The figure below, shows the trade balance of the Eurozone, which as a result had fallen from a surplus of 300 billion to a deficit of 300 billion. This represents a swing of around 4% of GDP.

Figure 3: Eurozone trade balance and the gas price (As of Sep-23)



Source: Bloomberg

Most economists expected that the Eurozone would enter a deep recession if gas flows from Russia were to be cut. This hasn't happened. Growth has been weak, but a recession hasn't occurred so far. This is due to several reasons.

Firstly, Europe was successful in reducing demand for gas, but implementing energy savings and replacing gas with other energy sources.

Secondly, new LNG import facilities were constructed allowing import from other countries.

Thirdly, industrial companies were much better able to cope with high gas prices than feared. Energy intensive industries did scale back production, but overall this was offset by resilience elsewhere.

Last but not least, the economic impact was sharply reduced by energy price caps and subsidies from governments.

Governments are now more focussed on achieving energy security to prevent being blackmailed by energy exporters. To a lesser extent than gas, this is also happening in oil markets where the OPEC+ tries to keep oil prices elevated to capture as much income as possible. Therefore, countries have accelerated the build-out of renewables and nuclear.

Europe's: RePowerEU

Europe's reaction has been the RePowerEU programme, which aims to end the dependency on Russian fossil fuels. This is done via energy savings, diversifying supply of energy and accelerated build out of renewable energy.

In 2021, only about 18% of the EUs primary energy production came from renewables and 11% from nuclear, while the remaining came from fossil fuels, which are largely imported. The cost of these imports vary with the prices of oil, gas, and coal. However, before the pandemic these were already 2 to 3% of GDP. During the energy crisis, these increased to a multiple of that. The target for renewables is 45% in 2030.

In the short run, energy savings are the most efficient way to reduce fossil fuel consumption. The EU has reduced overall energy consumption by 13% since 2014 and aims for another 13% in 2030.

Overall, the targets are ambitious and might not be reached. However, the direction of travel is clear.

US: Inflation Reduction Act

The US is in a different position from Europe, as it's a net energy exporter. It benefits from high LNG prices and due to lower domestic energy prices its industry is at a completive advantage.

The Biden administration nonetheless introduced a significant economic package in the form of the "Inflation Reduction Act (IRA)" to decarbonise the economy. Clearly, this required to reduce the negative impact of climate change, but the US also stands to benefit. Lower domestic energy use, will allow higher export volumes. Renewables are also currently the lowest cost of energy in many places.

So far, the impact of the IRA is large. Generous subsidies have led to an acceleration in the build-out of renewable infrastructure. This is also clearly visible in the economic figures where investment in fixed structures is accelerating.

China's: World champion in renewable deployment

This is often overlooked, as the overall primary energy mix in China is still for more than 50% reliant on coal. Nonetheless, the country has also accelerated its deployment of non-fossil energy sources to reduce dependency on foreign energy supplies. It is now the largest producer of both solar and wind generation in the world and is responsible for the largest pipeline of new capacity.

Figure 4: Wind energy generated in TWh (as of 2021)

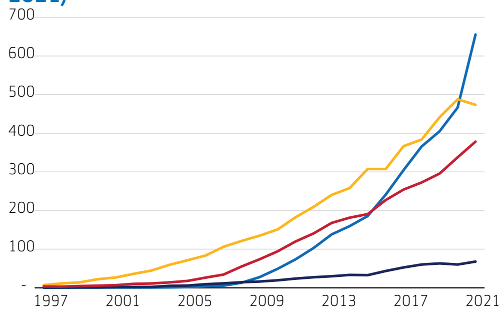
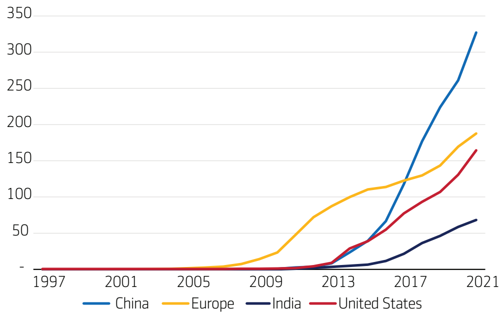


Figure 5: Solar energy generated in TWh (as of 2021)



Sources: International Energy Agency (IEA)

Economic implications

Despite these achievements, the transition will likely be slow. The world uses approximately 160,000 TWh of energy per year, of which only around 8,000 TWh is produced with renewable sources.

Nonetheless, the transition is significant in some regions and may have some interesting economic implications. Firstly, the trade balance should improve due to a lower need for fossil fuel imports. The economic multiplier of such an improvement is uncertain but is likely higher than 1 as resources can be spent more productively in domestic sectors. Secondly, inflation will likely be more stable as fossil fuel energy price shocks have a lower impact. Thirdly, the transition will require more domestic labour and investments. This would be positive for growth, but it also risks fuelling even more wage growth due to an already tight labour market in some regions. Lastly, fossil energy exporters are likely to capture a lower part of the world economic pie and have a smaller geopolitical cloud.

Technological advancements

Recent years have seen continued technological advancement. For instance, the semiconductor industry has significantly improved speed, versatility, and efficiency of its circuits, and advances in Artificial Intelligence is starting to have an impact on companies.

Advances in technology have an impact on the economy in many ways. Technology improves productivity, which can lead to an increase in output and a decrease in costs. This can lead to economic growth and an improvement in the standard of living. Additionally, technology can lead to new industries and products that create new markets and economic opportunities. Technological advancements are particularly relevant for aging societies. Higher drain on labour in an aging society could be offset by technological efficiency improvements.

Some technological advances are really a step change. An example is the invention of the internet, which over time has changed the way we work and live. It's hard to predict in advance, which technologies could also have such a significant impact, but possible candidates would be nuclear fusion and AI, in both of which investors are increasingly interested.

Nuclear fusion has the potential to provide a clean, sustainable source of energy that could replace fossil fuels. This could have a profound effect on the global economy, as it could reduce the dependence on oil-producing countries, lower the cost of energy, and help to accelerate the transition to low-carbon energy. However, the development of nuclear fusion technology is still uncertain, and it may take many years before it becomes a practical source of energy.

Artificial intelligence can transform many industries, from healthcare to manufacturing, by increasing efficiency and reducing costs.

Apart from an economic impact, technological developments also impact financial markets. Companies who have been able to develop new technologies, and protect those through patents, can have a potential competitive advantage. These may then provide the opportunity to generate persistently high profit margins. The recent decade has seen several examples of this. For instance, Alphabet which has had one of the best performing internet search engines or ASML which has a monopoly on the most advanced lithography machines. The ability of companies to develop and protect new technologies going forward will be important for the outlook on equities, as this would help these companies to capture a larger part of the economic pie. Future technologies, which could have similar effects include full autonomous driving and AI.

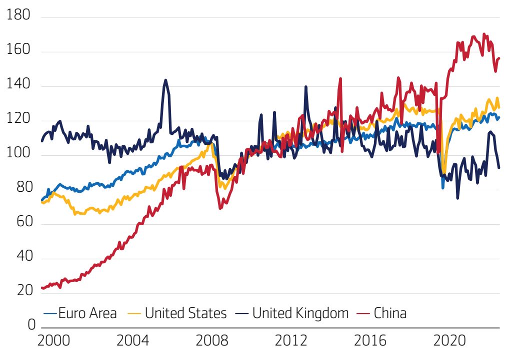
In our outlook, we assume further technological development leads to productivity growth in line with historical averages. However, in practice technological advancement comes in waves. Apart from that, the translation from innovation to productivity growth is often not direct and sometimes elusive. For example, the rise in mobile communication led to a rise in consumer wellbeing, but the translation to productive capacity was not clear. The unpredictable nature of advancements results in periods with widely variable productivity growth rates. Any economic forecast should therefore take this uncertainty into account.

Geopolitical: From hyper globalisation to deglobalisation

Russia's energy blackmail and the rapidly deteriorating relations with China have highlighted the vulnerabilities in the supply chains for energy and goods. This is leading to a scramble to identify vulnerabilities and correct them.

Various government initiatives have been setup to increase independence in semiconductors, energy and commodities.

Figure 6: Volume of trade (2010 =100)



Source: CPB

Interesting to note is that the volume of world trade is still on an upward trend. Most regions still have growth in their volume of import and exports. What is visible is a shift in trade. For instance, US imports from China have been decreasing, but are replaced by imports from other countries. So, despite the many stories about deglobalisation, in practice it is not as clear cut as some headlines suggest.

What is happening is preparations to limit dependency on key imports. For instance, the US and the EU are attempting to insource the production of critical components, like semiconductors. However, new factories take years to build, and the overall impact on trade might be limited as the volumes remain small.

The impact of the build-out of domestic (renewable) energy sources could be more profound. Energy is for many countries a large share of their imports. Replacing energy imports with renewables will likely take decades, but over time it will reduce the transfer of wealth to (fossil) energy exporters.

Using simple economic models, it could be argued that insourcing production would lower growth as duplicating production locations would lead to less efficiency. However, in the real world this clearly might be preferred to limit the risk of disruptions due to trade restrictions or other geopolitical conflicts.

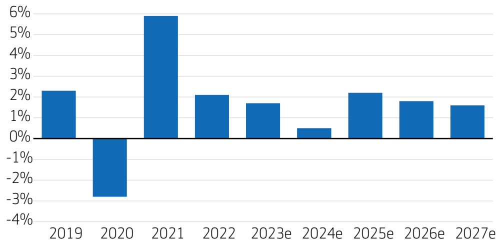
Overall, we don't expect the "deglobalisation" itself to be material enough to change our economic forecast. We do think that being less dependent on foreign suppliers is sound economic policy, reducing the risk of disruption.

United States

The United States economy has proven more resilient in the first half of 2023 than initially expected despite a "Volckerized" Federal Reserve (Fed) intent on stamping out inflation. With core services and wage inflation remaining elevated above target, we expect the Fed to keep interest rates in restrictive territory throughout much of the next year. As a result, the US economy faces several headwinds to short-term growth. The long and variable lags associated with 525 basis points of cumulative tightening since March 2022 are just beginning to weigh on growth and are expected to accelerate heading into 2024.

Restrictive monetary policy, together with tighter banking lending standards, should continue to cool credit demand and ultimately slow economic growth. Only in the second quarter of 2023 did the impact of higher interest rates begin to meaningfully weigh on consumer credit demand – little to no growth in this important driver of economic activity will likely serve as a drag heading into 2024. Additionally, the main pillars which supported consumption – the largest driver of US economic growth – throughout the pandemic have been losing steam and present further impediments to short-term growth including declining household wealth, stagnant real wages, depleted excess savings, tighter bank lending standards, and a resumption of student loan repayments. In our view, these forces are likely to lead to below trend growth in 2024 (with a high possibility of a mild recession in the fourth quarter of 2023 and first quarter of 2024), setting the stage for the next up-cycle complete with early cycle above trend growth in 2025.

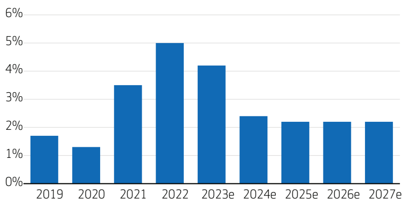
Figure 7: Historical and expected US real GDP Growth



Source: Bloomberg, Aegon Asset Management

While the effects of restrictive monetary policy can be seen in the housing market – where mortgage rates remain at their highest levels since 2000 and existing home sales near record lows – they are less visible in the labor market. Despite a material slowdown in payroll growth this year, employment is still growing at a robust pace. Additionally, the unemployment rate remains well-below the natural rate and thus is inflationary. Taming inflation will likely require the unemployment rate to rise by well over a full percentage point, a change typically associated with recessionary environments. However, by slowing inflation – even if the process is painful – the US economy will be better-positioned to achieve the sustainable real growth forecast in the later years of this report. Given recessions are inherently disinflationary, the forecasted slowdown should help the Fed re-establish price stability, bringing inflation closer to its 2% target.

Figure 8: Historical and expected US Core PCE inflation (as of Sep-23)



Source: Bloomberg, Aegon Asset Management

Fiscal policy is likely to be less impactful over the medium-term horizon due to a divided government. Besides routine funding bills, little - if any - major legislation is expected to pass ahead of the late 2024 elections, providing predictive stability in the policy landscape.

Europe

Europe has weathered the energy crisis relatively well. It didn't enter a prolonged and deep recession yet, despite the energy blackmail from Russia. However, it still faces several challenges.

Inflation remains uncomfortably high and growth prospects have fallen significantly. The immediate term prospects depend on the ability to tame inflation without inducing a deep recession. Labour markets have remained surprisingly tight, due to pent-up demand from the pandemic. In response the ECB has hiked interest rates and is reducing the size of its balance sheet. Interest rate sensitive sectors have been bearing the brunt of these policies, especially the real estate market, which is very rate sensitive, and has been cooling rapidly. This could be a risk to financial stability as real estate is the largest financial asset class.

The longer-term outlook for Europe is challenging, but at least these challenges are now being addressed. Europe's integration is far from finished. But due to the many geopolitical challenges it is moving closer together. Another big challenge for Europe is its lack of natural resources. The energy crisis painfully exposed this. But Europe also has many dependencies in non-energy products, making it vulnerable to disruptions and blackmail.

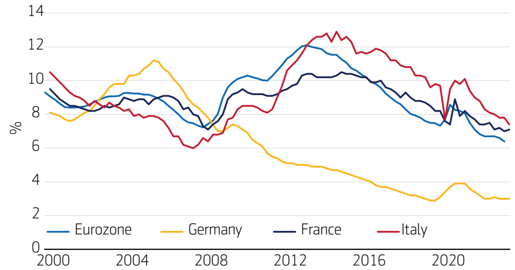
Recent developments

GDP growth in Europe has slowed sharply due to the energy crisis, monetary tightening and slowing foreign demand. Growth has been around zero since the end of 2022. However, this was better than initially expected as government policies to blunt the impact of the energy crisis were relatively successful. Improvements in supply chains have also helped the industry to recover and to offset part of the weakness in energy-intensive sectors, and fiscal support to companies and households limited the economic impact.

Labour market

Since the Eurozone crisis, labour markets have been strong. The pandemic only caused a temporary spike in an otherwise tightening labour market.

Figure 9: Unemployment rates Eurozone, Germany, France and Italy (as of Sep-23)



Source: Eurostat

Economists are split about the underlying structural reasons for the tight labour markets. But likely demographics are a large component as the 'babyboom' generation born between 1945 and 1955 retires and hence leaves the labour force. Apart from reducing the labour supply itself, a larger share of pensioners will also increase demand for labour in health service.

Another, more recent, effect is investments in the energy sector. Governments have accelerated their plans to build-out new generating and network capacity. But probably more importantly, consumers have been investing in energy saving measures and alternative energy sources.

Going forward, we expect a slight increase in unemployment as monetary tightening is likely to lead to an economic slowdown. However, demand for labour will remain elevated as the structural trends described above remain.

A key debate on the economic outlook is whether low unemployment rates translate to persistently high wage inflation. In economic theory this is described by the Philips curve, which plots the relation between inflation and unemployment. It indicates that low unemployment rates will result in higher inflation rates as workers have more bargaining power. Economic evidence shows that this theory holds. However, it also shows that the relation isn't stable over time and that other factors influence inflation rates as well.

Before the pandemic, many economists expected wage inflation to remain low. The reasoning was that due to technological innovations, capital was able to demand a larger share of GDP as it becomes relatively more important. The decline in bargaining power of labour, due to the decline in union membership, was also often quoted.

Overall, for the coming four years, we expect wage inflation to remain elevated as wages rise to compensate workers for higher energy induced inflation. Wage negotiations in 2024 and 2025, will be important to follow closely, as it will show whether employees still have enough bargaining power or whether the weakening economy will lead to lower wage demands.

European Union

The EU was created to promote economic cooperation and prevent future wars between its member states. While the EU has brought many economic advantages, it has also faced challenges and criticisms in recent years.

One of the primary economic advantages of the EU is the creation of a single market. This means that goods, services, and people can move freely between member states without tariffs or other barriers. The single market has boosted trade and investment, creating a larger economy with increased efficiency and competitiveness.

Another benefit of the EU is the creation of the euro, the common currency used by 19 of the member states. The euro has made it easier for businesses to trade and has reduced transaction costs and currency fluctuations. It has also made travel and tourism easier for citizens of the eurozone.

Additionally, the EU has a common trade policy, which allows it to negotiate trade agreements with other countries as a unified bloc. This gives the EU more bargaining power and can result in better trade deals for its member states.

The EU has also made significant investments in infrastructure and development projects, particularly in less developed regions.

However, the EU has faced several challenges in recent years. One of the most significant was the decision by the United Kingdom to leave the EU, commonly known as Brexit. The UK held a referendum in 2016, in which a slim majority of voters chose to leave the EU. The UK officially left the EU in January 2020, following a period of negotiation on the terms of its departure.

Brexit has had several economic consequences for both the UK and the EU. In the short term, it led to increased uncertainty and market volatility, particularly for businesses that relied on trade between the UK and the EU. The UK and the EU negotiated a trade deal that took effect in January 2021, which has helped to mitigate some of the economic impacts of Brexit. However, there are still concerns about the long-term economic implications of the UK's departure from the EU.

Another challenge facing the EU are populist parties. As the EU is inherently vulnerable to populistic governments as decisions often have to be taken unanimously, and member states have significant autonomy. This is especially true for the countries in the Eurozone which can inflict significant economic damage, as an exit from the currency zone would result in economic upheaval.

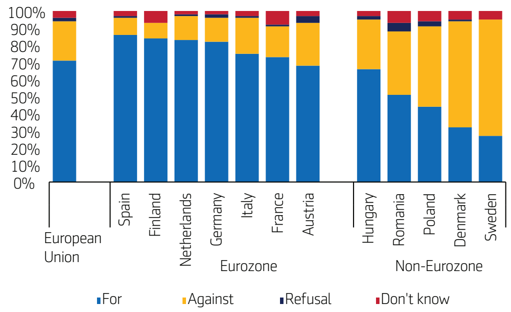
One of the most notable examples of populism in the EU is Hungary, where Prime Minister Viktor Orban and his Fidesz party have been accused of curtailing press freedom, eroding the independence of the judiciary, and violating the EU's democratic values.

France has also seen the rise of populist movements, such as the National Front led by Marine Le Pen, which has capitalized on anti-immigrant sentiment and Euroscepticism. While Le Pen was defeated in the 2017 French presidential election, her party has continued to gain support, winning seats in the National Assembly and local elections.

Populism has also led to the erosion of democratic norms and institutions, as well as the rise of authoritarianism and nationalism.

Despite this risk, overall, the support for the European project is still high. Surveys like the Eurobarometer, consistently show strong support for the EU and for the economic union. So, we are less concerned about another Eurocrisis erupting. Even populist parties, like Meloni's brotherhood of Italy, is not considering leaving the block.

Figure 10: Survey on support of the economic and monetary union



Source: Eurobarometer survey

The election of Trump in 2016 and the real possibility of his return in the elections of 2024, have likely increased the realisation that the European countries are stronger together to cope with a US administration which is openly dismissive of the European Union. Counterintuitively, this might have actually reduced the risk of the EU disintegrating.

The war on the European continent has had the same effect, as European countries realise they stand stronger together against its aggressive neighbour.

The EU has faced criticism from some who argue that it is too bureaucratic and inefficient. Critics point to the large number of regulations and the complex decision-making process within the EU as evidence of its inefficiency. Additionally, some argue that the EU's focus on a single market has led to the neglect of other important issues, such as social welfare and environmental protection.

In conclusion, the European Union has brought many economic advantages to its member states, including security, a single market, a common currency, as well as significant investments in infrastructure and development. However, it has also faced challenges and criticisms, including the economic impact of Brexit, populism, and concerns about its efficiency and focus. Considering overall support, we expect that further integration of economic policies will continue, which is likely to reap economic benefits.

Outlook

After weak growth in 2023, a gradual recovery in activity is likely to start towards the middle of 2024.

Tight financial conditions, negative real wage growth and soft external demand have been headwinds in 2023. However, a number of these factors will reverse into 2024. Energy price declines will trickle through and result in lower inflationary pressures. Wage growth will turn from deeply negative into positive territory, resulting in a reversal of the purchasing power hit during the energy crisis.

Fiscal policy will be less accommodative as (energy) support packages expire. However, the impact of the NextGenEU fund will remain substantial well into 2025, so fiscal policy is unlikely to be contractionary.

Overall, we expect GDP growth in 2023 of approximately 0.5%. Into 2024, we expect a rebound towards 1.5% and trend growth thereafter. We remain of the view that inflation will return to levels consistent with the ECBs mandate. However, considering the economy has been able to withstand higher rates and with the labor market remaining tight, we expect central bank rates to remain above their inflation target of 2%.

Emerging Markets

As the recovery moves beyond the effects of the pandemic but remains amidst several other shocks, everyone is watching how emerging market nations will fare in the long-term. We do see a multi-speed economic rebound in which some regions have recovered faster than others, and some countries have been left behind. There are bright and dim stars in all regions, though it seems that Asia and Africa are growing better in 2023, while Latin America and the Middle East are mixed, and Central and Eastern Europe (CEE) is generally sluggish. This may depend on trade ties, with the war in Ukraine impacting Europe more than other regions, and Asia and Africa benefitting from specific commodities and traded goods.

Inflation and monetary policy in Emerging Markets (EM)

Unfortunately, the combination of high inflation worldwide, tighter financial conditions, a slow recovery in China, and the multi-faceted spillovers from the Russia-Ukraine war, will challenge the world in managing macroeconomic policies and achieving a sustainable recovery. Fortuitously, central banks in most EM countries began raising rates very early on, so much so that a number of them have already achieved their goals and have begun cutting rates. Central banks that are already pausing the hiking cycle include the likes of Indonesia, Malaysia, Philippines, India, Colombia, Peru, Czech Republic, Poland, Romania, and Serbia. Those which have actually started cutting rates include Uruguay, Dominican Republic, China, Hungary, and Brazil. EM sovereigns are particularly sensitive to inflation concerns given their experience with higher inflation over the years. At times it can be difficult to root out of the financial system, since it often becomes anchored via wage indexation or union negotiations on wages, and thus can be harmful and grow even more (e.g. Argentina). Inflation in EM countries affects the poor the most, and can put negative pressure on economics, society, and politics.

China

China is struggling to meet the government's economic growth target of 5% for 2023 from a low base of 3% GDP in 2022. Behind the weak recent data is the excess supply, while demand is softer than expected following the removal of the zero-Covid policy. Domestically, the clampdown on speculative real estate purchases in recent years has cut off a key source of demand. House purchases are still very weak. Externally, the global supply chain relocation hurt China's exports, which fell more than 14% in July alone this year. Both domestic demand and external demand are not likely to increase in the near term. China's slowdown could have a negative impact on global growth.

Deflation: China is the exception to the global inflationary trend

In 2023 CPI inflation fell into contractionary territory for the first time since February 2021. Together with a ten-month contraction in PPI, deflationary pressure has been mounting lately. Both low global commodity prices and weak domestic demand are the contributing factors. The deflation situation is likely to stay for the rest of 2023. Policy-makers are expected to continue its easing cycle. This is in contrast to most other parts of the world where inflation and interest rates are skewed to the upside. There may be some benefits for many countries fighting with high inflation as Chinese companies cut prices to shed excess supply.

China's economic growth outlook and long-term goal

Weak growth outlook in the near and medium term

The real story beyond the weak headline numbers are weak domestic demand and declining external demand on the back of geopolitical tensions and talk of "de-risking", which caused many companies to shift their supply chain away from China. As a result, China is working hard on boosting its domestic demand as reflected by a series of targeted pro-growth policies released in the first half of 2023. However, China is reluctant to push a large fiscal and monetary stimulus policy given it has been, and is still, battling with a growing debt burden. The surge in debt burden is a consequence of high investment for decades. In addition, the geopolitical tension is likely to remain high in the near and medium term.

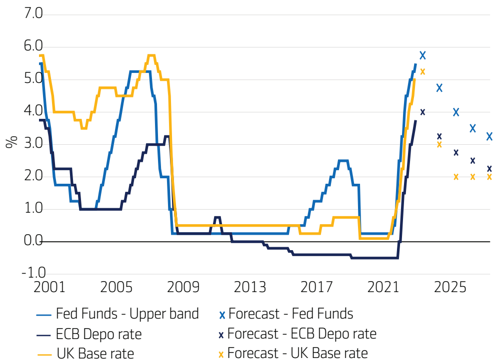
Long-term economic goal (3-4%)

In general, GDP growth in most large economies is driven primarily by consumption and investment (with net exports usually too small to matter). China's growth is likely to slow down longer than expected given the country needs to rebalance its growth model from investment & export-oriented, to consumption-oriented. Beijing's economic policymakers largely accept that fact. Given the disproportionately large investment share of economic activity, any reduction in its share of GDP must put significant downward pressure on growth in overall economic activity. We expect the long-term GDP growth to be on the weaker side at 3-4% unless there is a substantial increase in the growth rate of consumption.

Political developments and tensions between US and China

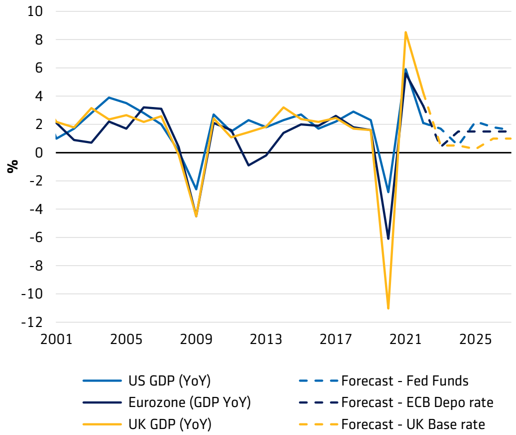
The tensions between the US and China are likely to stay elevated. At this moment there are no indicators of any softening in China's foreign policy toward the United States, nor any accommodation of American concerns about Chinese behaviour. The Biden administration's National Security Strategy prioritizes China as the "most consequential strategic competitor" of the United States. For this reason, it is expected to continue to invest in coalition efforts to strengthen deterrence in the Asia-Pacific and in limiting China's technological advances in national security-sensitive areas. China, on its part, is expected to continue to 1) exert an iron fist against any hints of domestic dissent, and 2) continue to favor state intervention in its economy. China's diplomatic activism is unlikely to abate. Therefore, the chances that China will do the United States any favors on North Korea or stop investing in relationship with Putin are rather slim.

Figure 11: Historical and expected central bank main policy rates (As of Sep-23)

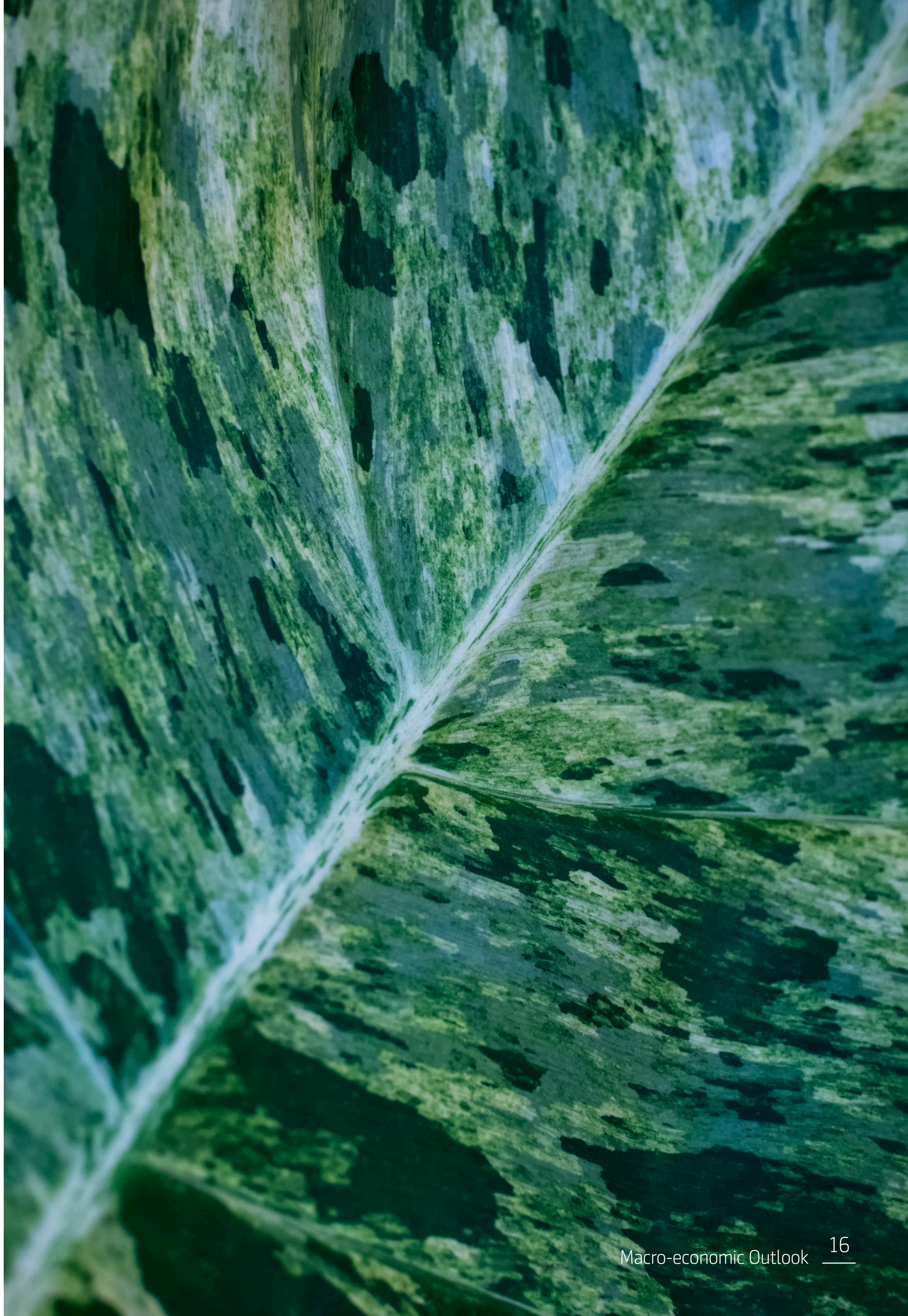


Source: Bloomberg, Aegon Asset Management

Figure 12: Historical and expected real GDP Growth rates (As of Sep-23)



Source: Bloomberg, Aegon Asset Management

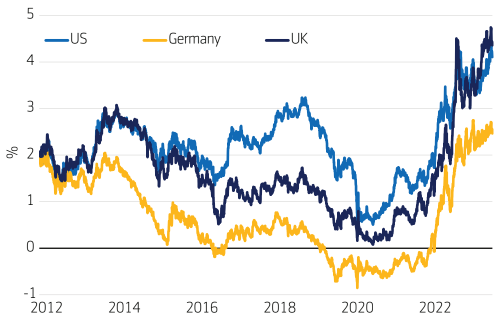


Developed market government bonds

Government bond markets continued to be under pressure due to the rising interest rates (see figure below), as central banks were still on their hiking path. Inflation - especially core - remains sticky and is only coming down gradually, with recent prints still above central bank targets. The uncertainty around the economic and inflation outlook results in a data-dependent approach by the major banks where they try to avoid any forward commitments. If incoming inflation data remains too high, they will continue tightening.

High interest rates have a dampening effect on economic activity and hence wage and price inflation should go down over time. Whether this implies a recession, or a "soft-landing", remains uncertain. A potential pause in central bank rate hiking, and possibly rate cuts when inflation is under control, are at the front of investors' minds.

Figure 1: 10 year sovereign interest rates (As of Aug-2023)



Source: Bloomberg, Aegon Asset Management

United States

US bond yields pushed higher in 2023. 10-year Treasury yields rose approximately 40 basis points so far. There are a number of factors driving bond yields. Clearly, in 2022 the sharp rise was mainly driven by rising inflation and inflation expectations. This year headline inflation has been declining and inflation expectations have declined. Ten-year breakeven rates are around 2.5%, which is marginally above central bank targets, but significantly lower than the 3% seen in 2022.

It seems therefore that the more recent rise is driven by improving economic expectations. The recession that many economists have been expecting hasn't happened yet. The US economy, so far, has been surprisingly resilient to the unprecedented rate hiking cycle. Unemployment remains low, and wage growth is resilient. It is therefore likely that markets expect structurally higher rates as an economy at full employment wouldn't allow any loosening of conditions.

That said, some cracks are appearing in the labor market. Vacancies are declining and the unemployment rate ticked up marginally. The big debate is how deep this slowdown is going to be. We do expect a US recession is unavoidable given the scale of tightening.

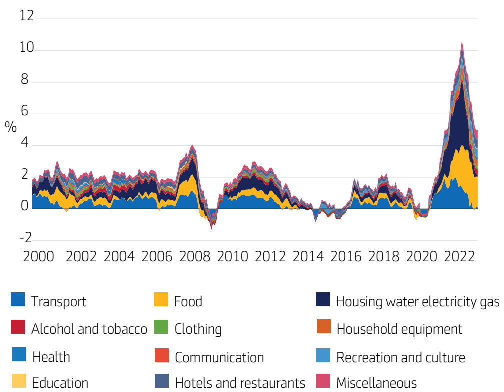
This year Fitch, a rating agency, downgraded the credit score of the US government. Although markets didn't really react immediately to this news, it does point the finger at an issue in the US economy. Since its low point in 2015 of a 2.5% budget deficit, the deficit has been increasing and temporarily reached 15% during the pandemic. It's now close to 6% and projected to stay there in the coming years. This has resulted in an increase in the debt-to-GDP ratio despite the phenomenal 25% nominal GDP growth since the pandemic. The political situation makes either party reluctant to reduce the deficit to prevent the other from being able to spend. This all implies a continued high supply of US treasuries in the coming years, which results in an upward pressure on yields.

All in all, we expect the Federal Reserve (Fed) to keep rates relatively high and start a more meaningful cutting cycle toward 2025. In our view, this would imply that long-term rates have limited scope to fall. We project the 10-year rate around 4% towards 2025 and only to fall marginally lower in the two years thereafter as more stable around the Feds target.

Eurozone

In Europe, two main themes dominate market sentiment – sticky inflation and the risk of a widespread recession. Inflation came off the peaks from 2022 and showed a decent decline, although it remains at elevated levels. Despite all the Central Bank interest rate hikes, the inflation figures remain sticky and are showing a slower decline than initially anticipated. Core inflation is likely to remain elevated as workers demand higher wages to compensate for increased living costs. This might trigger the central bank to keep rates in restrictive territory for a longer period. If economic indicators keep showing resilience, more hikes are still possible in the remainder of 2023. Once GDP or job data starts showing visible signs of a larger contraction, the central bank's discussions will shift to the potential easing of monetary conditions. The market is pricing the first rate cut in the second half of 2024 when central banks might need to counter the economic downturn. Starting earlier might be counterproductive and interfere with the central bank's main priority – fighting inflation.

Figure 2: Components of EU inflation (As of Aug-23)



Source: Bloomberg, Aegon Asset Management.

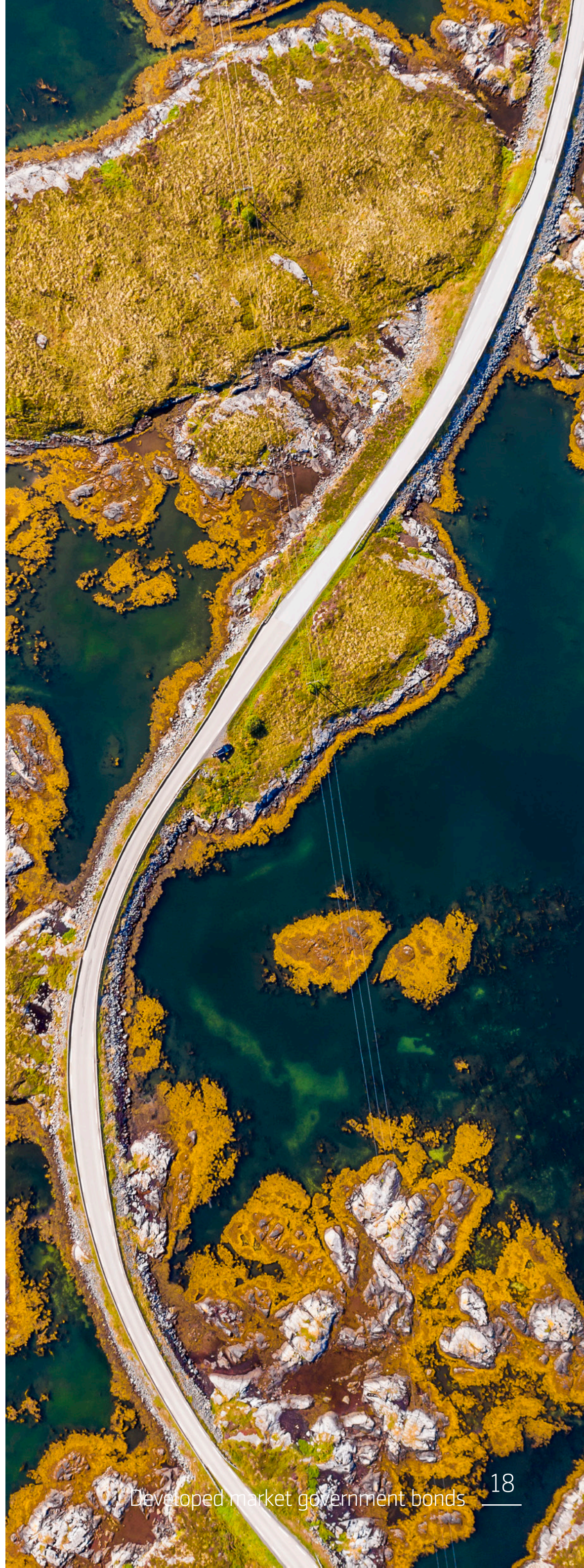
The front end of the yield curve is largely determined by central bank policy rates, while the longer end of the curve is influenced by expectations of future economic growth. The yield curves became deeply inverted in 2022 as it reflects investors' anticipations that after the spike in the official rates, central banks would have to reduce rates later to stimulate the economy. The low level of unemployment allowed central bankers to hike rates at an unprecedentedly fast pace, but due to the long and variable lags of monetary policy, the main impact of the hiking cycle is still to be seen. Lower lending volumes and overall tightening of credit conditions in the eurozone imply that higher interest rates could start visibly impacting the economy and might cause more slowdown into next year. The government bond market would likely benefit once investors start positioning for potential rate cuts. We therefore expect the curves to re-steepen when interest rate cuts are priced more aggressively in the front-end of the curve.

United Kingdom

A combination of inflationary pressures and rising rates expectations has made owning gilts over the last year a thankless task. The trajectory of CPI readings in the UK has certainly been more pronounced versus that of the US and Europe. While US inflation has now fallen to 3% from a peak of 9.1% in June last year (Headline CPI YoY), UK inflation has shown less convincing signs of decline; down only to 7.9% from a peak of 11.1% in October. UK inflation has also more often than not surprised above market expectations; of the past 12 readings, 8 of those have been higher than median forecasts. The direction of gilt yields has been a consequence of where traders believe the path of inflation will travel, and how the Bank of England may therefore react. The Bank of England has increased interest rates by nearly 5% since the beginning of 2022. But as inflation expectations have continued to surprise to the upside, traders have predicted that monetary policy would inevitably have to tighten further that what is already being done currently, which has had a negative impact on gilts.

The difficulty with monetary policy is that the impact of financial tightening has a lagged effect by 18-24 months. Last year, the 2-year fixed mortgage rate rose from 1.5% to 6%, but according to the Office of National Statistics, 50% of homes are either social housing or privately owned, thus reducing the impact of higher rates on mortgage owners. It hasn't helped either that the economy is still showing surprising signs of strength. Labour markets remain tight and wage growth is still strong, which has meant consumer sentiment has been relatively robust despite the high rate, high inflation environment. Also, political instability, particularly during the Liz Truss era, has caused investors to increase their longer-term inflation forecasts.

Looking longer-term however, there is now enough forward-looking measures to suggest the tightness of monetary policy and lack of fiscal stimulus will have an effect on the economy which will halt the Bank of England on its hiking path. Higher interest rates should eventually feed through to the real economy and slow growth. There are signs that the labour market is loosening quite quickly now with job vacancies to unemployed falling rapidly and the unemployment rate increasing to 4%. We are also seeing housing transactions fall and house prices fall year on year. Eventually the fundamental data will seem inconsistent with market valuations and as such yields may drift lower.



Corporate credits

Corporate credits, like most risk-bearing investments, had a difficult 2022 with macroeconomic headwinds. High inflation, combined with rising interest rates and monetary tightening of central banks, led to negative returns. In addition, spreads widened due to concerns about the impact of high inflation on economic growth. While inflation has moderated and interest rates are near their expected peak, sentiment has improved for credit markets. Year to date the spreads have tightened and rates have remained rather stable, which is supportive for corporate credit returns in 2023.

Investment Grade

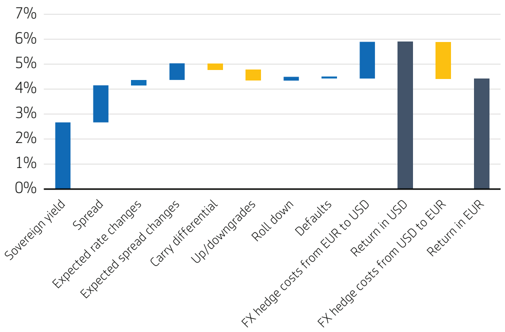
Our medium-term outlook for corporate credit is positive, given an attractive risk-return profile, supported by improved nominal sovereign yields and current spread levels. However, in the short term we expect macroeconomic headwinds, with a potential for a recession at the end of 2023 or beginning of 2024 in several major economic regions. This should push spreads higher and cause corporate defaults to pick up. Corporate defaults have been below historical averages in the past few years. This was partly due to solid economic developments as well as monetary- and fiscal aid during the pandemic. However, we expect defaults to pick up as the supporting factors are withdrawn. But current spreads should offer more than sufficient compensation.

Our outlook for Europe and the UK is more challenging than the US, however, we do not view the overall picture as sufficiently negative to push credit spreads beyond their year-to-date ranges. Historically attractive valuations provide scope for spreads to tighten, although the short-term economic headwinds mean this is unlikely to occur in a straight line.

We favor euro investment grade over US dollar-denominated credit given relative spread valuations. From a sector perspective, bank and insurance credit risk is particularly attractive given spreads have only partially recovered from the wide levels seen following the US regional bank crisis and Credit Suisse takeover in the first half of the year.

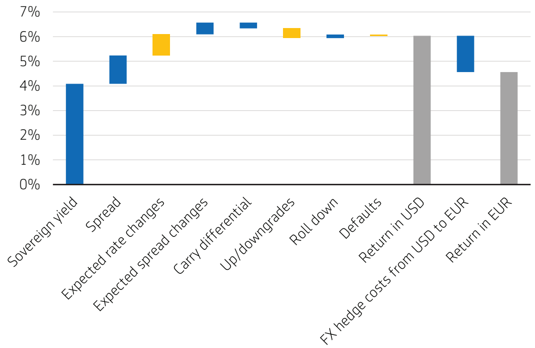
Due to the increased nominal yields and elevated spreads, we argue that corporate credits – both investment grade and high yield – have an attractive medium-term risk-return outlook. Figures 1 and 2 show how our return expectation for EUR and USD investment grade credits is derived from its various components.

Figure 1: Expected returns for EUR investment grade bonds



Source: Aegon Asset Management, Bloomberg as of August 2023.
For illustrative purposes only.

Figure 2: Expected returns for USD investment grade bonds



Source: Aegon Asset Management, Bloomberg as of August 2023
For illustrative purposes only.

High Yield

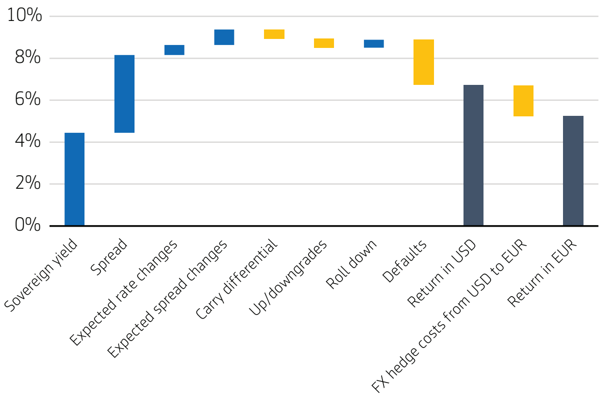
Although we believe high yield also offers an attractive risk-return profile for the medium term, valuations are slightly less attractive compared to investment grade credit. After the rally witnessed year to date, spreads remain around historical averages and are likely biased toward widening as we expect an economic slowdown in the short term.

From a fundamental perspective, most high yield companies entered 2023 with healthy balance sheets, low leverage, and high interest rate coverage. Many issuers displayed resilience in the face of headwinds with better-than-expected earnings and solid credit metrics. Generally speaking, rating trends also remain positive as rising stars continue to outpace fallen angels, although signs of deterioration in credit metrics are emerging. Companies are facing persistently higher rates and interest costs will likely increase for issuers with refinancing needs, floating rate liabilities, or limited rate hedges. Idiosyncratic issues are also creating more bifurcation across the market, leading to an uptick in distressed situations and defaults. We expect defaults to continue to creep higher toward long-term averages as weaker companies face increasing pressures.

While downside risk remains, the much-anticipated recession has also provided companies the luxury of time as they prepare for an eventual economic slowdown. Most companies are arguably better prepared to weather a downturn compared to prior recessions. Importantly, there are few near-term maturity concerns in 2023 and 2024, which should help alleviate near-term default risk. While rating actions will inevitably shift to downgrades as the cycle turns, the improved-quality of the high yield market should imply lower defaults than in prior downturns. Periods of spread widening could be short-lived depending on the medium-term macroeconomic circumstances.

Overall, we believe current yields provide an attractive long-term total return potential for high yield, and spreads should provide sufficient cushioning for credit losses. Figure 3 shows our return expectation for USD high-yield.

Figure 3: Expected returns for USD high yield bonds



Source: Aegon Asset Management, Bloomberg as of August 2023. For illustrative purposes only.

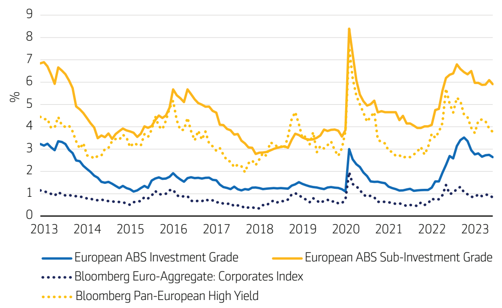
Asset Backed Securities

Asset Backed Securities (ABS) have benefitted from the floating rate nature last year, outperforming most fixed income assets while interest rates were rising. Still, while ABS spreads widened - mirroring the developments in broader markets – returns have been positive, providing a cushion against interest rate and credit spread volatility. Credit spreads may be volatile in the coming period to come due to, amongst others, recessionary fears. However, considerable weakening of the fundamental picture has already been priced in and investors in ABS have generally been well compensated for the perceived increased credit risk. Even more so, the credit curve is quite steep, increasing the potential benefit of taking credit risk. The current spread levels look attractive when compared to the broader fixed income markets and can potentially offer absolute and relative value.

The asset class consists largely part of consumer related ABS, but also includes collateralized loan obligations (CLOs) and commercial mortgage backed securities (CMBS). In general, over the last two years consumers in Europe and the UK have weathered the high inflation levels relatively well, even though inflation has outpaced wage growth, eroding the purchasing power of consumers. Moving forward we do expect that the economic slowdown and high inflation environment will deplete consumer's excess savings and weaken consumer's strength. We expect arrears in underlying loans to increase given the higher interest rate environment and pressure on household balance sheets. We anticipate corporate downgrades and defaults to increase, affecting the fundamental performance of CLOs. Based on this we expect spreads to move up in the near future, and to tighten in the period thereafter, in line with our economic scenario. In general we expect a benign default environment, but CLO and ABS structures are expected to be able to withstand even substantial stress scenarios and payment disruption owing to structural elements like (liquidity) reserve funds, excess spread, cashflow diversion triggers, and subordination, which have almost all increased in newly-issued ABS. Additionally, in case of severe deterioration in performance, observed historical asset price increases are likely to limit eventual losses in case of a forced sale. As such we remain constructive on the fundamentals of this asset class.

Overall, the combination of an attractive spread pick-up and negligible impairments should result in an interesting excess return over government bonds and other fixed income markets. We expect returns on investment grade ABS to be between 1% to 1.5% above investment grade corporate bonds for the next 4 years on average. For Sub-investment grade ABS we expect annual returns to be 9-10% for the next 4 years.

Figure 4: Spread European ABS over swap



Source: Aegon Asset Management, Bloomberg as of August 2023. For illustrative purposes only. Indices do not reflect the performance of an actual investment. It is not possible to invest directly in an index, which also does not take into account trading commissions and costs. All investments contain risk and may lose value.

Alternative Fixed Income

Apart from the traditional fixed income asset classes, there are also several asset classes we capture under the Alternative Fixed Income category. The range of assets is very diverse, and can range from Renewable infrastructure debt, NAV fund finance, state-backed loans, to subordinated SME financing. Risk and return characteristics vary widely across these specialist asset classes. What they do have in common is that they often offer a risk premium relative to other similar rated or similar risky assets. This could be partly due to illiquidity but is also likely due to their more specialised nature. It requires more expertise from the asset manager to select and manage these assets. Overall, we expect a significant return pick-up will be available in the coming years in Alternative Fixed Income due to an illiquidity premium.

Insured infrastructure

In this asset class, the investor co-lends alongside multilateral development banks ('MDBs') and commercial banks ('banks') in government loans or bonds which finance specific infrastructure projects. Credit risk is mitigated with credit insurance protection, provided by strongly rated insurance companies.

Often notes have double recourse; firstly, to the government loan for principal and interest and secondly to A/AA rated insurance companies which insure non-payment of principal and interest by the government on the loan. The investable universe is approximately 25-30 billion USD in annual emerging market sovereign issuance that can be insured by A and AA rated insurance companies.

The sovereign projects financed within the infrastructure universe range from road infrastructure to power/electricity, health, environmental solutions, technology and water/sanitation.

Investors can aim to finance infrastructure projects which contribute to various UN SDGs, including (but not limited to) good health and well-being (3), clean water and sanitation (6), affordable and clean energy (7),sustainable cities and communities (11) and climate action (13).

Renewable infrastructure debt

In the coming decades, the energy transition requires immense investments. Renewable energy projects will also require debt financing. A specialist investment class is therefore emerging.

Renewable infrastructure debt offers investors impact investments and a transparent contribution to the energy transition. One benefit is that investors can contribute to climate change mitigation and net zero through debt financing for renewable energy projects.

Often projects are co-finance alongside commercial banks, and they typically relate to established renewable technologies, including off-shore and on-shore wind and solar PV. But might in the future also involve hydrogen and battery storage projects, as well as floating offshore wind.

Direct lending

Direct lending offers investors access to senior, uni-tranche or subordinated loans to companies. Often these are done in partnerships with commercial banks, debt advisors and private equity funds to be able to source those loan opportunities.

Especially when investors partner with sovereign entities like the European Investment Fund (EIF) they can obtain financial guarantees on some of the loans. This helps reduce the credit risk and enhance the risk-return profile of the loan.

For asset managers, the partnerships and co-investment arrangements with commercial banks, supports an alignment of interest. The asset class is diversified in terms of sectors/industries.

NAV fund finance

An interesting niche asset class, is fund finance. Investment funds, predominantly private equity funds, regularly seek debt financing to fund their acquisitions before they draw on their commitment.

Investors can thus co-invest in this, often high yielding, asset class. It does require an extensive network of panel banks and advisors, as well as relations with private equity GP's.

Market opportunity for fund finance is big; with the exponential growth of private markets, large new markets have emerged to provide financing to private market funds. Typically, private market funds borrow between 10% and 30% of their NAV. As such, market volumes are very scalable (est. USD 400-850 billion).

(Dutch) Mortgages

Across the world, mortgage rates have risen considerably over last two years. In the US, 30-year fixed-rate mortgage rates moved from an average of 3% in 2021 to well over 7% in 2023, the highest level since 2008. Also in the UK and Europe, mortgage rates are significantly higher than in previous years. In the Netherlands, mortgage rates have also moved up, driven by a combination of higher sovereign rates and a slightly wider spread.

We remain constructive on the Dutch mortgage market. We believe that the current mortgage rates are attractive for long-term investors that can hold assets with a lower liquidity profile. The higher mortgage rates do provide an attractive risk premium to help compensate for illiquidity and default risks. Compared to other similar rated fixed income, Dutch mortgages offer an improved return/risk profile.

Credit losses have been historically low in the past decade as the Dutch housing market has experienced rising prices backed by declining interest rates and economic tailwinds. On the back of that, loan-to-value ratios have come down, providing a solid base for Dutch mortgages. However, since last year Dutch housing prices declined somewhat as higher mortgage rates posed a headwind to the housing market. In addition, we anticipate an economic slowdown in the short term, which is another factor that can slow the housing market. Still, credit risk is expected to remain low due to the strong payment morale of borrowers, strict underwriting criteria, full recourse and government backed guarantee schemes that may be available to certain investors. Moreover, fundamental factors such as almost chronic shortages in the Dutch housing market persist and should support housing prices going forward. The current spread offers substantial compensation for the expected credit losses.

Overall, we expect excess returns to be slightly below the current spread, which currently fluctuates around 200 bps above German bunds.

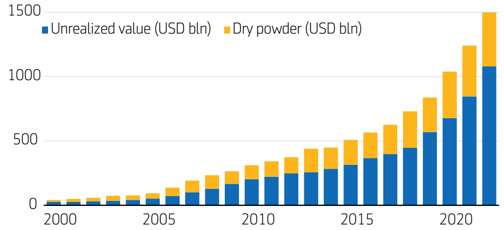
Figure 5: Spread on Dutch mortgages

Source: Aegon, Aegon Asset Management, Bloomberg (As of Aug 2023)

Private Debt

The private debt market is in the midst of a very interesting period. Over the past 18 months spreads and base rates have substantially increased, the market has grown as banks have further withdrawn, leverage has edged downwards, and covenants have become easier to negotiate. On top of that, there is a lot of macro uncertainty, which typically leads to higher demand for lower risk or more secured assets. This has come on top of the secular trends that were already driving growth in the private debt industry; the search for yield and the lack of financing that banks are providing. The chart below shows the steady growth of the assets under management (AuM) since 2000; in 2021 this adds up to an estimated USD 1.5 trillion.

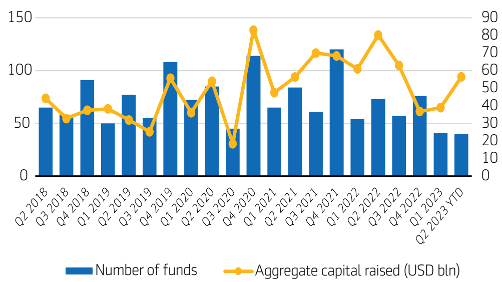
Figure 6: Global Assets under Management Private Debt (as of 31-12-2022)



Source: Preqin, Aegon Asset Management

Many private debt managers report that their main constraint right now is not deployment of capital, but finding enough capital to deploy. Institutional investors are increasingly becoming capital constrained because of overallocation to illiquid categories, like private debt, real estate and others. This is also called the denominator effect; for many pension funds, insurers and sovereign wealth funds the private market investments have shown stable valuations whilst the denominator of total AuM has gone down. This means that they are above their target allocations and are refraining from making new commitments. The graph below shows this development. Whilst in 2021 around USD 240 billion was raised, this has stayed at a similar level in 2022 and shows early signs of a slowdown in 2023 with just USD 95 billion raised so far.

Figure 7: Global Fundraising Activities Private Debt (as of Q2 2023)



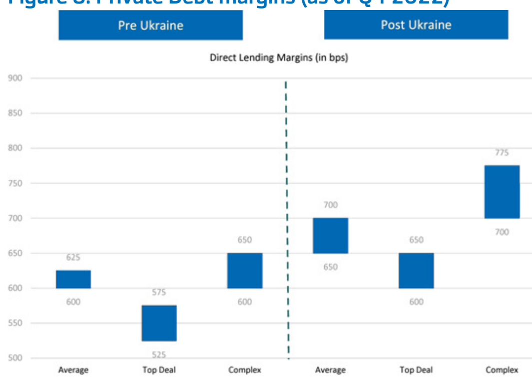
Source: Preqin, Aegon Asset Management

Spread widening

Managers are also raising far fewer funds; from 2019 to 2021 the number of funds that had a final close was around 300 per year. In 2022 this already declined a bit to 260, in the first half of 2023 the number was just 81. Also, the types of investments seem to be changing; the three largest vehicles closed in 2023 targeted mezzanine or special situations strategies. This could be indicative of a shift towards investments a bit higher up the risk/return curve.

This is a somewhat surprising development given that returns are significantly higher than was the case a year ago. Base rates have moved from negative territory halfway through 2022 to around 3.5% (Euro) at the end of quarter two 2023. At the same time spreads have also widened across the risk spectrum. DWS reports that direct Lending margins are more than 100 bps above the five-year average for similar levered deals. This means that net returns have seen marked improvements in a relatively short period of time. Spreads are expected to rise even further, mainly as a result of the dearth of financing available. Banks are less willing to participate in the capital markets, being hampered by strict regulations regarding the risks they can take. These regulations have tightened further since the beginning of 2023 after the new Basel IV rules came into force.

Figure 8: Private Debt margins (as of Q4 2022)



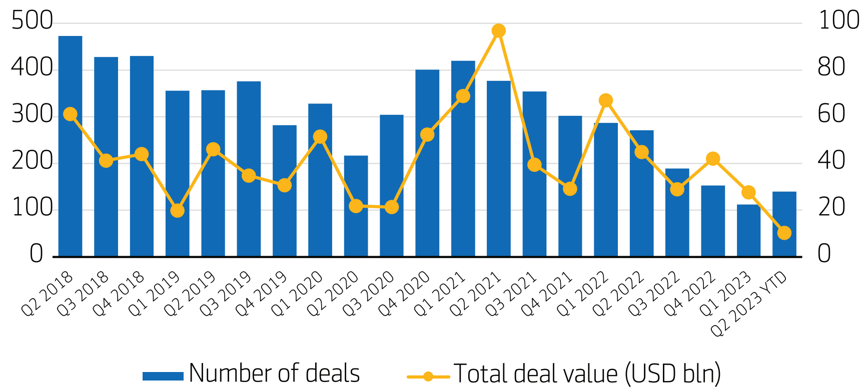
Source: DWS

Shift to private markets

The leveraged loan market and high yield bond market also saw lower activity. This led to a narrowing of the gap between the offers of private lenders and the traditionally more liquid leveraged loan market. This means that borrowers have considerably fewer financing options available. The better negotiating position for the lenders has also led to the shifting of terms. Whereas the historical trend previously was more towards so called cov-lite (covenant light) contracts, the current environment allows lenders to negotiate for stricter lending terms. The older cov-lite contracts that were agreed over the past few years do mean that defaults could stay lower for the coming period than would otherwise be expected. The larger headroom available in these loans means that it will simply take much bigger corrections/downturns before the covenants are being breached. In time, the rising interest rates could pose a problem for the borrowers.

Figure 9 shows that the number of private debt deals has declined over the past few years, in 2019 there were around 1400 deals, for 2022 this had gone down to 900 with the first half of 2023 just tallying 250 transactions. Total deal value peaked in 2021 at USD 235 billion, and is now down to just USD 38 billion in H1 2023. There are several reasons for this slowdown. Firstly, quite a few deals completed in the past few years left portfolio companies with capital structures that now appear more fragile given the 500 bps increase in base rates and rising leverage levels. Some private lenders are reserving capital to deal with potential issues in their existing portfolios instead of deploying it into new deals. Secondly, the M&A market has markedly slowed as a result of the difficulty of finding (cheap) financing. The market still has to adapt to the new environment that is no longer a low interest rate world.

Figure 9: Private Debt transactions (as of Q2 2023)



Source: Preqin, Aegon Asset Management

Thirdly, lenders are becoming much more selective in the types of deals they finance. Stable sectors and industries are preferred above volatile market segments. In transactions, critical assessments are done on supply chains, pricing power, energy costs and debt to EBITDA ratios. Healthcare or IT services are preferred whilst retail, leisure, and customer goods are typically avoided.

Outlook

The outlook for the private debt market is positive, especially for those looking to enter the market and not being affected by fully invested portfolios. The biggest driving force behind this positive outlook is currently the higher yielding environment. Whilst the expectation is not that interest rates will climb much higher in this cycle, the chances they will drop back to near zero any time soon also seems remote.

Secondly, the secular trends underlying the growth of the market in the past are still present. Banks are expected to continue to withdraw due to regulatory burdens. The benefit of working with only one or a few lenders over dealing with a bank club allows for faster and easier processes, which sponsors typically prefer and for which they are willing to pay a premium. Private equity is a driving force for the private debt market and dealmaking is without doubt muted, but a lot of dry powder remains, and they will look for ways to continue to deploy capital.

Thirdly, sector diversification, protective documentation with bespoke covenants, and robustness allow some to argue that the private debt market is uniquely positioned to weather a possible recession. The strong defensive characteristics are actually well suited for an environment in which there is more uncertainty. The current market is a lenders market in which investors are able to put their financial analysis capabilities and deal picking skills to work. These opportunities for creating alpha could lead to a dispersion in performance between issuers, sectors, and geographies.

On the downside, credit risk in the loan market is clearly growing. Rising interest rates do have consequences for balance sheets and credit position of the borrowers. Even if default rates do not to reach levels seen in a typical recession, recovery rates may decrease given the prevalence of cov-lite structures.

Emerging Market Debt

As explained in the economic section on Emerging Markets, we see a multi-speed economic rebound in which some regions have recovered faster than others.

Recently, Asia and Africa are growing faster, while Latin America and the Middle-East are mixed. The war in Ukraine is having a large impact on Eastern Europe due to trade ties and the impact of energy prices.

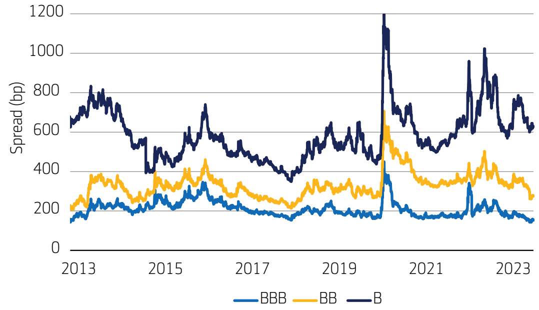
A few sovereigns (e.g. Dominican Republic and Costa Rica) have continued to benefit from the extended rebound in tourism, keeping their growth at good levels. However, the growth dynamic is somewhat varied all over the globe at this point, as sovereigns continue their recovery from the pandemic, and many have wound down the government stimulus packages, although not all have done this to the same extent. Differences often stem from a complex web of fuel subsidies and aid to the poor across the world, put in place to combat inflation or other pandemic-related effects, which is politically hard to completely unwind.

Overall, we have seen a favorable fundamental backdrop for sovereigns rated BB and above due to positive growth dynamics, disinflationary pressures, strong US demand, and targeted stimulus measures in China. The continued fight of the US Fed against inflation will have an impact on growth, and only time will tell if the long-forecasted US recession will actually occur in the near future or further down the line. External positions for EM commodity producers should keep getting stronger as commodity demand and prices remain elevated for most goods. The cyclical rebound for EM should continue, though slightly different for each nation, boosted by pent-up demand and investments. Of course, this could be tempered by a slowdown in growth or even a recession in the developed economies. Growth for EM sovereigns is still generally higher than that of developed countries, but the differential has declined compared to prior years, especially when the commodity boom occurred. It remains to be seen how strong the engines of growth are now following the many distortions of the recent pandemic. Additionally, it is important to note the progress on "friend-shoring," or locating production closer to home. This can change where industry is concentrated, and push it to become more diversified across the globe, reducing exports for some countries (e.g. China, as discussed above) while increasing exports for other countries (e.g. Mexico, other non-China Asia).

Emerging Market Debt has become a much more diverse asset class over the past decade. Apart from the sovereign issuers, the corporate issuer base has become larger and more diverse.

On the sovereign side, there has been a divergence between those that have developed successfully economically and those that continue to struggle with the classic Emerging Market issues. As a result, the divergence between the well-rated and lower rated sovereigns has widened substantially as the figure below shows.

Figure 1: Emerging Market Spreads per rating

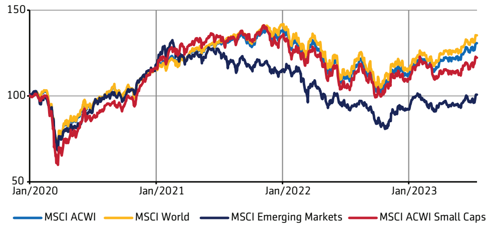


Source: Aegon Asset Management, Bloomberg as of August 2023.

Listed Equities

After a bad year for equities in 2022, equities have recovered strongly in 2023. Although inflation is declining and appears to be under control, there are concerns about the impact of central banks' policy on the short term macroeconomic condition. So far these concerns have not yet been reflected in share prices, partly due to developments in the field of artificial intelligence. However, differences between sectors and regions are again large. In the first half of 2023, growth stocks have outperformed value again, and emerging markets have lagged behind developed markets.

Figure 1: Strong recovery in 2023 despite macro-economic worries



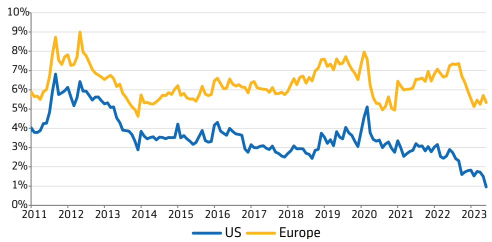
Source: Aegon Asset Management, Bloomberg (As of August 2023). Returns are net returns in USD and indexed to 1-1-2020.

A large part of the rise in stock prices in 2023 has been driven by sectors such as IT and consumer discretionary, sectors where large profit growth is expected in the coming years fueled by an expected main stream adoption of electric vehicles and artificial intelligence. More specifically, in the first half of 2023 the top 10 stocks in the S&P 500 were entirely responsible for the gains of the S&P 500. This is also reflected in the current valuations, where the gap in the forward P/E ratio of the top 10 and the remaining stocks in the S&P 500 is historically large. The market seems to be betting on extraordinarily high profit growth for these big tech companies fueled by the adoption of AI.

Valuations optimistic about growth

Another approach at valuations is to compare the forward earnings yield on equities to the yield on government bonds, also known as the yield gap. What is striking is that the yield gap in the US has decreased sharply since 2022. The earnings yield on equities has remained relatively stable, but the yield on US Treasuries has risen sharply. Therefore, the yield gap has shrunk significantly, as shown in the figure below. This could be a sign that stocks are currently overvalued relative to fixed income. However, a tight yield gap may be justified when extraordinary earnings growth is expected for equities. However, we believe that current equity valuations are somewhat ahead of expectations and there are too high expectations regarding growth expectations for the coming years.

Figure 2: Earning on yield equities/goverment bond yield



Source: Aegon Asset Management, Bloomberg as of August 2023

Looking at regions, emerging markets lag behind developed markets over previous years. While emerging markets economic growth prospects have moderated – in line with developed markets – valuation levels are historically low compared to developed markets. Currently emerging markets are trading at around 30% discount versus developed markets, based on the 12-month forward earnings multiple. This difference cannot be explained solely by fundamentals and thus seems to be more of a risk premium for geopolitical tensions. In addition, central banks in Emerging Markets frontloaded rate hikes in 2021 in an attempt to control inflation pressures when compared to developed market central banks. Assuming that inflation is under control it should provide central banks in Emerging Markets room for monetary support which in turn should support local economies.

Europe's valuations are also more attractive than those in the US. This can partly be explained by a different sector composition, where the US has a larger weight to high growth sectors and Europe has more weight to sectors with lower valuations like financials and energy. Nonetheless, corrected for the sector composition, European companies are cheaper on average compared to US companies. Therefore, Europe should fare better in a situation that earnings multiples come under pressure, for example if the anticipated recession hits the world economy in the short term.

Earnings growth

Earnings growth is an important driver of equity returns. Historically, earnings have grown around 1 to 1.5% in real terms. In the last two decades, earnings growth has been stronger. Particularly in the US. This can be attributed to the rise of mega-cap IT companies, with very strong market positions.

Corporate profits, as a share of GDP, have also risen. There is disagreement among economists over what the exact cause is. It might be caused by these stronger market positions, which large-cap IT companies have. It could also be that labor markets were relatively loose, resulting in a lack of pricing power of employees, and henceforth a stronger pricing power of providers of capital.

Going forward, we expect higher labor costs to have a negative effect on margins. However, we do think existing and new global tech companies will remain able to expand profits. Labor is typically a smaller share of input costs in this sector and the major advantages of global scale will imply that some companies will enjoy continued strong pricing power.

Outlook

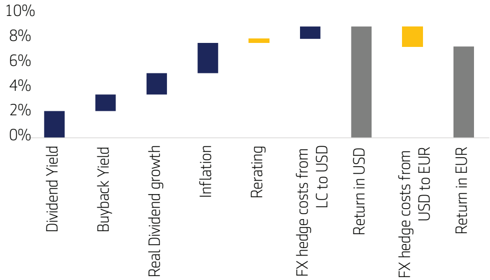
For developed markets, we expect a return of approximately 9% annually in US dollar terms in the coming years. Our return assumption is based on factors that determine the return on equities. The dividend yield and (net) return from share repurchase programs (buyback yield) should provide a relatively steady income. We expect a dividend yield of approximately 2.1% and a buyback yield of approximately 1.3%.

An important component of long-term equity returns is earnings growth. For the coming years, we expect corporate earnings to initially decline as a result of weaker macroeconomic environment, and a recovery in the years thereafter. Corporate earnings are sensitive to economic swings, and hence we expect them to decline in the coming year. However, at the same time, the economies of developed countries are significantly larger in nominal terms compared to the pre-pandemic level. This is due to the high inflation rates. This high nominal growth will eventually translate into higher corporate profits. We therefore assume decent earnings growth. This translates into 1.7% real dividend growth and 2.4% inflation. In addition, we expect a marginally positive rerating component of approximately 0.3%.

Hedging the return on equities to the U.S. dollar currently shows a small positive benefit, as non-US short-term interest rates are on average lower compared to short-term interest rates in the US. When hedging the return on equities to the euro, there is a negative effect, as euro interest rates are significantly lower at the moment, but we forecast spread tightening versus the US interest rates in the next couple of years. In euro terms, we expect a developed markets return of approximately 7.3% per year.

Figure 3: Expected returns - World Equities

Developed Markets (FX hedged to USD and EUR) average annual returns until 2027

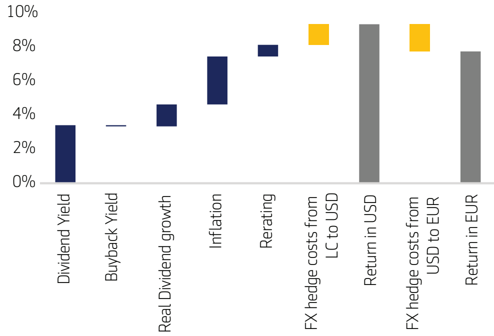


Source: Aegon Asset Management, Bloomberg as of August 2023. For illustrative purposes only.

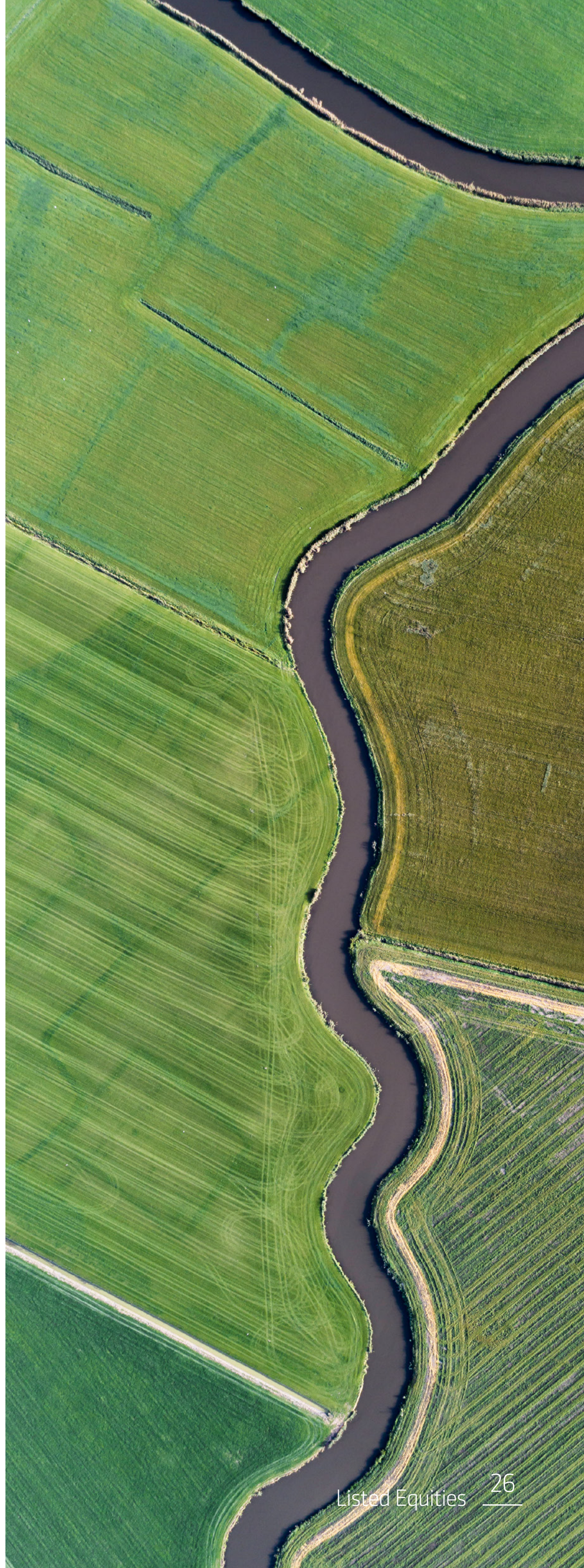
For emerging markets equities, we expect returns to be slightly higher than for developed markets. The dividend yield is higher at 3.4%, partially due to the more favorable valuations. Furthermore, the expected nominal profit growth is higher than in developed markets. We also expect a positive impact of the rerating component. Hedging equity returns has a negative impact, because short-term interest rates in emerging markets are higher than in the US and Europe. Overall, we expect a return of approximately 9.4% annually in US dollar terms, and almost 8% in euro terms.

Figure 4: Expected returns - Emerging Markets Equities

Emerging Markets (FX hedged to USD and EUR) average annual returns until 2027



Source: Aegon Asset Management, Bloomberg as of August 2023. For illustrative purposes only.



Private Equity

Private markets form a large part of the world economy as most companies are private. Private equity is the main avenue for investing in this space and has steadily grown to USD 9 trillion of assets under management (AuM) at the end of 2022, according to data provider Preqin. Due to low M&A-activity, a larger share of the AuM is now dry powder (committed but not yet invested capital). We expect the private equity market to continue its significant growth in the coming years, partly due to the rapid growth of dedicated ESG and impact funds. Although private equity has not shown a correction in valuations like the public markets, the high interest rates start to weigh on performance. In particular, growth venture capital is prone to this. Nevertheless, private equity remains an appealing long-term asset class given its attractive risk/return potential.

Inflation, recession and interest rates

In 2022, the MSCI World Index (-13%) was outperformed by Preqin's money-weighted private markets Preqin Index (-4%). Company valuations are holding because fund managers have been conservative to update valuation multiples, and due to the continued strong profitability of most companies. Private companies are generally well positioned in times of high inflation and recession: they are more flexible to adjust pricing strategies or their business model and can often quickly save costs and make management changes. The effects of the substantial higher interest rates are more serious for various reasons:

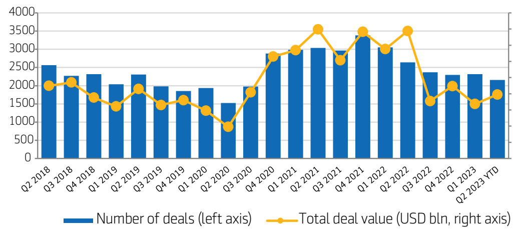
- Financing for company investments is more expensive which may lead to postponed or cancelled projects;
- Using debt to create value (financial engineering) has become less attractive for fund managers, although most funds lowered the use of leverage in acquisitions since the Global Financial Crisis and emphasize operational improvements instead. Especially larger takeovers are hard to finance;
- The Discounted Cash Flow-approach to value companies may lead to lower valuations given the higher discount rates which especially impacts growth companies;
- Highly indebted companies may face difficulties refinancing debt, although financing is often fixed for several years.

Low investment and exit activity affects liquidity

Since last year, overall deal activity has fallen towards the long-term average whereas the number of venture capital deals continues to decline. It has become difficult for start-ups to raise capital, with the exception of firms at the seed stage and those involved in artificial intelligence. The reason provided is the exodus of 'tourist capital': non-Venture Capital (VC) dedicated investors that previously found the market attractive with the low interest rates have now withdrawn. The mindset has also changed: there used to be a 'growth-at-all-costs' mentality, now the focus is on business fundamentals and profitability.

Transaction prices are in a downward trend. Buyers and sellers move slowly towards a new price equilibrium. Fund managers hold on to a company longer before it is put up for sale and the focus is on profitability instead of rapid expansion, resulting in lower valuations and longer (financial) due diligence processes. Also, many institutional investors still have a relatively high allocation to private equity. This may lead to forced sales in the secondary market where both activity and NAV-cuts are high. We expect transaction prices to stabilize in the coming years, which can stimulate M&A transactions. Pressure from LPs to generate liquidity may accelerate this development, as will an improved IPO-climate. In the meantime, we expect GPs to generate liquidity via alternative routes such as NAV-financing and GP-led transactions (pass-throughs, continuation funds).

Figure 1: Global M&A activity (as of Q2 2023)



Source: Preqin, Aegon Asset Management

The fundraising environment started to weaken mid-2022 and we expect that it remains challenging with longer fundraising times and lower target sizes. This is mainly because many investors still have a substantial private equity (over-)allocation and therefore less room for new commitments. The economic uncertainty and increased attractiveness of alternatives such as depreciated shares and bonds also play a role. As a result, investors commit lower amounts to new funds, choose to not participate in a fundraise or may even need to sell fund stakes (at a discount) on the secondary market.

Dedicated impact funds are rising rapidly

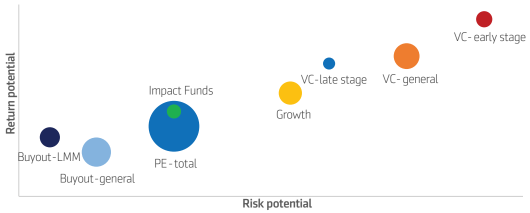
The supply of impact funds is growing fast. These funds make a clear social and/or environmental contribution alongside a financial return. Private companies are typically suitable for making an impact: they often focus on new, disruptive technologies, are flexible to change their business model, and can quickly scale up. Fund managers can use their (often) majority control to generate impact. Examples include switching to renewable energy, vertical farming and decarbonizing industrial processes. The risk and return potential of impact funds are hard to establish given the limited available track record. Although impact funds have less target companies available as these require a sustainable angle, we hold the view that their risk/return potential should be in line with the average private equity fund given expected future tailwinds. As the available impact funds differ substantially in their impact objectives, experience, strategy, and measurement, selection of the best-in-class impact managers is key.

Return outlook private equity

The outlook for private equity for the year ahead is muted, due to macro-economic conditions, low M&A activity and subdued returns. Inflation is less of an issue, given the high pricing power of many private companies. Especially the high interest rates will likely have a negative effect on both the short- and medium-term returns. Many loans will mature in the coming years, after which they will have to be refinanced at presumably higher levels. The difficulty to obtain favorable financing keeps investment and exit activity low in the short term. However, fund managers will gradually get used to lower transaction prices in acquisitions, which is favorable for new investments.

Figure 2 below shows how we position different subclasses of private equity in the risk/return spectrum. The size of the dot indicates the market AuM as of 2022. Despite the effects of high interest rates, fund managers understand the complexity of private companies and have the toolbox to add value over several years. Rather than using leverage, managers focus more on M&A to reap synergies, increasing operational efficiencies, expand to new markets and products, and deploy ESG-initiatives. In the next four years we expect a return, which is roughly similar to that of listed equities. This would be 7% to 8% in EUR and 8% to 9% in USD. This is below the historical annual performance of 13% (U.S.) and 14% (developed markets ex U.S.) over the past 25 years[1]. Going forward however returns are likely to be lower due to low macro-economic forecasts and elevated interest rate levels.

Figure 2: Return and risk potential of private equity subclasses



Source: Preqin for AuM (dot size), Aegon Asset Management on risk/return potential

Historically, funds in the lower middle buyout market (LMM) offer an attractive risk/return profile. These companies (< USD 100 million in revenue) typically have less exposure to global macro-economic risks, better value-creation opportunities and are more flexible in adjusting their business model or lowering costs. Also, in general they have lower leverage levels than larger buyout companies, making them more resilient to increasing interest rates.

With last years' drop in late-stage venture capital valuations, we view this subclass as having an attractive moment to entry soon.

In the longer term, the risk-return profile of private equity as an investment category remains attractive, partly because it can make an important contribution to the fight against current and future risks (climate change, food production, ageing population) through investments in technological solutions. Funds anticipating this are likely better positioned for higher future returns, for example VC funds investing in robotics and Artificial Intelligence or impact funds investing in renewable energy and artificial meat. However, future returns depend largely on manager selection: the difference between top and bottom quartile performing managers is larger in private equity (and even more in VC and impact funds) than in other asset classes given the high alpha dispersion. As such, selection is a more important factor for future returns then timing given its long-term nature.

[1]Cambridge indices on cambridgeassociates.com/private-investment-benchmarks

Real Estate

Real estate has benefited from strong economic growth and a low interest rate environment in recent decades. This changed last year due to the sharp rise in inflation. Central banks raised their policy rates at a rapid pace and long-term interest rates also followed. Real estate is a capital-intensive sector and therefore suffers from the rise in interest rates. However, it must be said that the leverage within real estate funds has often been reduced compared to years ago. As a result, the sector should suffer less from higher interest rates going forward. Still, there is potential for more repricing in the private real estate markets as the current valuations continue to lag those observable for transaction pricing. In the listed real estate market this market's drawdown has already occurred and many companies are trading at steep discounts to their asset values.

Current state of the market

Generally, tight vacancy and supply conditions prevail in most markets, most notably in the industrial/logistics and residential sector where occupier demand remains firm. However, the U.S. office markets have received significant negative press attention of late and their fundamentals appear relatively weak compared to those of Asia-Pacific and Europe which seem better balanced.

Global real estate investment activity remains subdued as the market continues to adjust to higher interest rates. During the first quarter of 2023 global transaction volumes declined by 52% over the year. European sales volumes were particularly impacted. The reason for this drop in transaction volume is the remaining wedge between the price expectations of buyers and sellers that is preventing transactions from happening. Interestingly, the retail sector bucked the trend of the other sectors with higher investment activity reported across the regions.

Commercial real estate yields have increased substantially across major global markets. This repricing, which started in the second half of 2022, continued into 2023. The pace of adjustment, however, did ease somewhat. Across more than 300 city-sector markets globally, yields and cap rates rose in 49% of them in the first quarter of 2023. In the bulk of the remainder, yields were unchanged. Therefore, there is still widespread upward pressure on yields and cap rates, particularly in those markets where valuation adjustments have been slow. Recently, bond yields have broadly remained at elevated levels leaving margins over prevailing commercial real estate cap rates, or yields, negative in certain instances, most notably the UK.

Transaction pricing

In response to the higher interest rates globally, transaction pricing declined further during the first quarter of 2023. Both Europe and the U.S. have experienced broadly similar annual falls of 21% and 18% respectively. In both regions the office sector has seen the greatest decline, followed by multifamily. Both sectors have seen significant outwards yield movements from low levels as a response to the elevated interest rate environment.

Global private real estate performance

Not surprisingly, markets have corrected at different speeds. The U.K. has led the correction, as is often the case during downturns. Over the second half of 2022 and during the first quarter of 2023, U.K. capital values fell 18% in total. The rest of Europe followed, with a faster correction compared to what occurred during the Global Financial Crisis (GFC). In Asia-Pacific, capital values have been much more stable since Japan accounts for around a third of the market. In Japan, interest rates on hold mean that capital values there have not come under the same downward pressure from rises in yields as they have in other markets.

Private real estate fundraising

Given the current state of real estate markets, it is not surprising that global private real estate fundraising has slowed dramatically year to date. According to Preqin, USD 71.4 billion of new capital was raised through June 2023, compared to USD 183.1 billion raised in 2022, and USD 217.2 billion in 2021.

Commercial real estate debt markets

The most recent Federal Reserve data showed that U.S. banks further tightened their standards for commercial real estate lending. This was particularly true for development lending where approximately three quarters of banks tightened and was well over 60% for non-development lending. In terms of debt finance costs, margins for commercial real estate mortgages have remained relatively stable, with interest rates representing the majority of total costs for borrowers.

Outlook non-listed Real Estates

In terms of the medium-term outlook for real estate, we forecast total returns for unlevered, institutional-quality real estate of approximately 6%. In terms of regions, we expect the U.S. to outperform continental Europe and the U.K. This may seem counterintuitive at first given that the U.S. is the market most likely to experience a near-term recession and where the repricing of the office market is forecast to be the most severe. However, we expect very strong returns for the logistics and residential sectors, with a strong capital-growth driven recovery once the near-term pricing declines are over. These two sectors account for 60% of the U.S. average, relative to just 24% in Asia-Pacific and 36% in Europe. This means that while the U.S. office sector is the sector where one can expect by far the largest peak-to-trough capital value adjustment over the medium term, its negative impact on the U.S. overall property forecast is more limited. We expect the return in Asia-Pacific to lag behind those in Europe and the U.K. given the size of the low-yielding Japanese market.

Outlook listed Real Estates

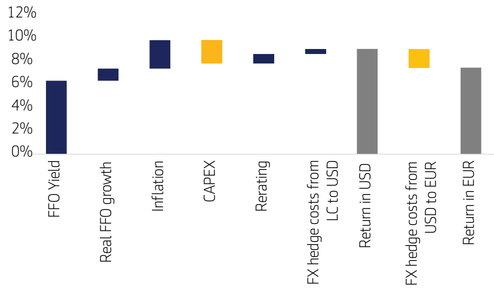
Based on listed real estate accounting returns, mainly the respective portfolio real estate returns after the impact of SG&A costs and leverage, the US would also screen as one of the stronger listed RE markets. Allocation to offices is similarly limited at 8% while industrial (17%) but also exposure to specialty sectors (a.o. datacentres and self-storage) grew over the years to 17% and 35% respectively (giving a similar defensive sector profile as seen for non-listed). We expect average earnings growth in Asia to be only modestly positive due to its exposure to residential development and a higher share of offices. Meanwhile, we expect the drag on earnings from future debt refinancing to be higher in continental Europe, due to a lower average Interest Cover Ratio in this region.

However, in contrast to non-listed, the listed sector is not priced based on underlying accounting NAV but trades freely in financial markets. As a result, its pricing reflects various expectations including real estate trends, macro developments, financial, as well as potential liquidity events etc. Following a markedly negative share price performance in the UK and continental Europe versus the US over the last 12 months, the former two markets now trade at a substantially wider discount to underlying property values. A potential repricing could thereby provide additional upside in continental Europe, the UK, as well as certain Asian markets.

We are also modestly optimistic on the listed sector as its current discount provides investors ac-cess to quality real estate assets at decent pricing. Demand, even if declining, is directed at the bet-ter quality assets with many REITs focussed on core. Meanwhile supply of quality is limited due to a lack of new development starts as increased cost of capital and building costs weigh on developer margins. With top line revenues relatively resilient, refinancing will likely weigh on the earnings growth. Refinancing should however take place gradually as most listed companies termed out debt with CFO's more risk aware post the GFC in 2008. With rates remaining higher for longer, this could still mean we see an extended through in pricing. We do however believe more emphasis will be placed on the quality of portfolio and resilience of earnings, as debt issues are well flagged and absorbed by the market.

We believe that within the real estate debt category, public debt of listed REITs might have gotten overly punished on sentiment. As the listed sector has the ability to raise equity, even if at a discount, we expect defaults (as in the GFC) to remain limited. We have already seen REITs, positioned in the middle in terms of risk, undertake equity issues to strengthen balance sheets.

Figure 1: Expected Listed real estate returns



Source: Projections provided by Aegon Asset Management. For illustrative purposes only. See disclosures for additional information.

Sectors

In terms of sectors, logistics and residential markets look to be good value because of the repricing of these sectors. This means that these sectors can be expected to generate returns higher than their required return. In essence, these sectors are driven by the structural tailwinds of e-commerce and demographics, respectively.

Most office markets still look expensive despite the repricing of this sector. Most retail markets still look to be poor value, especially U.S. and U.K. malls.

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