

Paying the price for our lack of resilience

Advanced Economies
Outlook 2023

Triodos  Investment Management



The outlook for 2023 is bleak. The multitude of crises have exposed the weaknesses of our economic system, culminating in record-high inflation across advanced economies. Though inflation is set to fall, there will be no early relief. This means we must brace for the inevitable global growth slowdown, spurred by recessions in most major advanced economies. The breadth and depth of the slowdown will be determined largely by the stickiness of inflation and the need for further monetary policy tightening. Either way, inequality is bound to rise, while the ongoing transgressions of our planetary boundaries ask for immediate policy action. This requires an integrated policy approach that steers towards a more resilient system: one supporting an equitable society with healthy ecological conditions.

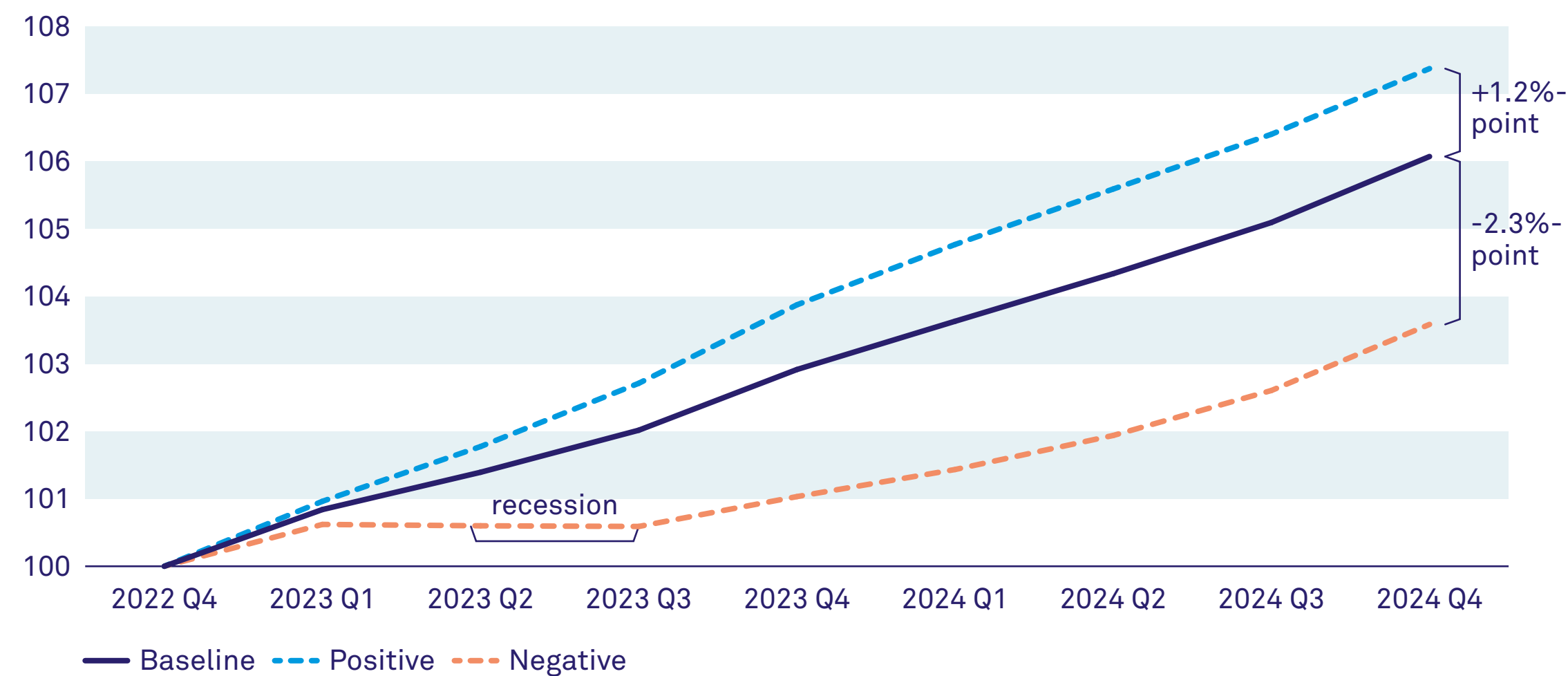
Global economy: flirting with a recession

For 2022, we project global economic activity to expand by 3.0%. This is below the long-term average but considering all that has happened during the year it is not as bad as feared. Since the start of the year, advanced economies had to deal with surging inflation caused by the COVID-19 pandemic. The Russian invasion of Ukraine and continued lockdowns in China aggravated this cost-of-living squeeze. COVID-19 re-openings across advanced economies did however support consumption through the (further) release of pent-up demand. This was underpinned by exceptionally strong labour markets and excess savings built up during lockdown periods.

The projected relatively robust activity expansions in advanced economies in 2022 mask the severe pain that many lower-income households already had to endure because of the rapid price rises. And unfortunately, it seems like the worst is yet to come, as the aggressive central bank tightening is intended to drive up unemployment so that a wage-price spiral can be avoided. How fast inflation falls will therefore largely determine how many households will fall into poverty.

In our **baseline scenario**, we project global economic activity to expand by a meagre 2.5% in 2023. This is the slowest annual growth rate since 1993, besides the 2008/09 Global Financial Crisis and the COVID pandemic. Our baseline sees a continuation of the recessions that have already started in the eurozone

Figure 1 Global real GDP growth
(Q4 2022 = 100)



Source: NiGEM, Triodos Investment Management

and UK, inflicted by the war-induced energy crisis that keeps inflation in these regions highly elevated until at least mid-2023. A global recession will be narrowly avoided, however, due to near-term growth-robustness in the US and Japan. Inflation in the US will fall faster, and Japanese inflation will remain contained. However, towards the end of the year, we also expect a mild recession in the US, as a result of the Federal Reserve's aggressive monetary tightening. China's economic recovery will in the meantime support global

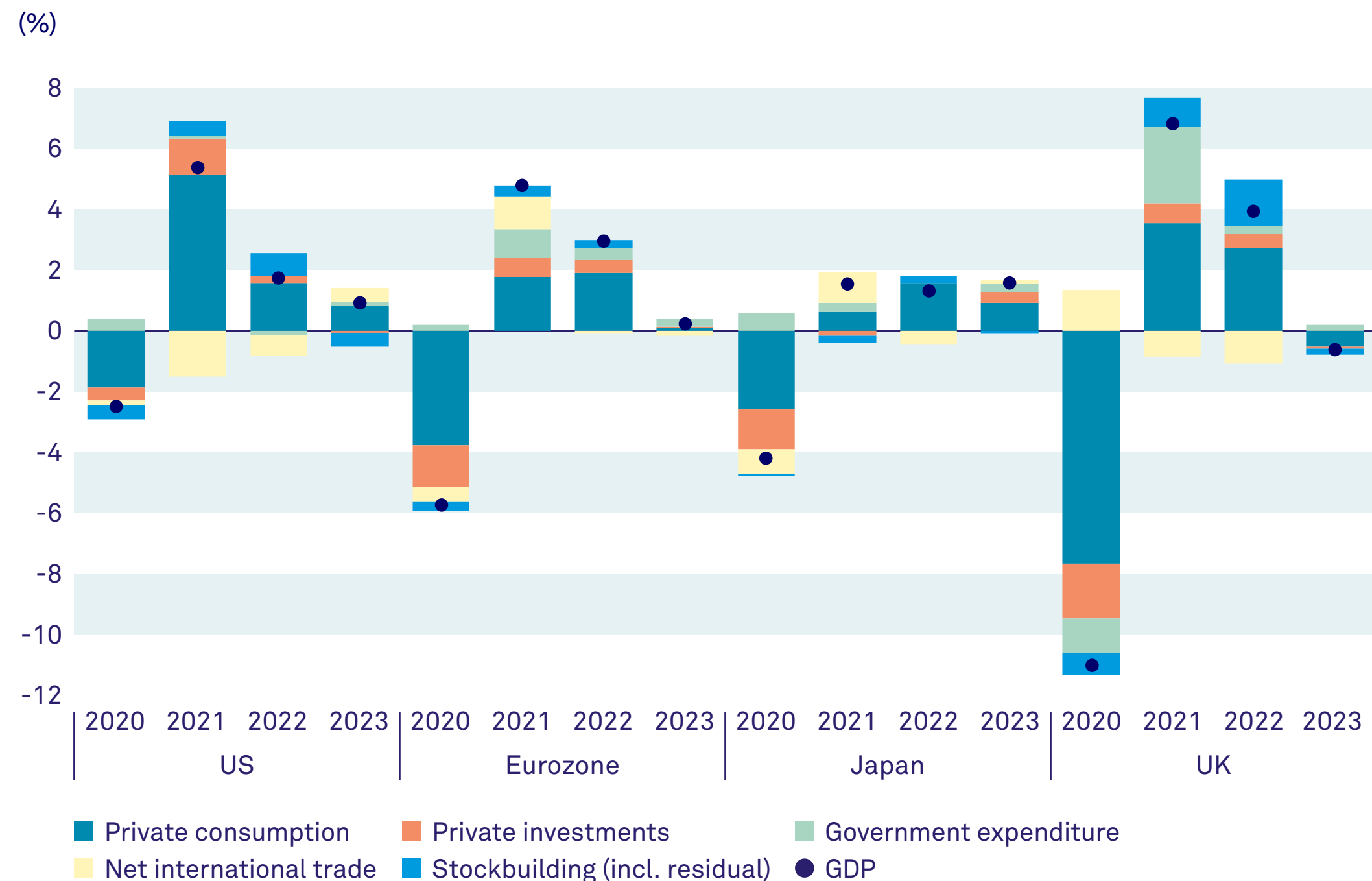
activity. Falling US inflation and European recessions predicate our call that the rate hiking cycle will end in Q1. But since we expect inflation to still be above central bank targets by year-end, we assume policy interest rates will be left untouched in the remainder of 2023.

In our **negative scenario**, we project global economic activity to expand by 1.5% in 2023. A wage-price spiral, further escalation of the war in Ukraine, and

new COVID-lockdowns in China result in continued upside inflation surprises, tipping the global economy into a recession (two consecutive quarters of negative growth). This scenario foresees higher ultimate policy interest rate levels for a more prolonged period. Fiscal support would be scaled up where possible but would not be enough to offset the inflation-induced fall in consumption. Residential investment would fall even more sharply due to the aggressive rate hikes. By the end of 2024, the accumulated loss in global GDP growth would be 2.3%-points.

In our **positive scenario**, which we deem least likely to materialise, we project a global economic activity expansion of 3.1% in 2023, still modest to historical standards. Inflation would fall faster than expected across advanced economies due to de-escalation of the war in Ukraine and quickly fading supply constraints. This would allow central bankers to start cutting policy interest rates in H2 2023. The disinflationary boost to real household disposable income would increase consumption, while the lower policy rates would benefit business and residential investment and the increase in geopolitical stability would support global trade. Fiscal support would be more limited. By the end of 2024, the accumulated gain in global GDP growth would be 1.2%-points.

Figure 2 Yearly GDP growth - expenditure components



Source: NiGEM, Triodos Investment Management

Unsustainable dependence on consumption continues

A breakdown of our baseline economic growth projections for 2023 clearly shows that the prospects for the major advanced economies will again be largely determined by household consumption. This is worrying, since in our current system, a slowdown in aggregate consumption is usually synonymous to rising poverty, while at the same time consumption growth is the main threat to sustainability challenges such as climate change and biodiversity loss. This contradiction is indicative for the lack of longer-term resilience of our current system.

Given these limitations of our current system, the near-term prospects for households in Japan and the US are clearly more favourable than for households in the eurozone and UK. This difference is caused by the speed of disinflation, the labour market, fiscal policy support and the potential drawdown of excess savings:

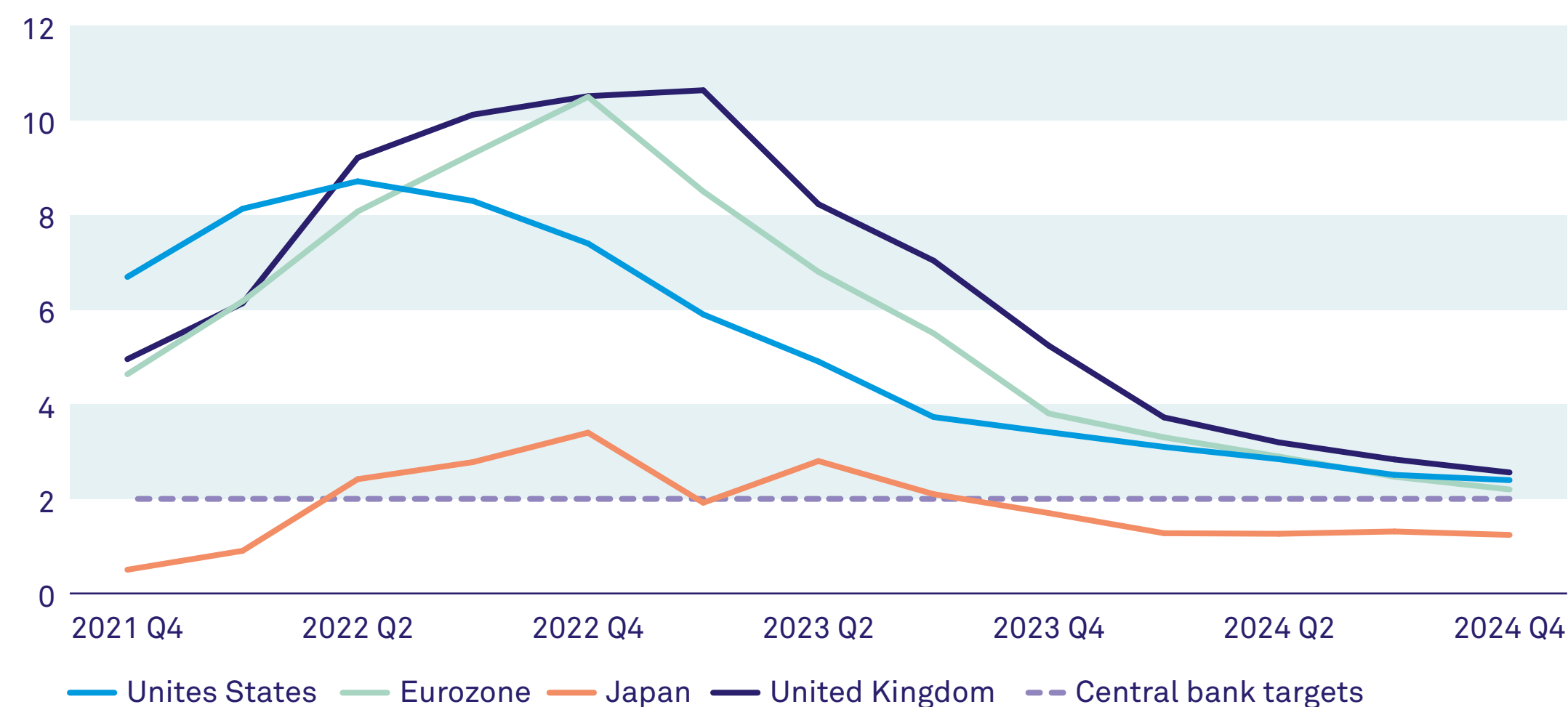
- **Inflation will fall, but at different speeds:** We expect US inflation to fall faster than UK and eurozone inflation, because in the first half of the year European inflation will still be affected by the Russian gas supply cuts. US inflation will in the meantime fully benefit from easing global supply chain pressures, yearly base effects and

the slowing of global demand. We expect eurozone and UK inflation to catch up in the second half of the year, as yearly energy price comparisons will by then significantly lower headline inflation. Still, according to the International Energy Agency, Europe will likely face an even tougher challenge in winter 2023, as in 2022 it was still able to fill its gas storage sites with Russian supply and LNG that was available because of lower Chinese imports. US inflation will in the meantime fall only slowly due to wage growth and more sticky services inflation. We therefore expect US, UK and eurozone inflation to still be materially above the 2% central bank targets by year-end, with the US at 3.4%, eurozone at 3.8% and the UK at 5.2%. Japanese inflation will never come close to the record-highs of its Western peers and will move below the central bank target by year-end.

- **Unemployment rates will stay below long-run averages:** The COVID-induced supply-demand imbalances have created exceptionally tight labour markets across advanced economies. The labour shortages have also reminded employers that retaining competent workers is important. Combined, these two factors should limit the inevitable rise in unemployment that inflation and central bank tightening is set to induce in the US, eurozone and UK. In Japan, the unemployment rate will even fall as we expect higher labour participation.

Figure 3 Headline inflation

(YoY %)



Source: NiGEM, Triodos Investment Management

- Fiscal support cushions the loss in purchasing power:** In response to the surge in inflation, all major advanced economies have stepped in to support their citizens, with a variety of measures such as (energy) price caps, cash handouts and windfall taxes. These measures will continue in 2023. Logically, the response has been the strongest in the eurozone, with measures adding up to 4.5% of GDP.

- Excess savings will mostly support US consumption:** The huge amount of excess savings built up during the pandemic has been partly spent in the US but has been largely left untouched in the other major advanced economies. This is because the COVID-19 stimulus checks in the US boosted disposable income and were targeted at lower-income households, which have a higher propensity to spend. The furlough schemes in the eurozone did

not boost disposable income and the lockdowns therefore mostly resulted in additional savings for higher income households due to reduced services spending. On top of that, consumer confidence fell much more in Europe due to the war in Ukraine and the related surge in energy prices. Going forward, a continuation of these dynamics will likely keep consumer confidence muted in the eurozone, making any material spending of the excess savings unlikely. In the US, we expect a further drawdown of excess savings. Depletion of excess savings in Japan and the UK will be somewhere in between these extremes.

Combined, this means we expect recessions in the eurozone and UK, because a period of falling consumption will result in contractions in economic activity in Q4 2022 and Q1 2023 (in the UK we expect a contraction in until Q4 2023). In the US and Japan, modest consumption growth keeps these economies from a recession in the near-term, but the US will eventually enter recessionary territory in Q4 2023. By then, the full effects of the aggressive monetary tightening will have reached households, causing a modest fall in consumption.

Investments slowed by restrictive monetary policy

The prospect of a slowdown or outright contraction in household consumption and continued war- and inflation-related uncertainty does not bode well for private investments in the major advanced economies. Indeed, a recent US **CEO survey** indicates that around 75% expect near-term economic conditions to worsen, and almost all expect recessions in the US and eurozone somewhere in the next 12-18 months. On top of that, the aggressive monetary tightening obviously discourages business investment as higher interest rates increase borrowing costs.

In our baseline scenario, we do not foresee any relief for private investments coming from the major central banks. We do not expect policy rate cuts in 2023 because we expect inflation to still be above central bank targets by year-end. We expect the Federal Reserve (Fed), European Central Bank (ECB) and Bank of England (BoE) to slow the policy rate hiking going forward, eventually pausing in Q1 2023. This would imply a total of 475bps of hikes by the Fed since the start of the hiking cycle, 390bps by the BoE, and 300bps by the ECB. We don't expect the BoE and ECB to match Fed hiking, because inflation in the UK and especially eurozone is much more of an imported energy problem, and therefore less likely to fuel a

wage-price spiral. The more dismal growth outlooks for these regions will likely already put a brake on inflation through reduced demand.

However, corporates have so far been able to keep their margins from falling significantly, and corporate balance sheets across advanced economies are healthy. This should mean modest growth in business investment despite the aforementioned difficulties.

The main drag for private investments will be deteriorating investments in the housing sector. The sharp rise in interest rates means households will be facing higher mortgage interest rates, which is already slowing the increase in house prices and housing demand. Residential construction will consequently be put on hold.

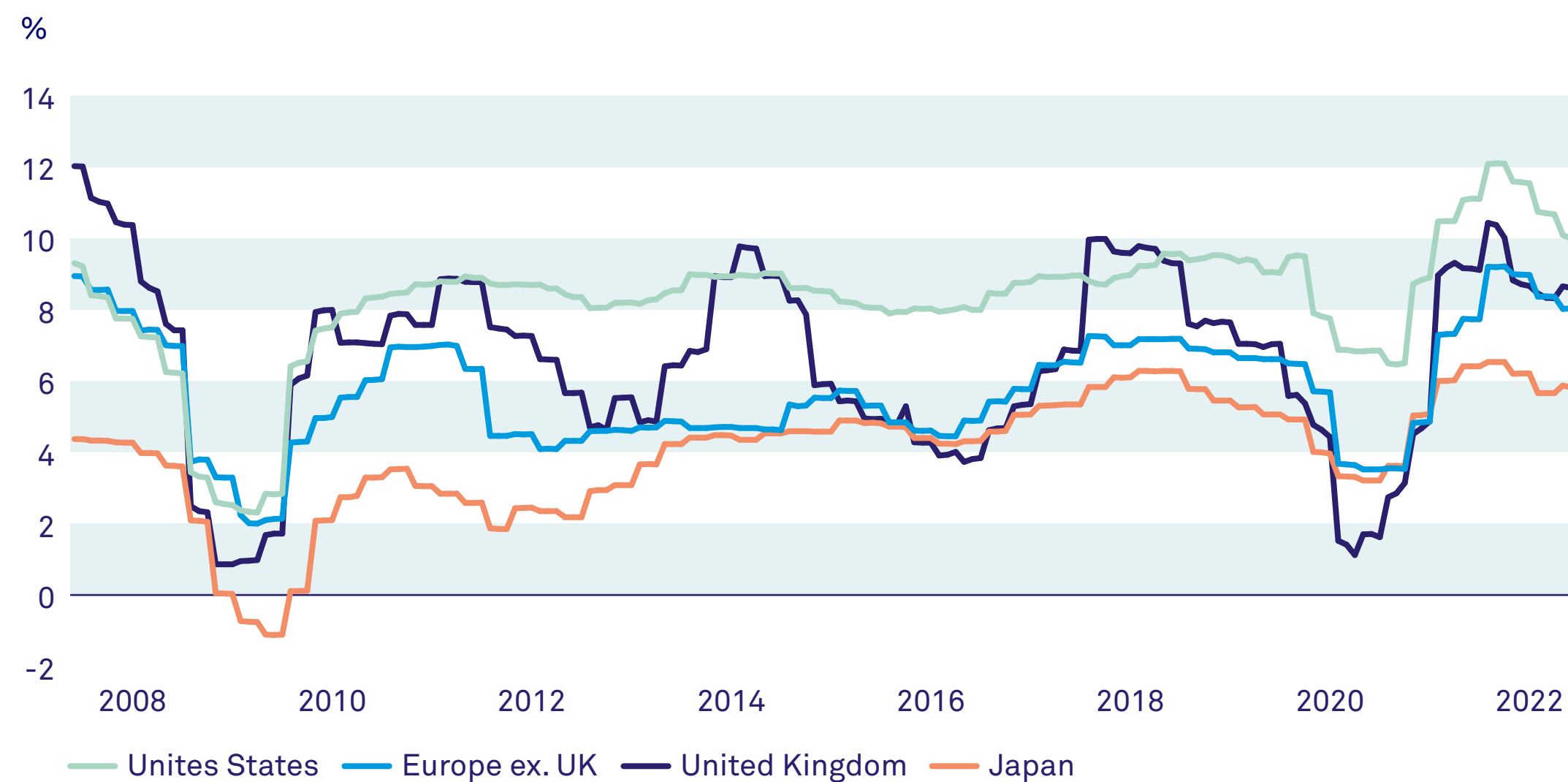
Overall, private investments are, like consumption, not resilient enough within the current system. A clear example is the housing market: there is an urgent need for residential construction in advanced economies because of the housing shortages and the need to insulate homes to reduce the energy demand. However, the current system depends on low interest rates and wealth accumulation through rising house prices to stimulate construction.

developments are far from enough if we want to stay within our planetary boundaries. Overconsumption in advanced economies and hence global trade should be drastically reduced.

In 2023, we expect the world trade expansion to be below the long-term average due to reduced demand from advanced economies. The war in Ukraine will likely linger on, as will trade tensions between the US and China. Geopolitical fragmentation will therefore gradually continue with the formation of distinct economic blocs, but in 2022 we have seen that fragmentation does not necessarily equal lower global trade in the short term. The main risk to global trade in 2023 remains COVID-19 lockdowns, but our baseline scenario does not foresee new lockdowns in the major advanced economies and expects China to slowly move away from its strict lockdown policy.

For the major advanced economies, the contribution of net trade to economic growth will mostly be determined by continued energy scarcity. For the US, being a net energy producer, this will likely mean a positive net trade contribution. For the UK and especially the eurozone, both net energy importers, this will translate into negative net trade contributions to economic growth, though reduced domestic demand (lower import) will especially limit the overall drag from net trade for the UK. Japan will benefit from net trade

Figure 4 Corporate net profit margins



Source: Refinitiv, Triodos Investment Management

Limited global trade expansion amidst ongoing fragmentation

World trade has expanded at a pace close to the long-term average in 2022, despite pandemic-induced supply chain disruptions, increased geopolitical fragmentation due to the war in Ukraine, and the ongoing tensions between China and the US. Consequently, world trade volume reached new record-highs, thereby defying predictions about the ‘end of globalisation’. But the pandemic and war in Ukraine did expose the vulnerability of our hyper-globalised trade system, with a lack of inventory buffers, spare capacity, and a diversified supplier base. We have seen some initial moves towards more resilience, such as the start of reshoring essential chip production, and more focus on diversifying energy supply through increased local renewable energy capacity. But these

despite being a net energy importer, as increased Asian demand will boost exports.

Governments should prioritize transformative resilience

Government debt-to-GDP levels have modestly declined in 2022, but this has been due to yearly GDP growth, not as a result of fiscal prudence. And ratios are still close to the record-highs that were reached after the unprecedented pandemic-related fiscal support. This means there are some limitations to what governments can do, but we still expect that government expenditure will modestly contribute to growth in economic activity in all major advanced economies in 2023. But unfortunately, most of the government measures are still targeting near-term relief for close to all households by trying to keep the situation closest to what people are used to. Governments therefore fail to focus on increasing redundancy, diversity, dispersity, autarky and adaptability, all key principles that could improve system resilience and spur the required transformation (see our long-term outlook ‘We are in a polycrisis - Resilience and Transformation Required’). Already in the near-term, this lack of transformation will result in more overconsumption, more extreme weather events,

rising inequality, lack of sufficient sustainable private investments and ongoing geopolitical instability.

But the dismal economic performance in 2023 can also be used as a catalyst for the much-needed transformation. Governments can play their part by presenting integrated plans that intend to build a more resilient system, using the current polycrisis to justify their plans and get support from voters. Key will be to explain that building resilience increases wellbeing for most households. The richest 1% of the world population is responsible for just as much CO₂-emissions as the poorest half of the global population. Targeting a redistribution of wealth would therefore be a great first step, as it would lower emissions and free up money to improve ecological conditions, while simultaneously improving the financial situation of lower-income households. Advanced economies should not only implement these ideas domestically, but also be generous to the Global South in the fight against global warming. In this way, 2023 could be a truly transformative year.

By building a more resilient system, governments would make sure lower-income households would be shielded from the severe adverse wellbeing consequences of our negative scenario. And increased resilience would also make sure the required

Economic growth projections

| | 2021 | GDP growth (%) | | | Headline inflation (%) | | | | |
|------------------|------------|----------------|-------------|------------|------------------------|------------|------------|------------|------------|
| | | Baseline | | Positive | Negative | Baseline | | Positive | Negative |
| | | 2022 | 2023 | 2023 | 2023 | 2022 | 2023 | 2023 | 2023 |
| Global | 6.0 | 3.0 | 2.5 | 3.1 | 1.5 | 8.8 | 6.8 | 5.4 | 9.2 |
| US | 5.7 | 1.9 | 1.0 | 1.8 | -0.5 | 8.1 | 4.5 | 3.5 | 6.9 |
| Euro area | 5.2 | 3.3 | 0.3 | 1.2 | -1.4 | 8.5 | 6.2 | 3.5 | 7.1 |
| UK | 7.4 | 4.3 | -0.7 | 0.2 | -2.4 | 9.0 | 7.8 | 6.9 | 9.0 |
| Japan | 1.7 | 1.5 | 1.7 | 2.9 | -0.6 | 2.4 | 2.1 | 0.7 | 3.8 |
| China | 8.1 | 3.0 | 4.4 | 5.0 | 3.3 | 2.0 | 2.0 | 1.2 | 5.9 |

Source: NiGEM, Triodos Investment Management

transformation takes place even if our positive scenario becomes reality, and it is tempting to return to ‘business as usual’. So, in all scenarios, resilience would protect future generations from bearing the full costs of current complacency.

Investment outlook 2023

The fairy tale of never-ending monetary stimulus has at last shattered into pieces. In 2023, investors will have to face reality without monetary sedation. This absence will evidently be felt through heightened market volatility, as we foresee another challenging year with elevated macro risks. Investors will crave for their monetary fix. Ultimately, they will be partly catered to, with the halt of the hiking cycle in Q1 and dovish forward guidance towards the end of the year. But with risks clearly skewed to the downside, we for now maintain our neutral allocation stance. If reality stays close to our baseline, we will increase our duration and eventually overweight equities.

Financial markets remain in grip of central banks

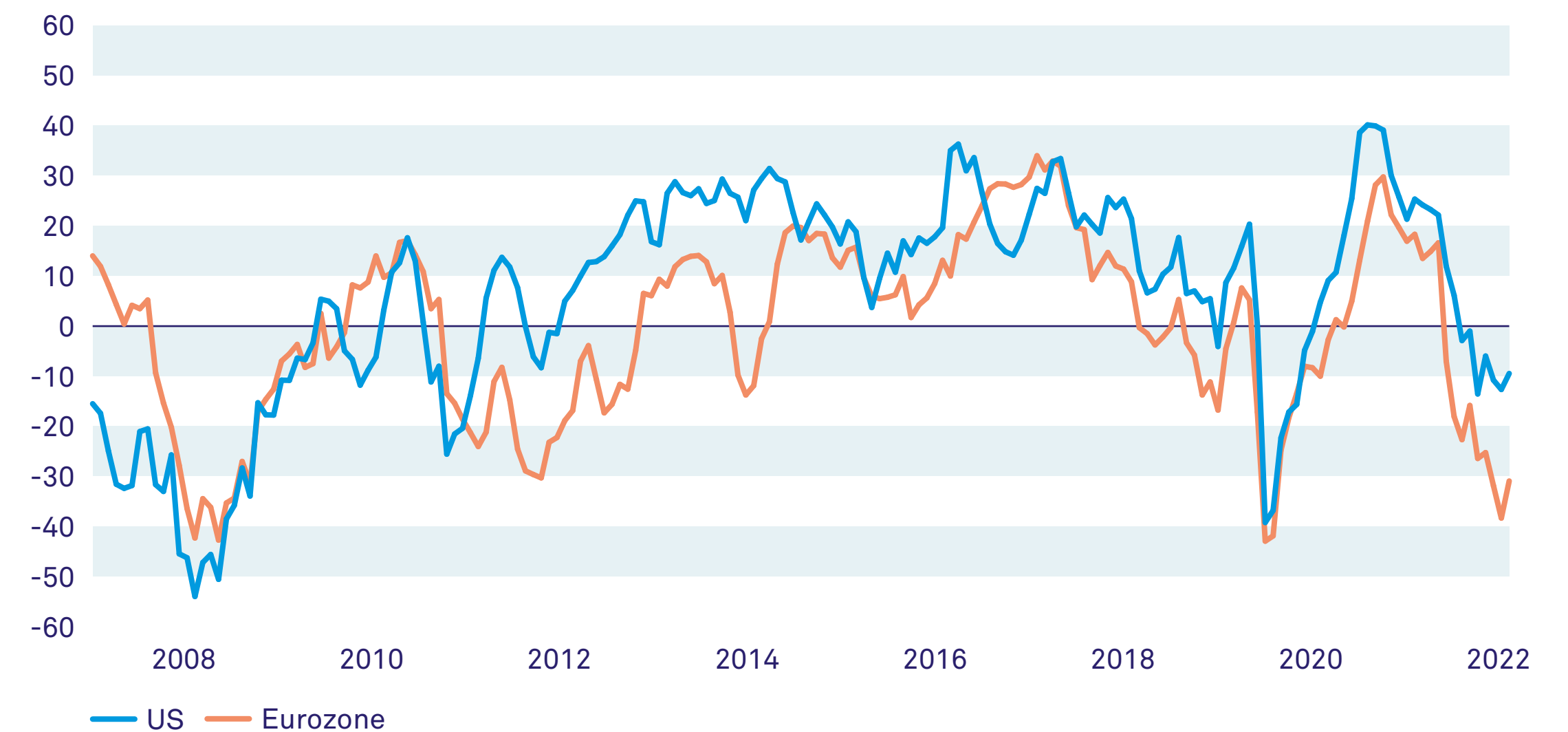
In 2022, we have seen what happens when the monetary policy rug gets pulled out from under financial markets. There was no place to hide, with bond and equity markets rapidly falling in tandem from their record-highs. The painful conclusion is that these record-highs were manufactured as a by-product of the lack of resilience of our current economic system. The COVID-induced recession clearly exposed all our systemic flaws and required an unprecedented fiscal and monetary response to keep the economy afloat. This resulted in an unnaturally fast financial market recovery. At the same time, the excessive stimulus exacerbated the COVID-induced supply-demand imbalances, thereby driving up inflation, which eventually forced central bankers (too late) to abandon their ultra-loose policy measures. Looking back, it is evident that monetary policy has been forced to

extremes to uphold our growth-dependent system, thereby making monetary policy the main driver of markets, instead of fundamentals.

For 2023, we expect that monetary policy will remain the dominant force driving financial markets. In our baseline scenario, a global recession will be avoided, but inflation in advanced economies will not fall below central bank targets. This means central bankers will keep their policy rates on hold after ending the rate hike cycle in Q1. Initial investor relief due to the rate hike pause will gradually make way for concern about the rocky fundamentals and geopolitical risks. However, towards the end of the year, central bank forward guidance will likely hint at a pivot to lower rates early 2024, which should be enough to further boost investor sentiment.

In our downside scenario, inflation continues to surprise to the upside, causing a global recession.

Figure 5 Investor sentiment



Source: Refinitiv, Triodos Investment Management

The increased chance of de-anchored inflation expectations resulting in a wage-price spiral would force central bankers to only halt the hiking cycle in Q2 at higher terminal rates and to leave policy at highly restrictive levels until year-end. Financial markets would consequently have another dismal performance in 2023. In our upside scenario, which we deem least likely, inflation would fall faster than expected,

reaching central bank targets before year-end. This would limit the global economic growth slowdown and would allow central banks to start cutting policy interest rates in autumn. Financial markets would be set for a strong recovery.

Longer-dated bond yields will fall

Eurozone government bond yields have risen sharply in 2022. The ECB is in the middle of a rate hiking cycle and seems committed to continue raising its policy interest rate to restrictive levels until end of Q1 2023. This means yields could rise even more in the near term. At the same time, the ECB wants to prevent any significant further widening of spreads between

Southern European countries and the German Bund, and the eurozone has entered recessionary territory due to the energy crisis stemming from the war in Ukraine. Therefore, we expect longer-term yields to gradually move lower in 2023, reflecting disappointing growth, the rate hiking pause, and the eventual forward guidance towards rate cuts. This would result in a further inversion of the yield curve in the first half of 2023. The reduction of the ECB balance sheet in 2023

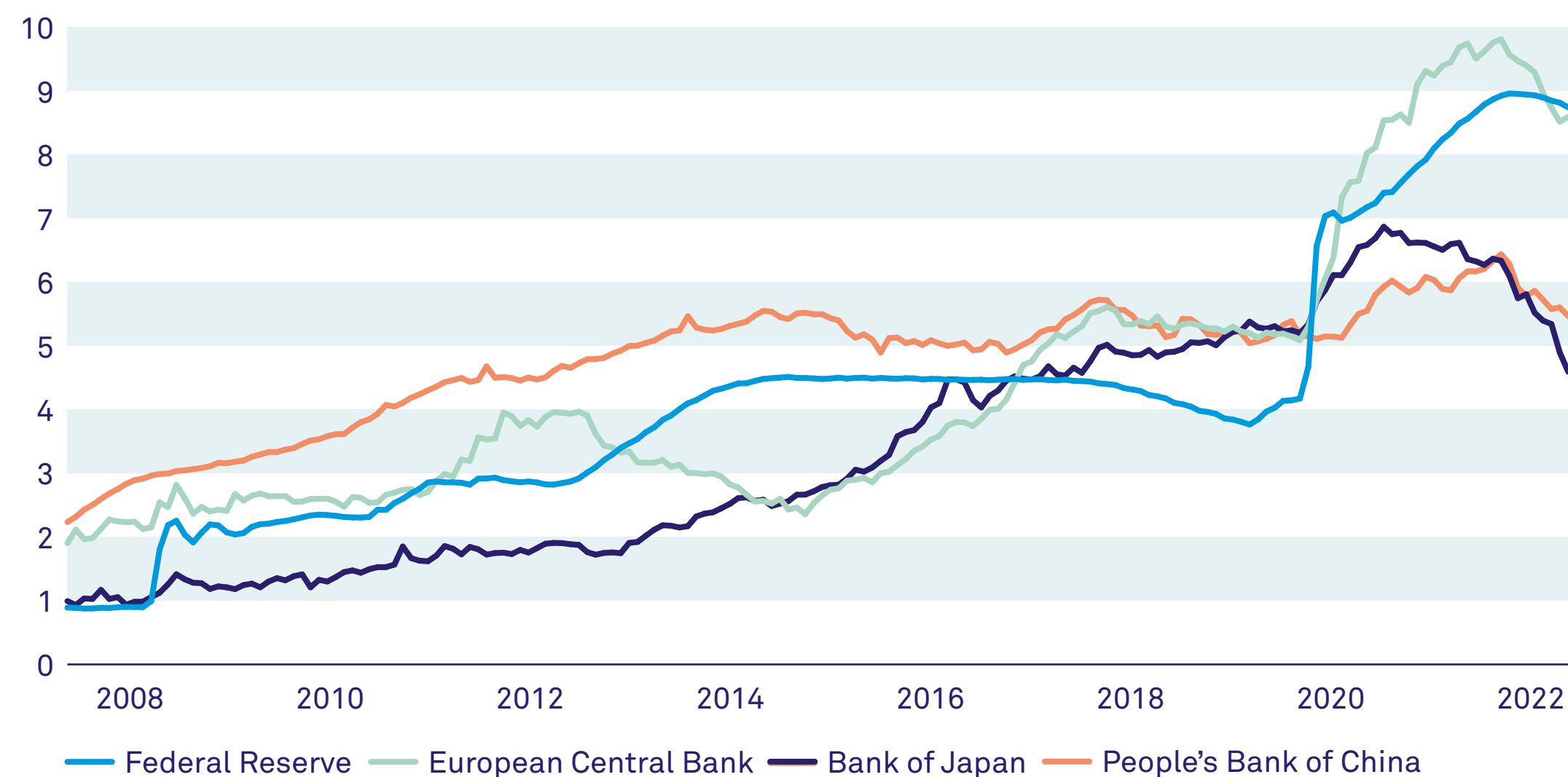
will partly (but not fully) offset this downward push in the longer end of the curve. If reality stays close to our baseline, we will adjust our duration accordingly to take advantage of the fall in longer-dated bond yields in the first half of the year. Overall, the threat of inflation surprising to the upside (forcing the ECB to be more aggressive) still makes us cautious when it comes to bonds, explaining our neutral allocation stance.

Equity markets will modestly recover

Despite the slowdown in economic activity, corporate earnings have held up relatively well until now, because of tight labour markets, strong consumer and corporate balance sheets and corporate pricing power. However, the outlook points to slowing growth and reduced liquidity, and analysts continue to lower their EPS estimates. As we expect recessions in the

Figure 6 Major central bank balance sheets - total assets

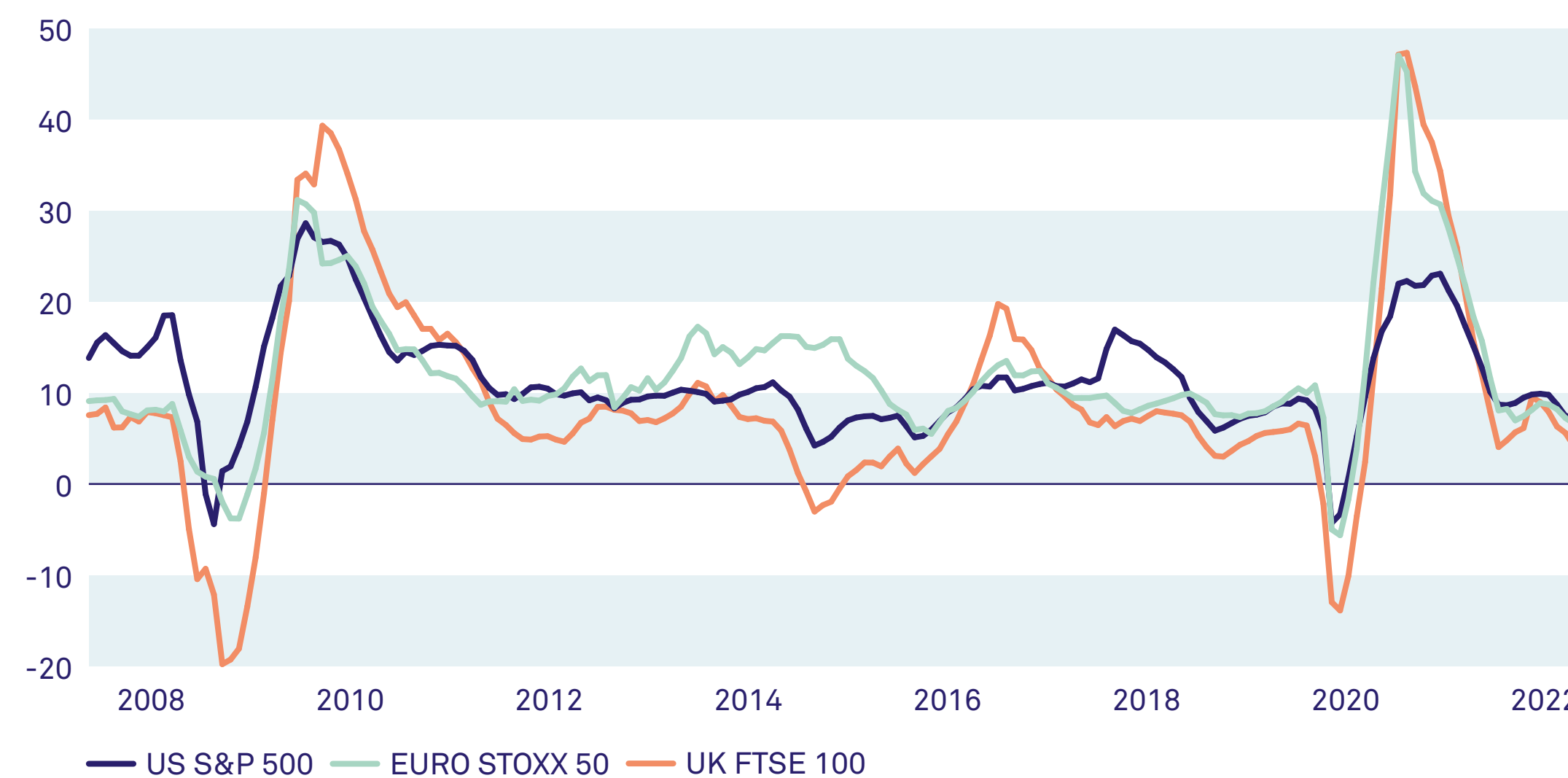
x 1.000 billions USD



Source: Refinitiv, Triodos Investment Management

Figure 6 Twelve-month forward earnings growth

(%)



Source: Refinitiv, Triodos Investment Management

Advanced Economies Outlook 2023

US, eurozone and UK, prospects for fundamentals do not look rosy. On the positive side, we do not expect a global recession, and expect the recessions in the eurozone and especially US to be relatively shallow. This should prevent a global earnings recession. Next to that, we believe that central banks have approached peak hawkishness, and this will likely overshadow muted earnings growth. Nevertheless, the risks are to the downside, causing us to stick to our neutral stance for now. The closer we come to the end of the policy rate hike cycle, the more inclined we are to overweight equities.

Impact opportunities

We continue to see opportunities in the sustainable investment landscape. The European Green Deal, the EU's roadmap for making its economy sustainable, will continue to gain momentum. The related green taxonomy will enable investors to steer their investments towards more sustainable technologies and businesses, and the creation of an EU Green Bond Standard will deliver a uniform tool to assess green bonds. The Sustainable Financial Disclosure Regulation (SFDR), part of the EU's Green Deal, also makes investors more aware of financial risks related to sustainability, and to some extent limits the options for greenwashing. The Green Deal will also force

companies to become more transparent. Besides Europe, we expect to continue to find sustainable investment opportunities in Japan, where corporate governance continues to improve due to top-down governance initiatives while bottom up the Sustainable Development Goals are high on companies' agenda. In the US, the Inflation Reduction Act will spur the green transition with over EUR 350 billion of green subsidies. Overall, we will continue to contribute to the envisioned transition by focussing on investments that support climate mitigation and adaption and the fulfilment of the Sustainable Development Goals in this decade.

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