Research Institute
DWS Long View
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Marketing material

DWS

Long View Q1: Monetary tightening

Transmission of monetary tightening into financial conditions and demand destruction

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- Return forecasts for the next decade are relatively unchanged from the start of the year, with a modestly lower fixed income return outlook and modestly more constructive returns for some alternative asset classes.
- In retrospect, monetary tightening was justified in the US in early-to-mid 2021, which might have set forth a much milder pace of rate hiking.
- In the shorter term, questions remain around the trajectory of monetary policy contingent on the effects of aggressive monetary tightening on aggregate economic demand. In our view, the peak economic drag was likely in March of 2023.
- Quantitative tightening likely has a milder effect on economic growth relative to quantitative easing. However, the impact is evident when monitoring the change in longer-term real interest rates.
- Previous interest rate hiking cycles have proven relatively benign for financial markets, with, on average, constructive credit spreads and equity price behavior. It is not yet clear whether the aggressive nature of this monetary tightening cycle will result in further bank stress.

Summary

In this report, we present the DWS long-term capital market assumptions for major asset classes as of the end of March 2023 while exploring the risks to these forecasts.

The first quarter of 2023 introduced the first significant signs of financial stress as a consequence of the Federal Reserve's ("the Fed") rate hiking. With the Fed Funds effective rate ending March at 4.83% versus 0.33% bps a year prior, the US economy showed signs of slowing goods demand and modest labor force weakness.

While this incremental demand destruction was intentionally—in order to stem stubborn inflationary pressures, the significant interest rate tightening caused unintended stress across the financial sector. The move higher in both short-term and longer-term interest rates ultimately led to the failure of Silicon Valley Bank ("SVB") in March and further reflected in price volatility across a number of other regional financial institutions.

While the interest rate hiking cycle appears to be in its final innings, the residual impact on asset-liability management across the banking sector and across the broader economy still poses a risk to financial markets.

In our view, the Fed's latitude to pivot back to accommodate monetary policy is somewhat limited given persistent price pressures, particularly in the services segments of the economy. The issue of credibility restricts the flexibility of the Fed absent a severe slowdown in economic growth or a significant tightening in financial conditions. The risk of preemptively hiking rates, as we highlighted in the 2023 Long View, is perhaps too great to engage in anticipatory interest rate cutting.

Despite demand weakness, stress in the financial system, and limitations to the Fed's monetary policy, global markets were resilient in Q1, with global equities returning roughly 7% and corporate credit spreads remaining largely flat. Interest rates, despite significant intra-quarterly volatility, also ended Q1 only modestly lower relative to the beginning of the year.

Our models now forecast an annual return of 6.7% from the MSCI All Country World Index ("ACWI") over the next decade, versus 6.6% three months prior. At an aggregate level, we estimate the forecasted rate of return on a diversified portfolio of assets at 6.3%, very marginally lower from the level at the end of 2022.

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

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Table 1: DWS Ten-year annualized forecasted returns

	As of 31 Mar 2023	Δ since 31 Dec 2022
ACWI Equities	6.7%	0.0%
World Equities	6.6%	0.0%
EM Equities	7.6%	0.1%
US Equities	6.8%	0.0%
Europe Equities	6.6%	0.0%
Germany Equities	6.5%	-0.7%
UK Equities	8.2%	0.8%
Japan Equities	4.1%	-0.6%
EUR Treasury	2.4%	-0.3%
EUR Corporate	3.8%	-0.2%
EUR High Yield	6.1%	0.0%
US Treasury	3.8%	-0.3%
US Corporate	4.7%	-0.2%
US High Yield	6.4%	-0.4%
EM USD Sovereign	7.6%	0.0%
World REITS	5.8%	0.4%
United States REITS	6.5%	0.3%
Global Infra. Equity	6.9%	0.1%
US Infra. Equity	7.5%	0.6%
Private RE Equity US	3.6%	-0.3%
EUR Infrastructure IG	3.6%	-0.2%
Private EUR Infra. IG	4.7%	-0.1%
Hedge Funds: Composite	5.4%	0.3%
Broad Commodities Futures	4.7%	0.5%

Source: DWS Investments UK Limited. Forecasts from of 31 March 2023 to 31 March 2033. Due to various risks, uncertainties and assumptions made in our analysis, actual events or results or the actual performance of the markets covered may differ materially from those described.
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Forecasts are not a reliable indicator of future returns. Forecasts are based on assumptions, estimates, views and hypothetical models or analyses, which might prove inaccurate or incorrect. Past performance, [actual or simulated], is not a reliable indication of future performance.
Any hypothetical results presented in this report may have inherent limitations. Among them are the sharp differences which may exist between hypothetical and actual results which may be achieved through investment in a particular product or strategy. Hypothetical results are generally prepared with the benefit of hindsight and typically do not account for financial risk and other factors which may adversely affect actual results of a particular product or strategy. Any forward looking statements (forecasts) are based on but not limited to assumptions, estimates, projections, opinions, models and hypothetical performance analysis. All of which are subject to change at any time, based upon economic, market and other considerations and should not be construed as a recommendation. Past performance is no guarantee of future results.

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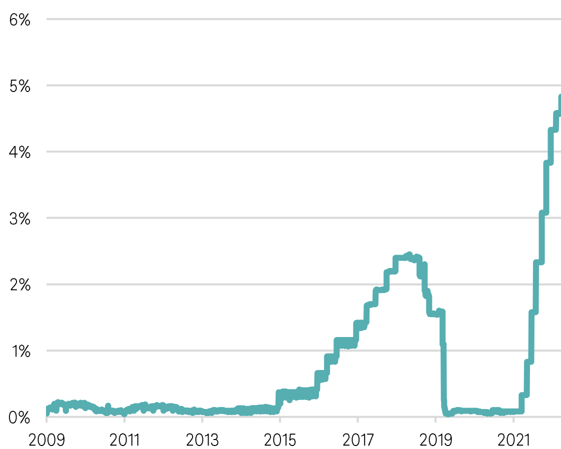
1 / Examining the current monetary regime

1.1 The current monetary policy backdrop

It has been roughly a year since the Federal Reserve ("the Fed") started increasing its policy rate in an effort to stem persistent inflationary pressures. In just 12-months time, the Fed Funds Effective Rate has risen from just 0.07% to 4.83%, the largest and most rapid increase in recent decades. Further, this sharp pivot toward hawkish monetary policy follows fifteen years of accommodative policy that suppressed market volatility and compressed term and risk premia. Figure 1 shows the US Fed Funds since the Global Financial Crisis ("GFC")

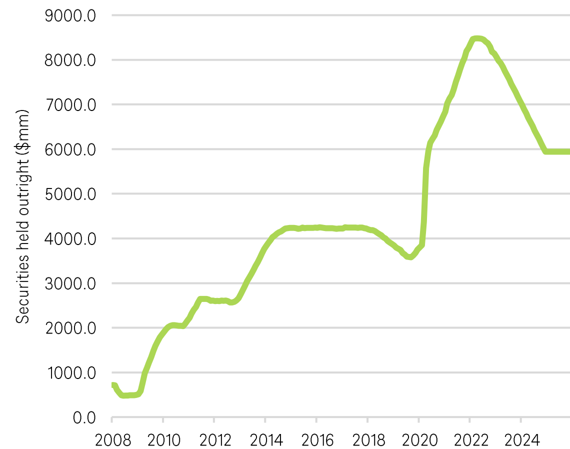
Figure 1: US Federal Funds Effective Rate



Source: Bloomberg as of 31 March 2023.

The precipitous rise in risk-free borrowing rates was amplified by the tapering of the Fed's balance sheet holdings–also referred to as Quantitative Tightening ("QT")–beginning in May, shown in Figure 2, with the trajectory of the Fed's balance sheet securities holdings projected to move back toward pre-pandemic levels. Our expectations are currently for the Fed's securities holdings to decline by $95bn per month ending in 2024, isolating securities held as to isolate balance sheet policy from the impacts of temporary lending measures made to troubled banks.

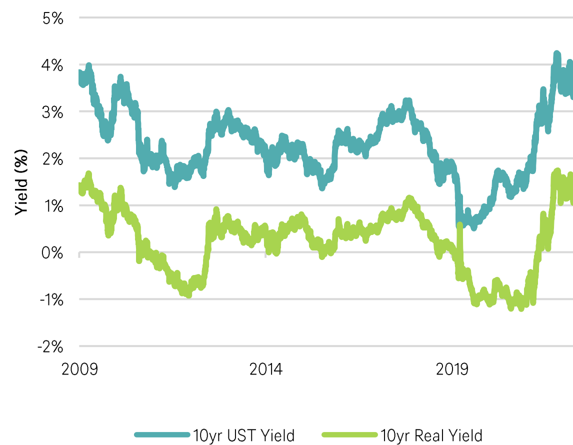
Figure 2: US Federal Reserve securities held outright ($ mm)



Source: U.S. Federal Reserve, DWS Calculations as of 31 March 2023.

The net impact of balance sheet reductions is a steepening in the real term premium, materializing in higher longer-term nominal and real Treasury Yields as shown in Figure 3.

Figure 3: US Federal Funds Effective Rate and 10yr UST Yield (%)



Source: Bloomberg as of 31 March 2023.

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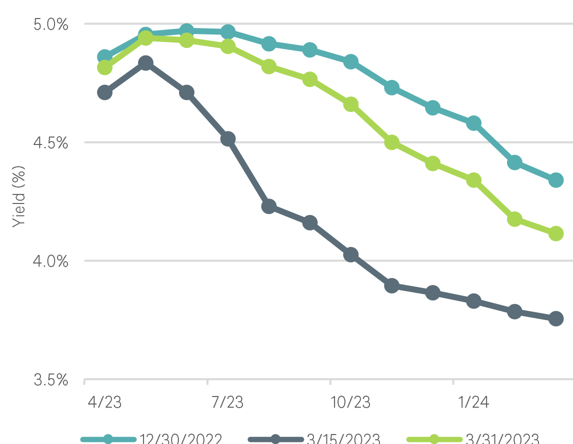
1.2 The impact of monetary policy on economic conditions

Over the previous quarter, the market-implied trajectory of policy rates has experienced considerable volatility and uncertainty. Following the collapse of Silicon Valley Bank in mid-March, Fed Funds Futures rallied dramatically, reflecting a view that perhaps the pace and magnitude of monetary tightening would cause either a steep decline in economic growth or risk further financial contagion and force the Fed to shift back to aggressive interest rate cuts.

Since that time, Fed officials have reiterated the importance of combatting inflationary pressures, which has repriced the Fed Funds Futures curve to a more modest trajectory of gradual loosening of monetary conditions later this year. Figure 4 illustrates the market-priced measure of policy rates to start and end the quarter in contrast with the implied curve immediately following the Silicon Valley Bank failure.

Figure 4: Fed Funds Futures Implied Rate (%)



Source: Bloomberg, DWS Calculations as of 31 March 2023.

Our outlook for monetary policy is more benign, as maintaining credibility in addressing its dual-mandate is essential for Fed officials. Preempting inflationary decline or anticipating labor weakness could prove a misstep as we highlightened in the 2023 Long View[1].

As we near the inevitable peak in the current rate-hiking cycle as indicated by both market pricing and through rhetoric from Fed officials, we naturally ask ourselves two main questions:

1. How quickly will the effects of monetary tightening be reflected in financial conditions and economic growth?
2. What might be a reasonable path forward for interest rates over the next couple of years?

For historical context, we might compare the current rate hiking cycle to recent monetary tightening experiences. As a bit of background, throughout most of US financial history, the Federal Reserve Bank ("the Fed") did not formally target a funds rate. It wasn't until 1982 that the Federal Operating Markets Committee ("the FOMC") deemphasized M1 and unofficially switched to a funds rate targeting procedure. Subsequently, in 2012, the Fed officially adopted a 2 percent inflation target, increasing the monetary policy multiplier and helping to anchor market expectations around its policy guidance.

Since this switch in the funds rate targeting procedure, the Fed has engaged in six interest rate hiking cycles including this current cycle, with the previous five interest rate hiking regimes spanning an average of roughly 81 weeks. Table 2 compares each of these hiking cycles by a few important macroeconomic and interest rate measures.

Table 2: Comparison of Fed hiking cycles

	Duration (weeks)	Δ in Fed Funds Target Rate	Economic Growth (starting level YoY %)	Δ in GDP growth (% ann.)*	Inflation (starting level YoY %)
1988-1989	48	2.25%	4.2%	8.6%	3.0%
1994-1995	52	3%	3.4%	5.7%	2.7%
1999-2000	46	1.75%	4.7%	7.6%	2.0%
2004-2006	104	4.25%	4.2%	6.6^	3.3%
2015-2018	157	2.25%	1.9%	4.3%	0.7%
2022-2023**	54	4.75%	3.7%	7.0%	8.5%

Source: DWS Investments UK Limited as of 31 March 2023.
*Calculated based on nearest quarter
**Current rate hiking cycle is still underway

As the table illustrates, the pace and magnitude of the current rate hiking cycle exceeds all other periods of rate tightening in the modern fund rate targeting era. To an extent, this complicates the translate of empirical observation into our views on the economy.

Economic backdrop

Current economic conditions remain resilient, with personal consumption expenditures for both goods and services well above trend (see Figure 5). Although goods demand has shown signs of slowdown, strong but slowing services demand is likely to buoy economic growth, informing our outlook for a mild recession later this year.

[1] https://www.dws.com/en-us/insights/dws-research-institute/dws-long-view-2023/

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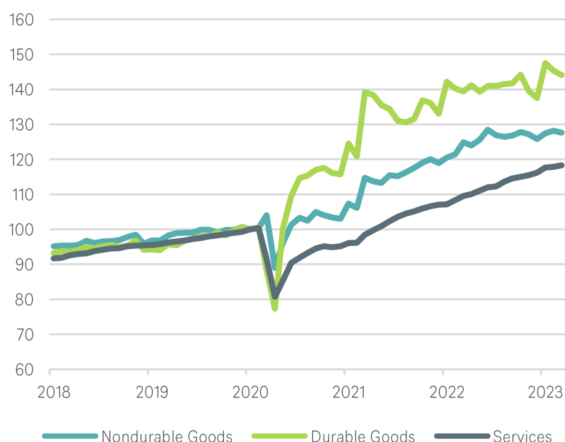
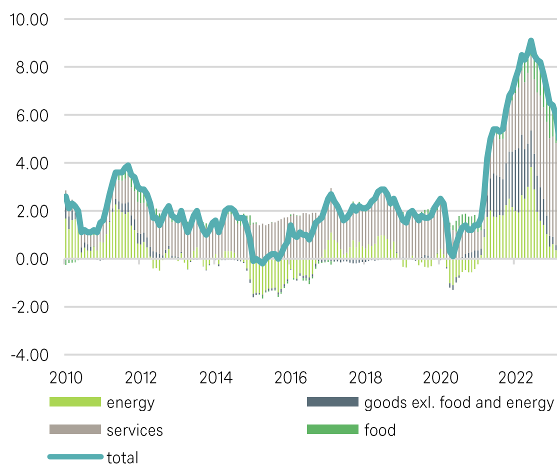
Figure 5: Personal Consumption Expenditures Goods & Services (Index Q1 2020 = 100)



Source: Haver as of April 2023

While inflation has shown signs of slowing, core and headline CPI remain well above Fed target levels, where services contribution to YoY price increases is still quite substantial, as shown in Figure 6.

Figure 6: CPI and its major contributors in % YoY

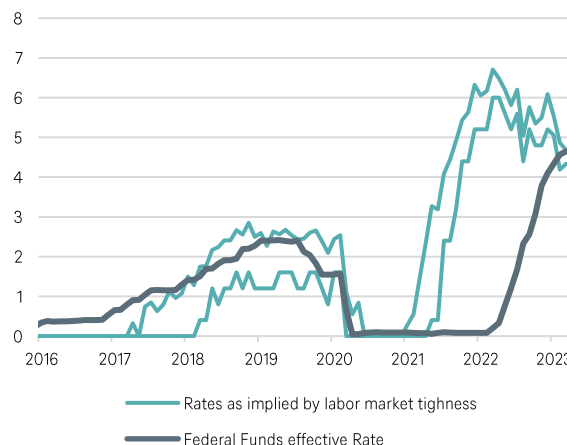


Source: Haver as of April 2023

Impact of monetary policy

With the benefit of hindsight, there is some evidence that the Fed was behind the curve, waiting too long to begin tightening monetary conditions. Based on the labor market, part of the Fed's dual mandate, the Fed perhaps should have begun raising the Fed Funds rate as early as 2021 (see Figure 7). While the reopening of economies around the globe and fading supply chain disruptions might lift the pressure on inflation somewhat, labor market-based inflationary pressures are certainly not transitory in nature. This explains in part the still stubborn nature of price pressures despite historically aggressive monetary tightening.

Figure 7: Rates implied by labor market tightness



Sources: Michaillat, Pascal, and Emmanuel Saez. 2022 (https://doi.org/10.48550/arXiv.2206.13012), Own Calculations, Haver Analytics, DWS Investment GmbH as of 3/2/2023

Figure 8 examines the potential sensitivity of GDP growth to increases in policy rates, where the aggregate effects might peak a year into the hiking cycle. Derived by macroeconomic models, the chart explains how much drag in percentage GDP to expect from past and future expected rate hikes As we are roughly a year into interest rate hikes, we might expect this drag on economic growth to peak in thesecond quarter of this year – in line with our assessment of a mild recession.

Figure 8: Drag on GDP from past and expected higher policy rates

Source: Haver, Federal Reserve Board as of April 2023

Figure 9 shows the tightening in the Bloomberg US financial conditions index up to this point.

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Figure 9: Bloomberg US financial conditions index

Source: Bloomberg as of 31 March 2023.

Although Fed policy is intended to tighten financial conditions to help slow economic demand, it is not yet clear whether the aggressive nature of monetary tightening will result in further bank stress, particularly across regional deposit institutions.

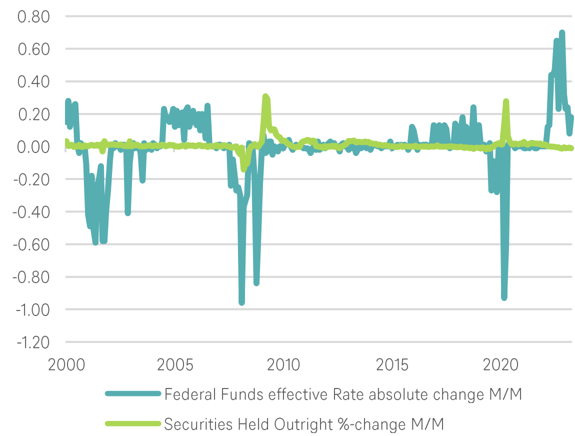
The impact of QT

While the relationship between interest rate hikes and financial conditions is rather straightforward and intuitive, determining the tightening effects of QT is a much more complex problem. Historical precedent for significant balance sheet operations is lacking in the domestic economy, and research from the Federal Reserve Board of Governors ("the FRB") estimated that while reducing the balance sheet by $2.5tr over several years would be roughly equivalent to raising the Fed's policy rate by half a percentage point, the authors of the study stressed that their estimate was "associated with considerable uncertainty".

We posit that QE and QT have asymmetric effects. In times of stress, when the central bank starts large-scale asset purchase programs, usually interest rates are cut aggressively. In contrast, a normalization of monetary policy usually is done by increasing policy rates at a relative slower pace and only very gradually selling assets. Therefore, we think QT has a much milder effect on the economy as compared to QE as long as enough reserves are left in the system.

The last time this happened was in 2019, when the Fed had to stop QT less than a year after it initiated the run-down. What has change since then is that the Fed implemented a so-called ample reseve framework in 2019. With its extension in 2021 (introducing a standing repo facility) this framework should ensure that similar episodes like in 2019 are unlikely to happen again. Figure 10 shows the rate of change for both the Fed Funds effective rate and the Fed's balance sheet holdings.

Figure 10: Reserve bank credit outstanding and Fed Funds effectie rate

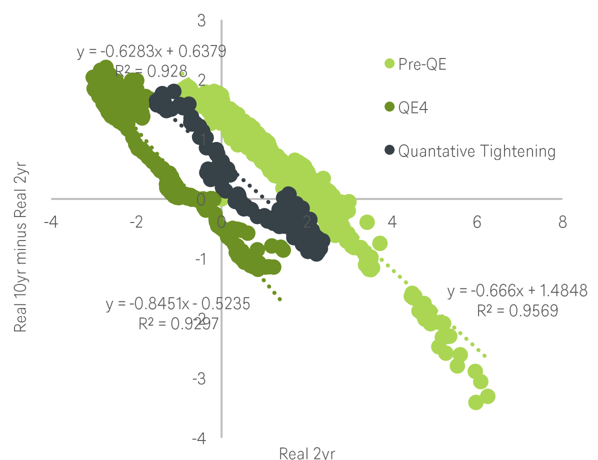


Source: Bloomberg, Federal Reserve as of 31 March 2023.

In any case, the theoretical purpose of QE remains primarily the liquidity providing leg of an expansionary monetary policy, ensuing that interest rate cuts can feed into the economy even more efficiently and that simultaneous bond buying stabilizes the financial system. Often times, periods of interest rate cuts are dominated by financial system stress and risk aversion, and liquidity injections help to strengthen and stabilize these financial conditions.

In terms of impact on financial asset prices, the impact of QT is more apparent on real interest rates. As with QE, QT seemingly has impacted real US treasury yields in the longer end of the curve, with the 10-2 real curve having shifted 115-120bps higher, although this curve remains about 85bps flatter than pre-QE levels (see Figure 11).

Figure 11: Linear regression of real 10yr minus 2yr US Treasury yield against real 2yr US Treasury yield



Source: Bloomberg, DWS calculations as of 31 March 2023.

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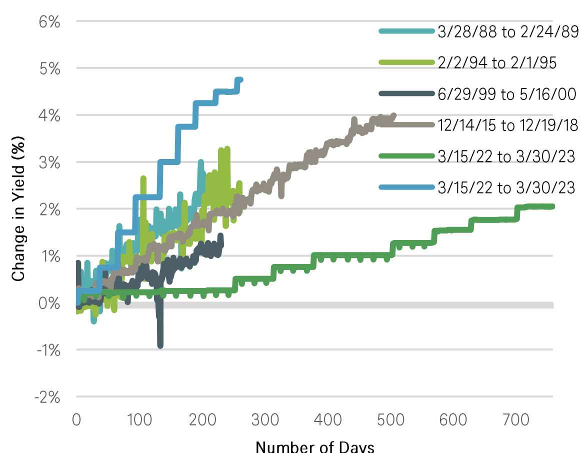
1.3 Financial market behaviors during modern era rate hiking cycles

Where we can perhaps gain additional insight into market behaviors as a function of monetary tightening is examining the reaction function of financial market indicators and measures to throughout previous rate hiking cycles. As Figure 12 reiterates, the pace and magnitude of this current rate hiking cycle is noticeably the most aggressive over the past four decades in large part due to inflationary pressures...

Figure 12: Change in Fed Funds Effective Rate (%) during hiking cycles

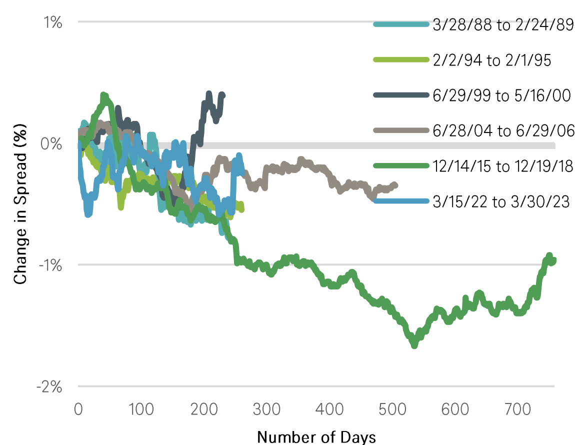


Source: Bloomberg, DWS as of 31 March 2023.

While this recent rate hiking cycle was conducted amid a much higher inflation backdrop as compared to recent history, as we previously discussed, at least some of the non-transitory price pressures were a result of a tight labor market and robust services growth.

During previous hiking cycles, strong macroeconomic conditions often meant relatively well-behaved credit and equity markets. Figure 13 shows the change in BAA corporate credit spreads in each of the recent rate hiking cycles, where the average spread behavior experience was modest tightening with the exception of 1999 to 2000. 2015 to 2018 also stands out as both the most recent Fed hiking cycle and a period of quite significant spread rally.

Figure 13: Change in Moody's BAA spread over 10yr UST during hiking cycles

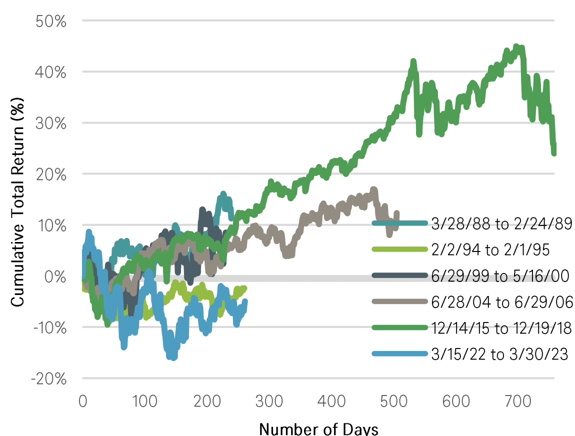


Source: Bloomberg, DWS as of 31 March 2023.

In many cases, these monetary tightening windows were characterized by strong negative correlations between credit spreads and interest rates, indicating the strong economic backdrop that perhaps justified the monetary tightening measures or at least provided a buffer against economic slowdown.

Looking at equity performance, the picture is a bit noisier. Figure 14 shows the returns of the S&P 500 during rate hiking cycles, where certain regimes (2015-2018, 2004-2006) experienced quite strong equity returns where equities have demonstrated some weakness in other hiking cycles (from 1994-1995 and 2022-current).

Figure 14: S&P 500 cumulative return during hiking cycles



Source: Bloomberg, DWS as of 31 March 2023.

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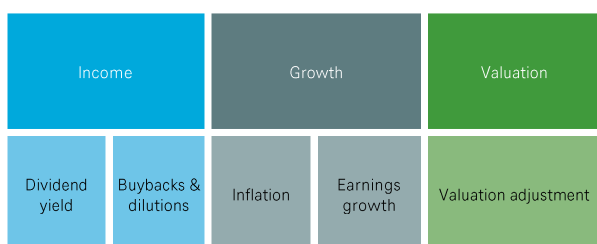
2 / Long View Forecasts

2.1 Equity Forecasts

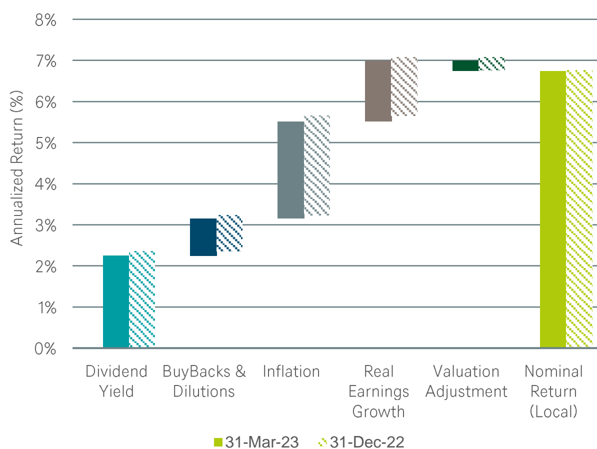
For our equity return forecasts, Figure 16 illustrates the changes to our return pillars for 10-year MSCI All Country World local currency return forecast. Our return forecast for global equities were up incrementally to 6.7% from the 6.6% level at the end of 2022. A very modest decline in dividend yield (from 2.4% to 2.2%) was offset by less challenging valuations (which went from -0.3% to -0.2%) and a marginal increase in real earnings growth (from 1.4% to 1.5%).

Figure 15: Pillar decomposition for equities



Source: DWS Investments UK Limited. Data as of 31 March 2023.

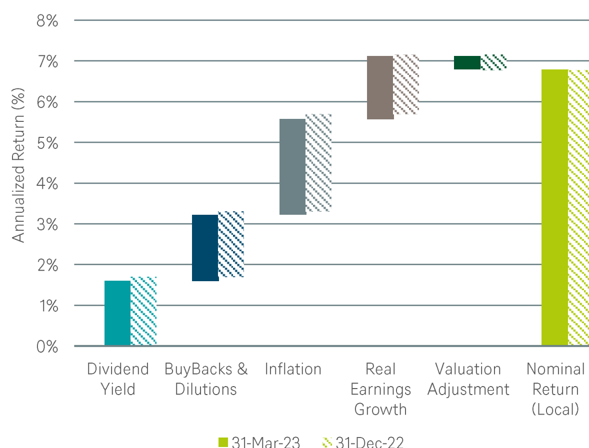
Figure 16: MSCI All Country World: Contribution to 10-year forecasted hypothetical annualized returns



Source: DWS Investments UK Limited. Data as of 31 March 2023.

Our US equity forecasts were also largely unchanged, staying flat at 6.8% per annum. Similarly to global equities, dividend yields declined very marginally (from 1.7% to 1.6%) whereas earnings growth (from 1.5% to 1.6%) and valuations (from -0.4% to -0.3%) were modestly higher relative to the end of 2022.

Figure 17: MSCI USA: Contribution to 10-year forecasted hypothetical annualized returns

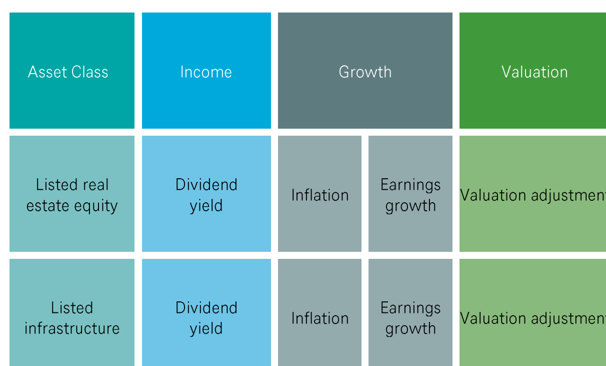


Source: DWS Investments UK Limited. Data as of 31 March 2023.

2.2 Liquid Real Assets Forecasts

While REITs and Infrastructure both leverage very similar pillars to equities (see Figure 18), returns are derived largely from income via dividend distributions as shown in Figure 19 and. Figure 20.

Figure 18: Pillar decomposition for REITs and Infrastructure



Source: DWS Investments UK Limited. Data as of 31 March 2023.

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

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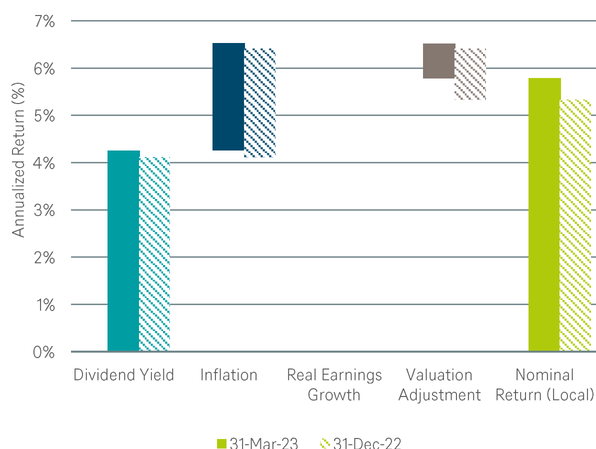
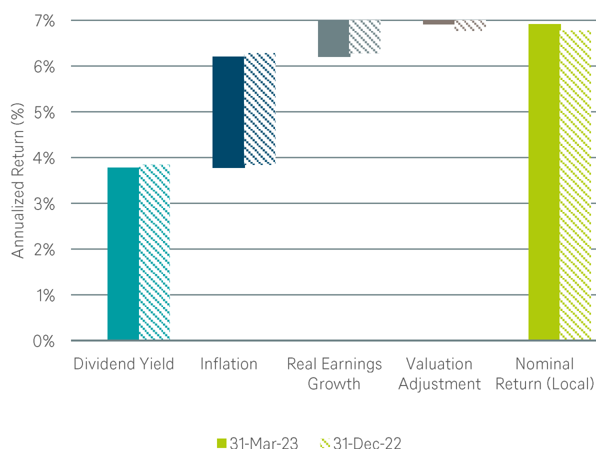
Figure 19: Global REITs: Contribution to 10-year forecasted hypothetical annualized returns



Source: DWS Investments UK Limited. Data as of 31 March 2023.

Figure 20: Global Infrastructure: Contribution to 10-year forecasted hypothetical annualized returns



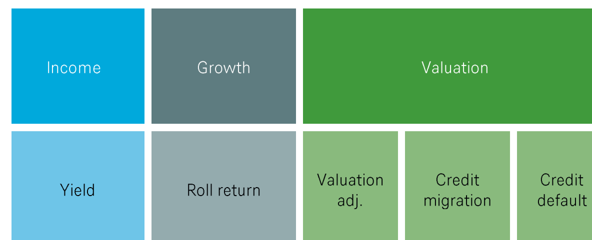
Source: DWS Investments UK Limited. Data as of 31 March 2023.

2.3 Fixed Income Forecasts

Following the significant selloff in interest rates in 2022, rates markets ended Q1 in stark contrast. Although interest rates were higher through the first couple of months, the SVB failure and concerns around further weakness across the banking system caused interest rates to rally significant in mid-March. The net effects was the 10-year US Treasury yield ending the quarter at 3.47%, about 40bps lower versus the end of the year. The banking concerns also extended on a limited basis to credit markets, manifesting into some weakness in spreads in the back half of March.

The net effects of the intra-quarter rate and spread volatility was modestly lower yields relative to the end of the year, reflecting in modestly lower return forecasts across sovereign and corporate bond markets. Looking over a strategic time horizon, these yield levels are marginally lower than the previous quarter but remain well above bond yields over the past decade. Starting yield is by far the most important driver of return contribution in our building blocks shown in Figure 21.

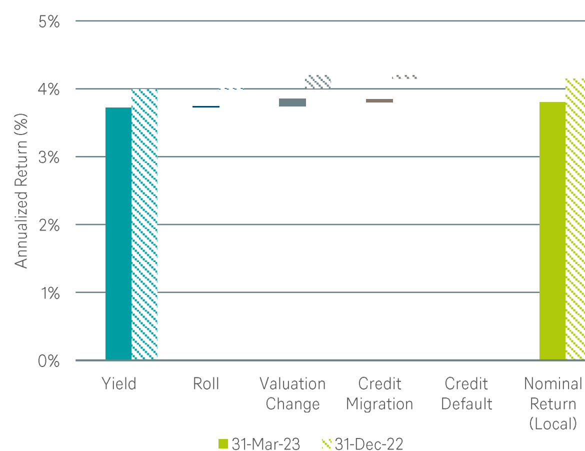
Figure 21: Pillar decomposition for Fixed Income



Source: DWS Investments UK Limited. Data as of 31 March 2023.

Over the first quarter, the 10-year US Treasury yield moved from 3.87% at the end of 2022 to 3.47% to close out Q1. This has modestly reduced our US Treasury return forecasts from 4.1% to 3.8% as shown in Figure 22.

Figure 22: US Treasury Bond Index: Contribution to 10-year forecasted hypothetical annualized returns



Source: DWS Investments UK Limited. Data as of 31 March 2023.

Corporate bond spreads were a tale of two periods in Q1, with spreads behaving quite positively up until the SVB failure in mid-March. In aggregate, investment grade corporate bond spreads ended Q1 6bps higher (from 130bps to 138bps) where high yield corporate bond spreads rallied 14bps (from 469bps to 455bps). Figure 23 and Figure 24 shows US Investment Grade and US High Yield return forecasts, respectively.

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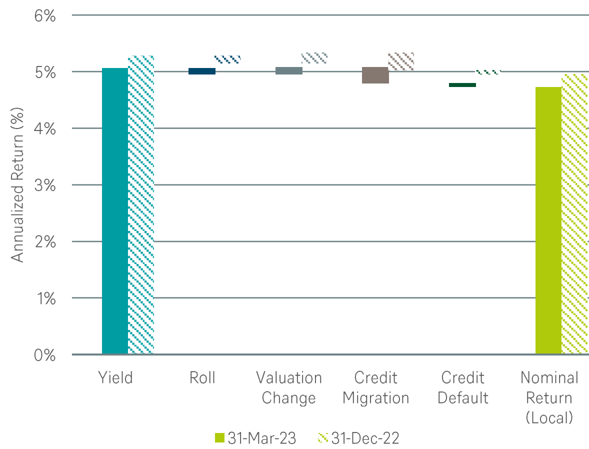
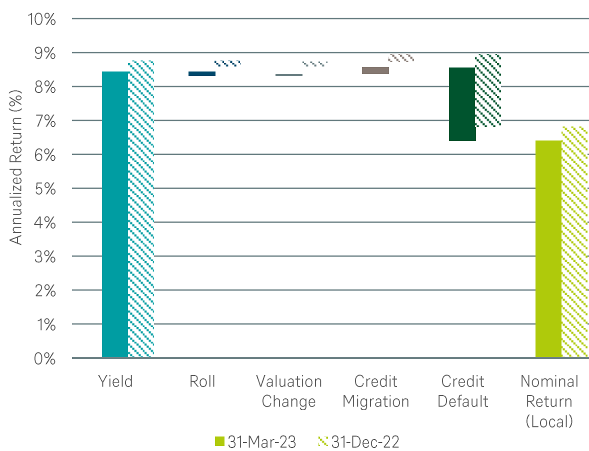
Figure 23: **US Investment Grade Corporate Bond Index: Contribution to 10-year forecasted hypothetical annualized returns**



Source: DWS Investments UK Limited. Data as of 31 March 2023.

Figure 24: **US High Yield Bond Index: Contribution to 10-year forecasted hypothetical annualized returns**



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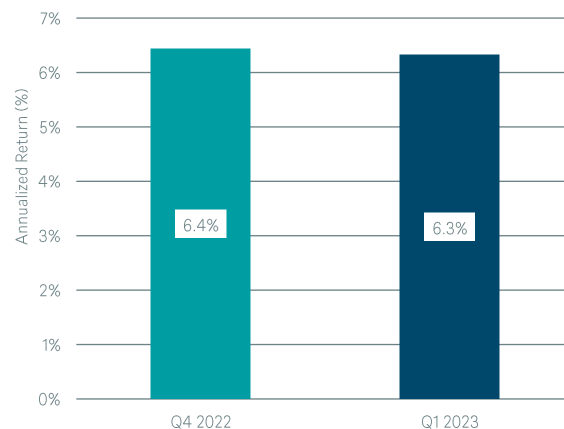
3 / Conclusion

Comparing return forecasts as of the end of Q1 relative to the end of the year paints a benign picture, with the return outlook across equities, fixed income, and alternatives relatively unchanged. The point-to-point comparison, however, was largely coincidental, with a continued move higher in interest rates and tightening credit spreads up until mid-March when SVB collapsed and markets began to price in financial contagion risks. In a way, this bifurcated market in Q1 indicates the predicament of monetary policymakers, where economic and corporate fundamentals remain robust while market participants anticipate downside risks as a result of aggressive monetary tightening amid a backdrop of persistent inflationary pressures. The net effects of monetary tightening should materialize in the coming quarters, and despite volatility in the rates markets, the Fed has demonstrated a commitment to its inflation mandate.

While these shorter term uncertainties may create noise across financial markets, we have some greater certainty around a number of strategic return drivers. Starting yield levels are favorable versus recent years and while valuations are not cheap, they are less prohibitive going forward relative to a year ago. Our 10-year return forecasts shown in **Figure 25** illustrates how our 10-year return forecasts for a moderate strategic asset allocation multi-asset[2] have changed over the most recent quarter.

Figure 25: **10 year forecasted hypothetical annualized returns of moderate strategic asset allocation**



Source: DWS Investments UK Limited. Data as of 31 March 2023.

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

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