



Market Perspectives

May 2023



Contents

Macro – As oil prices gush, will the Gulf states' bonanza last?	3
Tighter credit conditions call for increased selectivity	6
Deciphering banking codes	11
Illiquid alternatives: a song of fire and ice	16
Targeting alpha in Asian equities	21
How to invest "in" our planet	24
The importance of an optimistic outlook	27
Multi-asset portfolio allocation	30

Contributors:

Henk Potts, London UK, Market Strategist EMEA
Lukas Gehrig, Zurich Switzerland, Quantitative Strategist
Nikola Vasiljevic, PhD, Zurich, Switzerland, Head of Quantitative Strategy
Julien Lafargue, CFA, London UK, Chief Market Strategist
Dorothee Deck, London UK, Cross Asset Strategist
Michel Vernier, CFA, London UK, Head of Fixed Income Strategy
Alexander Joshi, London UK, Head of Behavioural Finance
Damian Payiatakis, London UK, Head of Sustainable & Impact Investing
Luke Mayberry, London UK, Investment Analyst
Iain Martin, London UK, Investment Writer

Foreword

Welcome to our May edition of Market Perspectives, which tries to get to the bottom of what the demise of Silicon Valley Bank and Credit Suisse in March means, and if the initial turmoil in financial markets has calmed.

In equities, the tighter credit conditions on the way as banks batten down lending activity, means that investors are likely to be more selective and higher-quality businesses will be preferred. Financials, construction and industrials appear to be the sectors most exposed to such an outcome.

Meanwhile, in bonds, yields have eased from the spike seen in March. The tighter lending conditions and beefed-up bank regulations on the way will hit banks' earnings. This may have consequences for the rest of the market, as a quarter of the US investment grade bond market is made up of bank debt.

Beyond our usual asset class and financial market analysis, we also reflect on what investors can do reduce biodiversity risk in their portfolios while protecting the planet. Meanwhile, our behavioural finance section points to why it might pay to look on the bright side when investing.

As always, we hope you enjoy the articles, and we thank you for entrusting us with your investments.

**Jean-Damien Marie
and Andre Portelli,
Co-Heads of Investment, Private Bank**

As oil prices gush, will the Gulf states' bonanza last?

Middle Eastern economies are among a handful to prosper in the aftermath of the COVID-19 pandemic and subsequent surge in energy prices. Opportunities in the transition to green energy and a booming tourism sector should help to drive economic growth, whatever happens to fuel prices. However, religious and political conflicts are never far away in the region, while shifting geopolitical tectonics may also reshape its future.

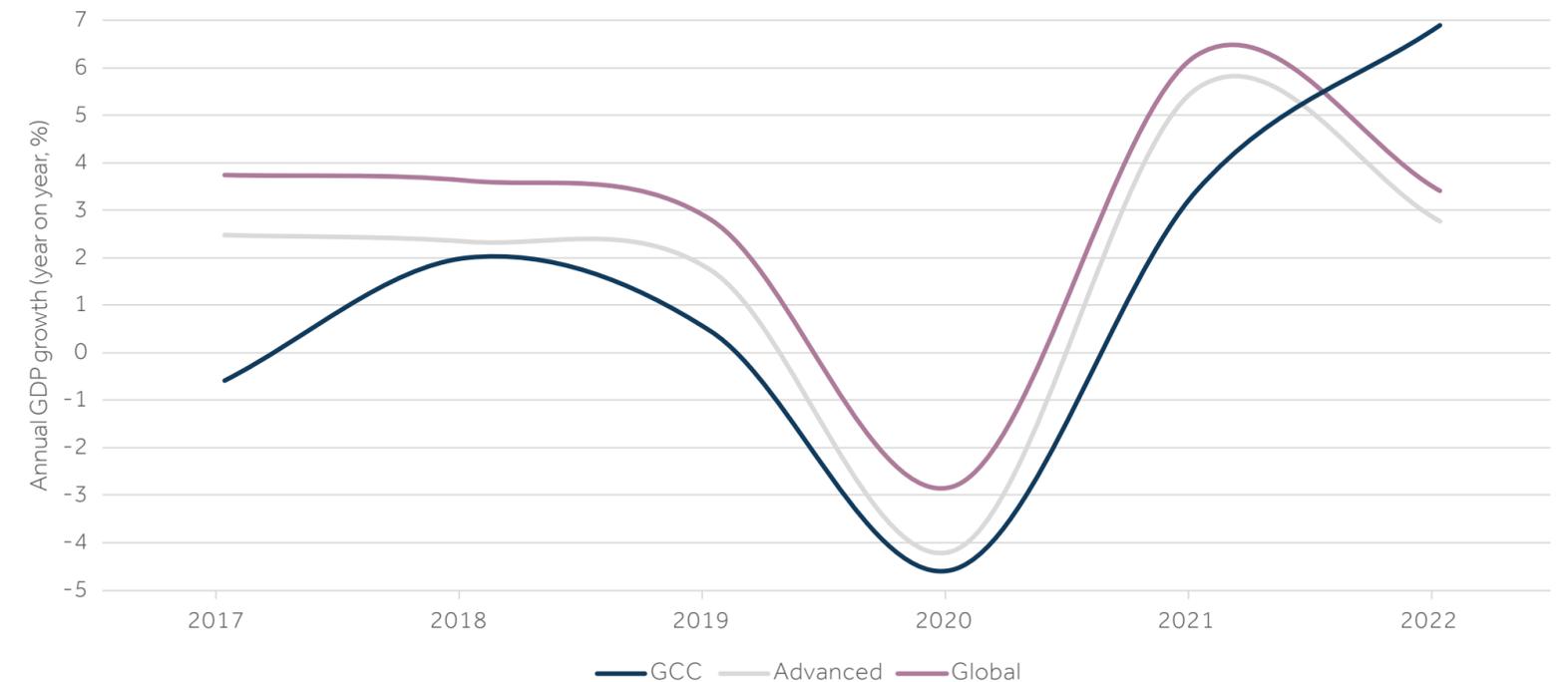


While most of the world has struggled to cope with the disruption from the COVID-19 pandemic, the fallout from the energy shock and surging price pressures, many Gulf states have bucked the trend, being a bastion of growth and stability.

A rapid vaccination programme, higher energy prices, supportive government policies and a rebound in tourism have all helped the Gulf to outperform many of its global peers. Middle Eastern countries have dominated the global growth tables over the past couple of years, with Kuwait (8.7%), Saudi Arabia (8.7%) and United Arab Emirates (UAE) (7.6%) leading the way.

ECONOMIC GROWTH IN THE GULF STATES ON THE UP

Annual gross domestic product for the Gulf Governing Council states, advanced economies and world since 2017



Source: Bloomberg, World Bank, Barclays Private Bank, April 2023

STRONG RECOVERY FROM COVID-19

The financial firepower of the Gulf Cooperating Council (GCC) countries and a strong organisational infrastructure allowed them to approve, produce and distribute vaccines at speed in the early days of the pandemic. GCC countries, when required, also proved to be adept at controlling new outbreaks of the disease, thereby limiting the extent of the disruption to the economy.

The early vaccine adoption meant that the authorities were among the first to relax COVID-related restrictions. This freedom encouraged both businesses and holidaymakers to flock to the region, as aggressive lockdowns persisted in almost all other parts of the world.

HIGHER OIL PRICES

Many of the Gulf states are large energy exporters that have been among the leading beneficiaries of higher oil and gas prices. Saudi Arabia is estimated to hold approximately 21.5% of the world's proven oil reserves¹. Saudi Aramco reported record profits of \$161 billion in 2022 after producing 11.5 million barrels per day (mbpd) of crude oil and other liquids, or around 10% of global crude supply.

The UAE has one of the world's largest proven oil and gas reserves. Oil exports account for around 30% of gross domestic product (GDP) for the UAE. Last November, the Emirate brought forward its target of producing 5mbpd to 2027 from 2030². Kuwait holds around 7% of the world's reserves, with oil revenues accounting for around half Kuwait's GDP and approximately 90% of government export revenue.

GLOBAL ECONOMY HIT BY ENERGY-PRICE SHOCK

The recovering global economy and fears of a supply shock sent oil prices surging in 2022. Whilst crude costs eased back from the \$140 a barrel peak at the start of Russia's invasion of Ukraine in February last year, they are still expected to remain supported by relatively tight supply and demand dynamics for the rest of the year.

On the supply side, the Organization of the Petroleum Exporting Countries' Opec+ grouping of producers, led by Saudi Arabia, announced a production cut of 1.16mbpd³, which is scheduled to start in May and remain in place until the end of 2023. Simultaneously, Moscow also extended a 500,000-barrels-a-day (kpd) cut.

Meanwhile, Libya, Nigeria and Venezuela suffered significant disruption to their production capacity, while supply growth in non-Opec member the US has also fallen short of expectations. The production cuts come at a time when inventory levels remain low by historical standards.

On the demand side of the equation, forecasts remain robust. China, the world's largest importer of energy and demand, is projected to surge as the economy reopens. Mobility data shows that transportation usage has jumped over the past few months as shops and restaurants have reopened and international air travel has resumed.

The International Energy Agency estimated, at the start of the year, that Chinese demand would grow by 850kpd in 2023, equating to nearly half of its projected increase. At a global level, Opec forecasts a 2.3% increase in global oil demand this year.

"Religious and political conflicts continue to destabilise parts of the region and its overreliance on commodities makes it vulnerable to a collapse in fuel prices"

GULF ECONOMIES TO PROSPER FROM HIGHER OIL PRICES

The International Monetary Fund estimated that robust energy prices helped the GCC countries to generate a \$100 billion fiscal surplus in 2022. While production cuts will reduce some of the economic benefit in the short term, if energy prices remain higher for longer it would be good news for the public finances of major producers.

SURGING ENERGY REVENUE DRIVING THE GROWTH AGENDA

The flow of petrodollars has created large budget surpluses and allowed the Gulf authorities to rebuild financial buffers, increase government spending and to drive the structural reform agenda. Governments have been liberalising, diversifying and digitalising their economies. Authorities have been improving education resources, healthcare provision and advancing worker equality. Officials have also introduced sweeping legal reforms that protect trademarks, increased data protection and enacted laws to protect industrial property rights.

The impressive growth backdrop, improving legal/regulatory framework and pro-business reforms have encouraged Foreign Direct Investments (FDI) to flow into the region. The Gulf's focus on infrastructure, innovation and technology has also attracted international investors and companies looking to expand.

Many GCC countries have created free economic zones that have eased rules around licenses to operate and created beneficial tax breaks. Under its 2030 vision, Saudi Arabia aims to increase the contribution of FDI from 0.7% of GDP⁴ in 2016 to 5.7% by 2030⁵.

¹ Opec share of world crude oil reserves, 2021, Opec, April 2023 https://www.opec.org/opec_web/en/data_graphs/330.htm

² ADNOC brings forward its oil production capacity expansion to 2027, Enerdata, 30 November 2022 <https://www.enerdata.net/publications/daily-energy-news/adnoc-uae-brings-forward-its-oil-production-capacity-expansion-2027.html>

³ OPEC+ announces surprise oil output cuts, Reuters, 2 April 2023 <https://www.reuters.com/business/energy/sarabia-other-opec-producers-announce-voluntary-oil-output-cuts-2023-04-02/>

⁴ Saudi Arabia foreign direct investment: % of GDP, CEIC, September 2022 [https://www.ceicdata.com/en/indicator/saudi-arabia/foreign-direct-investment--of-nominal-gdp#:~:text=Saudi%20Arabia%20Foreign%20Direct%20Investment%20\(FDI\)%20registered%20a%20growth%20equal,Mar%202006%20to%20Sep%202022.](https://www.ceicdata.com/en/indicator/saudi-arabia/foreign-direct-investment--of-nominal-gdp#:~:text=Saudi%20Arabia%20Foreign%20Direct%20Investment%20(FDI)%20registered%20a%20growth%20equal,Mar%202006%20to%20Sep%202022.)

⁵ Saudi Arabia's race to attract investment dogged by scepticism, Reuters, 16 November 2022 <https://www.reuters.com/business/energy/saudi-arabias-race-attract-investment-dogged-by-scepticism-2021-11-16/>

GULF STATES ARE AGGRESSIVELY INVESTING IN ENERGY TRANSITION

The windfall from higher commodity prices is giving the region the financial ammunition to accelerate the transition from hydrocarbons to renewable energy sources. Saudi Arabia has already started to construct a \$5 billion wind and solar powered hydrogen plant at its Neom smart mega-city project.

The UAE's Net Zero by 2050 Strategic Initiative aims to achieve the goals set out in the Paris Agreement⁶ and develop green industries, skills and jobs. As such, the UAE has heavily invested in developing carbon capture technology and has already embraced clean energy by opening three nuclear power stations. The state's hosting of the 2023 UN Climate Change Conference towards the end of this year reinforces its growing green ambitions.

TOURISM WILL SUPPORT GROWTH AND DIVERSIFY ECONOMIES

The relaxation of border controls early in the pandemic made the Middle East (in particular the UAE) a popular oasis in a COVID-ravished world. Overall, the Middle East delivered the strongest tourism recovery rate last year, with arrivals accounting for 83% of pre-COVID levels compared to a global average of 63%.

Visitor numbers to Dubai have surged over the past couple of years and occupancy rates (77%) were some of the highest in the world despite an increase in room supply. Dubai officially received 14.36 million international overnight visitors in 2022, which was a year-on-year increase of 97% on 2021, according to figures from the UN World Tourism Organisation.

Other destinations in the Middle East are looking to tap into Dubai's success. Saudi Arabia, which already hosts millions of Muslim pilgrims to the holy sites of Mecca and Medina, wants to increase its appeal as a mainstream holiday destination. To help in achieving this aim, authorities have eased visa restrictions, ramped up the country's sponsorship of major sporting events and embarked on an international advertising campaign.

The Saudi government has a goal to raise the tourism sector's contribution to the Kingdom's GDP from 4% in 2022 to 10% by the end of this decade⁷. The authorities have also set an ambitious target of boosting annual visitors to 100 million, compared to around 67million in 2021⁸.

THE MIDDLE EAST IS AN INNOVATIVE FINANCIAL CENTRE

For centuries, the Middle East has been considered an important strategic trading centre. Given its geographical position, wealth of natural resources and extensive diplomatic ties, the region's role as a key exchange hub looks set to expand. Part of that expansion is likely to be driven by its position as a growing financial centre.

Sovereign wealth funds have long played a crucial part in global finance and, while that will continue, authorities have recently also sought to harness investment flows as a way to expand capital market capabilities in the Middle East.

For example, the region's promotion of cryptocurrency adoption and regulation illustrates how officials are looking to apply an innovative approach to find new opportunities in financial services.

STRONG GROWTH, BUT RISKS PERSIST

The combination of vast amounts of proven oil and gas reserves, a growing tourism base and an expanding trading centre should continue to provide strong economic growth over the next few years. GCC leaders appear to be using the energy price dividend to diversify their economies and implement significant structural and social changes.

However, this is a part of the world that continues to struggle with potential headwinds. Religious and political conflicts continue to destabilise parts of the region and its overreliance on commodities makes it vulnerable to a collapse in fuel prices.

Author: Henk Potts, London UK, Market Strategist EMEA

⁶ The Paris Agreement, United Nations Climate Change, April 2023 <https://unfccc.int/process-and-meetings/the-paris-agreement>

⁷ Saudi Gazette report – Riyadh, Saudi Gazette, 24 January 2023 <https://saudigazette.com.sa/article/629194#:~:text=During%20the%20Future%20Real%20Estate,a%20value%20of%20SR15%20billion.>

⁸ Saudi to attract 100 million visitors by 2030, Middle East Economy, 2 February 2023 <https://economymiddleeast.com/news/saudi-visitors-2030/>

Tighter credit conditions call for increased selectivity

The sudden failures of Silicon Valley Bank and Signature Bank in the US, as well as the loss of market confidence in Credit Suisse in Europe in March sparked much turmoil in financial markets. Those events seem largely idiosyncratic and unlikely to lead to a full-blown financial crisis. However, they do expose vulnerabilities in the system, which are worth considering.



Please note: This article is more technical in nature than our typical articles, and may require some background knowledge and experience in investing to understand the themes that we explore below.

TIGHTER CREDIT CONDITIONS RAISE THE ODDS OF A HARD LANDING ...

While the impact of March's bank collapses on the real economy will be difficult to quantify, it is fair to assume that they will lead to a further tightening in bank lending standards and lower loan growth. This will likely contribute to a further decline in economic activity, a deterioration in credit quality and more generally an increase in the probability of a hard landing.

In that context, smaller, riskier and more highly-leveraged companies would find it more difficult to access capital. Lending facilities coming up for renewal would be refinanced at higher rates and more stringent covenants. This would likely lead to more loan delinquencies and wider credit spreads compared with government bond yields. Corporate earnings would also become less predictable.

At the market level, this should translate into an increase in financial assets' risk premia, more volatility and a higher dispersion of returns.

As shown in the chart (see p7), tighter lending standards are usually associated with wider credit spreads, and more uncertainty in companies' earnings potential (defined below as the coefficient of variation in corporate earnings expectations over the subsequent 12 months).

Interestingly, bank lending standards started tightening in the US in September 2021, but were not accompanied by a meaningful widening of credit spreads, or an increase in the uncertainty of earnings projections. The dispersion of analysts' earnings forecasts seems low considering the increased risk of a recession. In other words, despite the recent deterioration in the growth picture, analysts appear to be in agreement in their expectation of flat earnings globally this year, which seems over-optimistic to us.

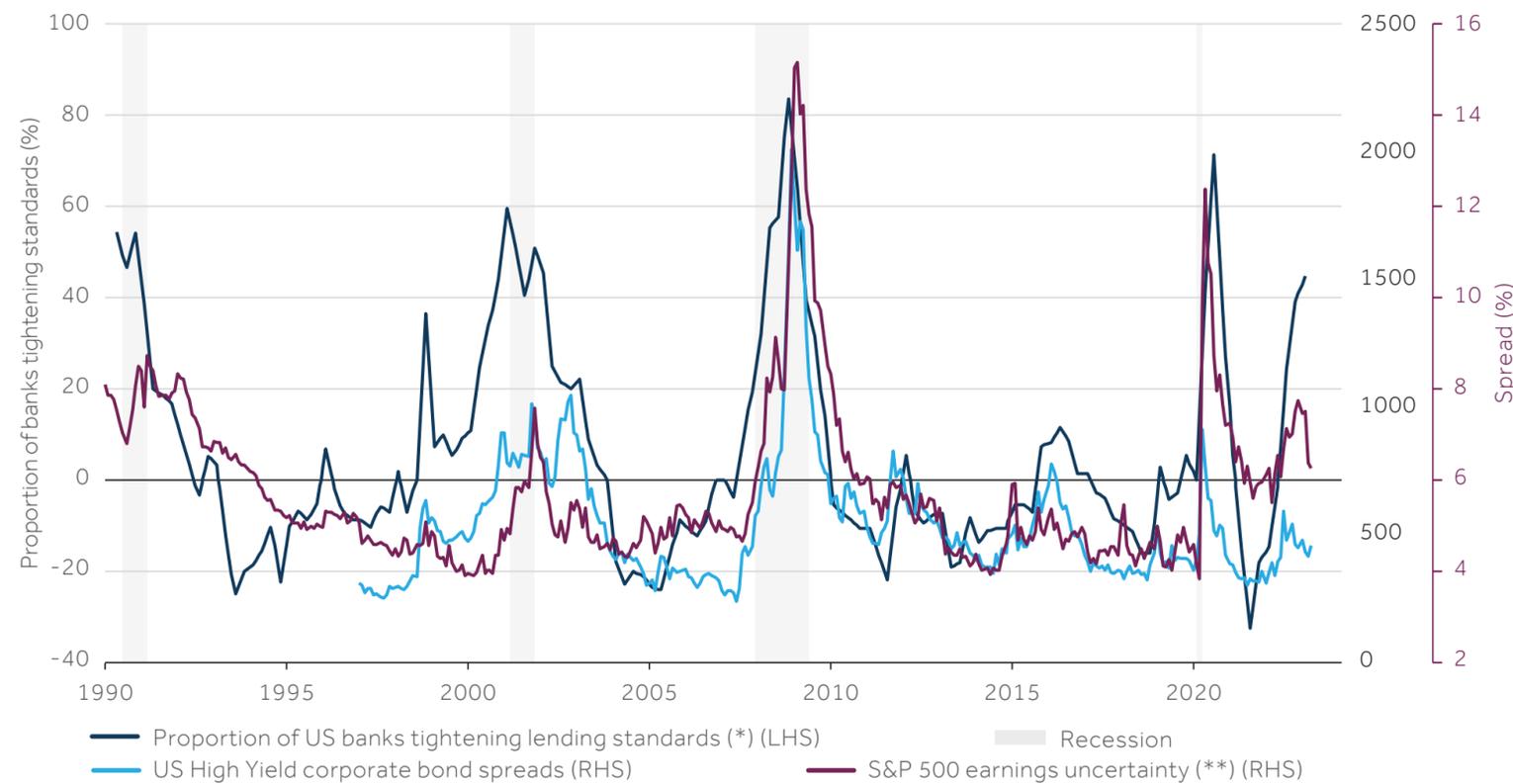
... AND CONFIRMS OUR VIEW THAT ANALYSTS' EARNINGS EXPECTATIONS REMAIN TOO OPTIMISTIC

Historically, the trend in lending standards has led earnings growth by about six months (see chart, p7). At current levels, US lending standards would be consistent with a 10% year-on-year decline in US earnings by September, compared with analysts' expectations of flat earnings for full-year 2023, according to IBES consensus.

This would be consistent with our expectation of a mild economic slowdown. As we get more information about companies' views on their trading outlook during the first-quarter reporting season in April and May, analysts are likely to reduce their earnings forecasts.

TIGHTER LENDING STANDARDS GENERALLY LEAD TO WIDER CREDIT SPREADS AND MORE EARNINGS UNCERTAINTY

The trend in US domestic banks tightening lending standards against high yield bond spreads and S&P 500 earnings uncertainty since 1990

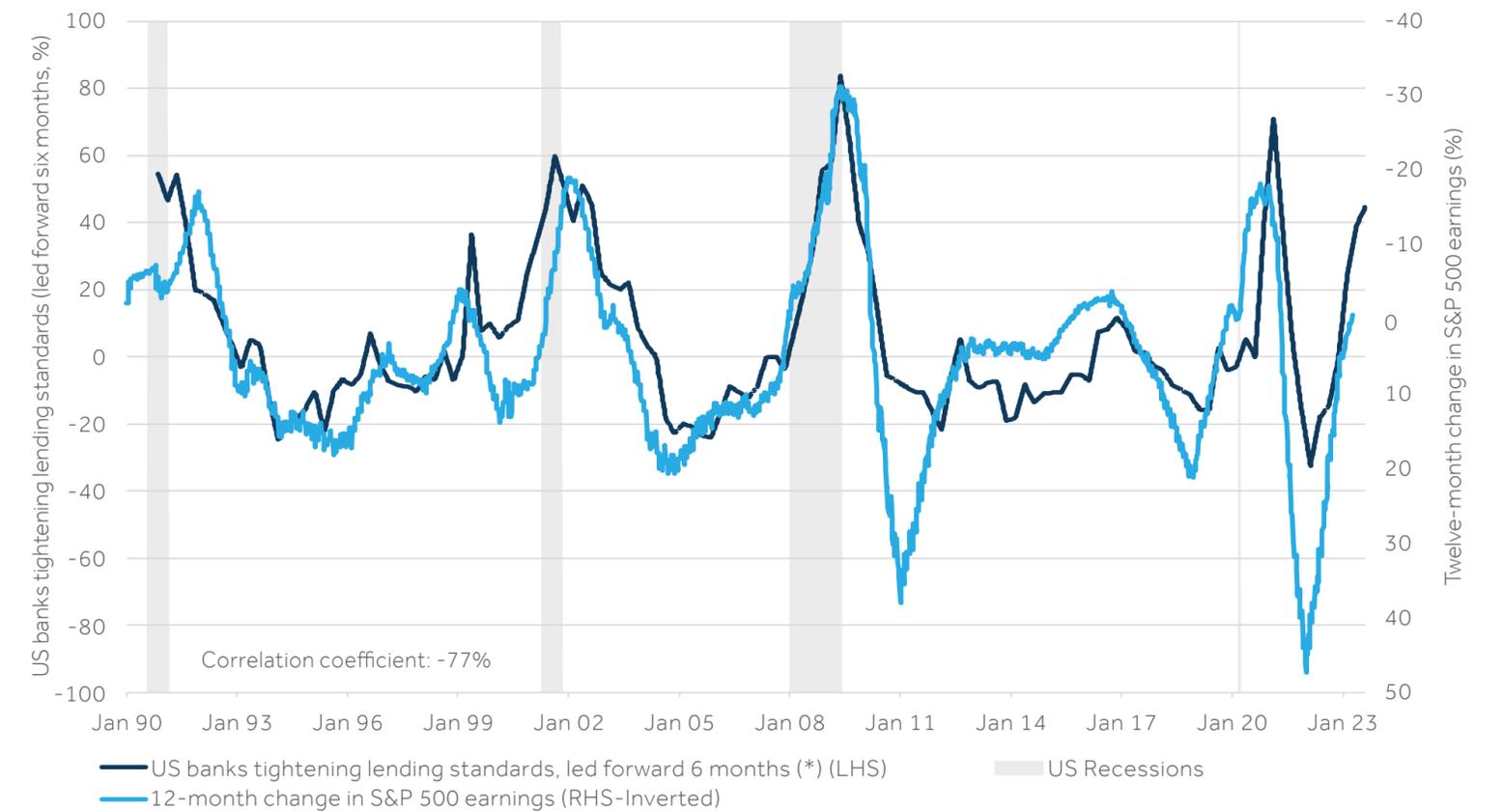


(*) Proportion of US domestic banks tightening lending standards for commercial & industrial loans to large and medium-sized firms
 (**) Earnings uncertainty: standard deviation of forward 12-month earnings forecasts, divided by weighted average forward 12-month earnings forecasts

Source: Refinitiv Datastream, Barclays Private Bank, April 2023

US LENDING STANDARDS TEND TO LEAD EARNINGS GROWTH BY ABOUT SIX MONTHS

The trend in US bank lending standards (led forward by six months) against the year-on-year change in earnings for the S&P 500 since 1990



(*) Proportion of US banks' tightening lending standards for commercial and industrial loans to large and medium-sized companies

Source: Refinitiv Datastream, Barclays Private Bank, April 2023

STOCK RETURNS ARE HIGHLY CORRELATED WITH EACH OTHER AT PRESENT, DRIVEN BY MACRO FACTORS...

In the past year, as the US Federal Reserve has embarked on one of the most aggressive hiking cycles in history, US and European stocks have been driven by macroeconomic factors more than company-specific risk.

Individual stock returns have been highly correlated with each other, driven by common factors, which has made it more difficult for stock pickers to generate alpha and beat their benchmarks.

In the past 25 years, higher levels of 'pairwise' correlations, or the correlation of returns for one stock against another, have been observed only on three occasions: during the global financial crisis (2008-09), the European sovereign debt crisis (2011-12) and the COVID-19 pandemic (2020-21). It is typical for stocks and financial assets in general to be highly correlated with each other in times of stress (see chart).

... BUT THE DISPERSION OF EQUITY RETURNS IS LIKELY TO RISE

A similar observation can be made by looking at the dispersion of equity returns in the 12 months to April across 20 sectors globally. The spread between the best performing sector (consumer products and services, up 10%) and the worst performing one (autos and parts, down 22%), remains low by historical standards, at 32%.

Over the past 50 years, the spread between the performance of the best and worst sectors has averaged 48%, and in November 2021, it reached 78%, with autos and parts up 82% in the previous 12-month period while food and drug retail was only up 4%.

As we get more clarity on the growth and inflation outlook, as well as the path of monetary policy, equity investors are likely to become more discriminating and reallocate capital away from companies with weak fundamentals, into those which appear best positioned to weather the current market turmoil and trade at a discount to their fair value. This should translate into a higher dispersion of returns within the equity market.

STOCKS HAVE BEEN HIGHLY CORRELATED WITH EACH OTHER IN THE PAST YEAR

Average correlation of US and European stocks with their respective market index for the S&P 500 and STOXX Europe 600 indices since 1990 (one month change over a year)



Source: Refinitiv Datastream, Barclays Private Bank, April 2023

SECTORS MOST AT RISK FROM TIGHTER CREDIT CONDITIONS

Credit conditions are likely to play a major role in the performance of equities in the coming months. In that sense, the companies most exposed to higher interest rates and tighter lending standards are likely to underperform the broader market.

The chart highlights the areas of the market, excluding financials, which appear to be most vulnerable in that context, ranked according to their financial leverage and interest gearing ratios on the vertical axis.

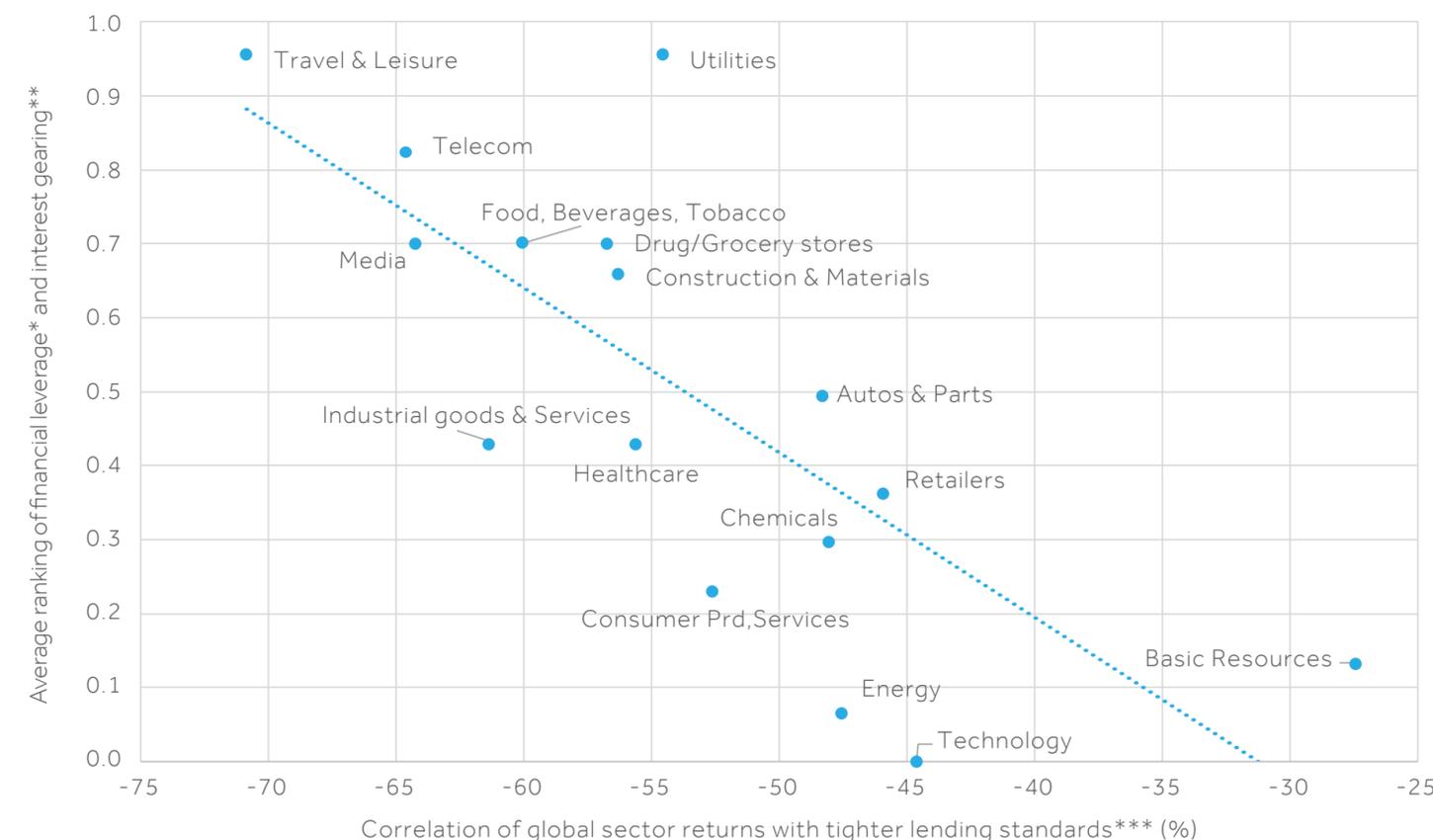
The sectors most at risk globally include utilities, travel and leisure, telecoms, media, food and beverages, and food retail. The horizontal axis shows a high degree of correlation between their share price performance and tighter lending standards since the global financial crisis (-65% correlation coefficient for the broader market including financials).

If credit conditions deteriorated further and there was a severe economic slowdown, those businesses would find it more difficult to access capital. Their interest expenses would also increase, and those with a high operating leverage would be most negatively impacted by a decline in revenues.

"Despite the recent deterioration in the growth picture, analysts appear to be in agreement in their expectation of flat earnings globally this year, which seems over-optimistic to us"

GLOBAL SECTORS MOST VULNERABLE TO TIGHTER LENDING STANDARDS (EXCLUDING FINANCIALS)

Global sectors ranked by financial leverage and interest gearing against the correlation between their stocks' 12-month returns and tighter lending standards since the global financial crisis



(*) Financial leverage: net debt / earnings before interest, tax, depreciation and amortisation (EBITDA)

(**) Interest gearing: interest expense / earnings before interest and taxes (EBIT)

(***) Lending standards: proportion of US banks' tightening lending standards for commercial and industrial loans to large and medium-sized companies

Source: Refinitiv Datastream, Barclays Private Bank, April 2023

INVESTMENT IMPLICATIONS

While a further tightening in lending standards is likely to ease inflationary pressures, we struggle to see a scenario where it would lead to a significant decline in inflation without causing a recession. The impact of tighter credit conditions on the real economy will be difficult to measure, which complicates the task of central banks, as they judge when to stop lifting rates and contemplate rate cuts. This obviously raises the risk of a policy error and the odds of an imminent global recession.

Therefore, with risks tilted to the downside, prudence and selectivity are warranted. At this stage of the cycle, it is important for investors to focus on companies with strong balance sheets, low financial leverage and stable operating margins through the business cycle, with a preference for large caps over small caps.

Of the sectors that are most sensitive to the credit cycle globally, our analysis suggests that financial stocks (banks, insurance and financial services), as well as travel and leisure, industrials, and construction and materials show the most significant downside risk. Their share prices have performed more strongly than expected, given their historical relationship with US lending standards since the global financial crisis.

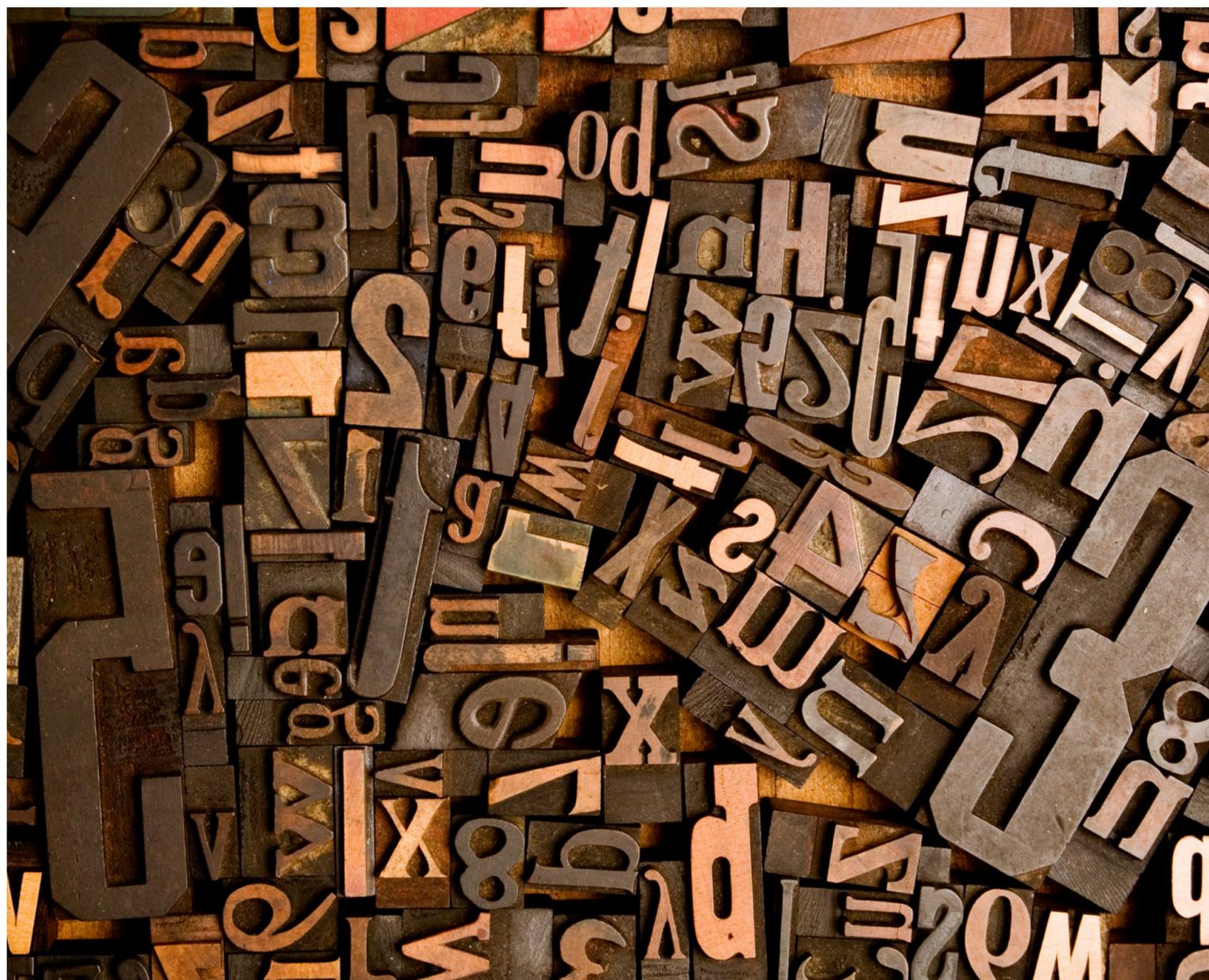
In this environment, it is sensible for investors to keep hedges in place, to mitigate downside risk in equity portfolios. While bond volatility remains elevated, equity volatility is still low by historical standards. Therefore, hedging strategies can still be implemented at a relatively cheap cost, despite the recent turmoil.

Finally, building a diversified portfolio remains key, within the equity market and across asset classes. Given the surge in yields over the past year, for now, government bonds appear more appealing than equities over the coming 12 months.

Author: Dorothee Deck, London UK, Cross Asset Strategist

Deciphering banking codes

Getting to grips with all the bonds on a bank's balance sheets, and the resulting financial implications, can be crucial to understanding the actual health of a business. With tighter funding conditions likely to put even more pressure on earnings this year, the fallout from the recent banking shocks is far from over. That said, leaving aside the heightened volatility in bond markets, opportunities can still be found.



Please note: This article is more technical in nature than our typical articles, and may require some background knowledge and experience in investing to understand the themes that we explore below.

For the first time in a while, it hasn't been the US Federal Reserve (Fed), or other central banks, that have dominated the news in the bond market. Instead, the focus has been on banks and their respective bond holdings in the aftermath of the recent banking sector shocks.

First, it was drama at US regional banks Silicon Valley Bank (SVB) and Signature Bank in March, followed by the bank run and troubles at Credit Suisse in Europe. Indeed, the chapter does not seem to be finished, shown by May's government-led takeover of distressed First Republic Bank by JP Morgan.

In light of increased uncertainty, the earnings reporting of banks presented in the last two weeks have been of particular interest.

IMPORTANCE OF BANKS

The events translated directly into higher spreads of bank bonds and the entire investment grade corporate bond market, over similar government debt in March. Despite a subsequent tightening of spreads since their peak, levels remain relatively wide by both historical standards and when compared to bond spreads in other sectors.

Corporate bonds issued by banks deserve particular attention, given that banks remain a large provider of funding to their respective economies and because bank bonds make up much of the corporate bond market. In the US bank bonds constitute roughly 25% of the broader US investment grade corporate index, according to Bloomberg. While in Europe they account for as much as 33% of the market. For both, this is more than double the weighting of the next largest sector.

BANK SCRABBLE

In order to monitor the financial health of banks an ever-increasing pool of abbreviations are used. It feels like one could combine almost any random number of letters and there would be a good chance that it would represent a specific financial measure or piece of legislation that the abbreviations represent. Good luck, such abbreviations are not accepted on a scrabble board.

The range and proliferation of measures and abbreviations may terrify some investors, as they illustrate the complexity of the industry. But, for those who know what to look for, the trove of data in the abbreviation soup can help investors to spot quickly potential trouble ahead.

On the back of the Silicon Valley Bank (SVB) distress, investors quickly looked at the bank's liquidity coverage ratio (LCR). The measure LCR shows a bank's high quality liquid assets (HQLA) in relation to a stressed 30-day outflow.

Substantial deposit outflows exposed SVB's weak strategy and overly softened regulations in the US, especially concerning liquidity level monitoring among smaller banks.

Contrary to the EU (2,200 banks) or UK in the US only the largest banks (14 banks) follow stricter LCR ratios. This more relaxed strategy is likely to become stricter in the near future.

DEPOSIT OUTFLOWS

While the initial wave of deposit outflows was caused by uncertainty and stress, a subsequent wave was driven largely by money searching for higher yields in money-market funds.

Recent data from the Fed confirms this trend. Instead of large sudden outflows among smaller banks, more contained, but gradual, outflows among larger banks can be seen. A trend which may continue in the coming months.

European and UK banks witnessed outflows during March but to a much lower extent. In addition, the sector in Europe and the UK maintains a healthy liquidity coverage ratio of around 160% on average, according to ECB data, compared to 118% in the US. Still, as seen with Credit Suisse, at an individual level, weaknesses get exposed that might lead to sudden larger liquidity outflows. And as so often, a liquidity crisis can lead to a solvency crisis.

BOND HOLDINGS ON BANK BALANCE SHEETS

The sudden deposit outflows in the US revealed the link between liquidity and capital resilience. In the case of SVB, liquid holdings had to be sold to fund the substantial deposit redemptions. The sale of the bond assets exposed large losses on its so-called available-for-sale book (AFS). In the absence of the necessary fire sales these losses would have not been shown on the balance sheet. The reason for this is that smaller US banks are not required to show any mark-to-market losses on such categorised holdings which can lead to an overstated core equity tier 1 ratio (CET1).

Larger US banks, and the large majority of European banks, have already reported such unrealised losses in the respective reporting and as such their CET1 capital position has been lowered in the wake of the lower-trending values on their bond holdings, caused by higher interest rates. Losses on an AFS portfolio can be easily identified by the accumulated other comprehensive income (AOCI) ratio. Looking to the future, it is expected that smaller US banks will also be captured by stricter rules over the current true level of their core equity ratio. While this will likely lead to more transparency and resilience, it will probably lead to higher funding costs for respective banks.

“US bank bonds constitute roughly 25% of the broader US investment grade corporate index, according to Bloomberg, while in Europe they account for as much as 33% of the market. For both, this is more than double the weighting of the next largest sector”

BONDS WITH BAIL-IN FEATURE

Events in March were an example of when a liquidity risk was translated into capital risk. Credit Suisse's first-quarter results showed that outflows hit a \$69 billion in just three months¹. Furthermore, the bank was quickly running out of ammunition, with the LCR plunging to 144% in the final quarter of 2022, compared with 192% in the third-quarter of 2022.

The Swiss regulator intervened in order to prevent a possible default and to protect the bank's deposit holders and senior debt holders. The action should have provided comfort for bond investors, but the novel approach taken to the restructuring raised fears among debt investors about the pecking order within the capital structure. Instead of writing down the value of equities ahead of bond holdings, the Swiss regulator chose to wipe out so-called AT1 bonds (additional tier 1 bonds).

These deeply subordinated bonds consist of write-down features. As such, a total wipe-out, write-down event should not have been a surprise. The challenge is that even though the bonds are subordinated to all other debt in the capital structure of a bank, they are supposed (at least in most jurisdictions) to be considered senior to equity (no creditor worse off principle).

Naturally, the intervention quickly sparked a wider sell-off in European TLAC (total loss absorbing) or MREL (Minimum Requirement for own funds and Eligible Liabilities) bonds. This wider category does not only consist of subordinated bonds, but also conventional senior bonds.

A new breed of senior bonds, introduced in the aftermath of the great credit crisis in 2008-09, can be used to absorb losses so as to protect the value of deposits and true senior bonds (see table, p13). While the events highlight how complex banks' capital structures can be, at the same time the subsequent re-pricing of bonds has led to yield opportunities.

The following table shows a typical bond structure of a bank as shown first in our publication in July 2020.

¹ Credit Suisse saw \$69 billion of outflows before UBS takeover, Bloomberg, 24 April 2023 <https://www.bloomberg.com/news/articles/2023-04-24/credit-suisse-saw-69-billion-of-outflows-in-frantic-quarter>

TYPICAL BOND STRUCTURE OF EUROPEAN BANKS

	Typical bank debt format (excluding any covered or asset backed debt)	Rating example bank (Moody's methodology)	Brief overview
	Non-guaranteed deposits/ counterparty contracts	Aa3	Any household or corporate deposits (not guaranteed by a deposit scheme) or derivatives contract a bank may have with other financial counterparties.
	Senior preferred debt or senior debt issued by the operating entity	Aa3	Senior unsecured debt in the format of loans or bonds that can be most compared to the conventional senior bonds of the past. In the UK and Switzerland, these bonds are senior bonds issued out of the operating entity (Opco).
Bail-in able debt / Total loss absorbing capital (TLAC)	Bail-in senior debt: Non – preferred Senior debt (NPS) or Holding senior debt.	Baa1	Debt which in general is senior, but in a bank resolution forms part of the resolution mass and may be bailed-in to support the debt ranked above. Capital will only be "bailed in" after any subordinated debt has been used. As with senior preferred debt, coupons must be paid. The typical format in Europe. In the UK and Switzerland, bail-in debt comprises senior bonds issued out of the respective holding entity (HoldCo bonds), for instance, a bank holding AG instead of Example Bank AG.
	Subordinated debt (e.g. Tier 2)	Baa2 / Baa3	Similar to NPS, but subordinated to any senior debt in a liquidation and resolution situation. Older formats can have a capital write down trigger while newer formats do not have such a trigger. Can be callable or bullet bonds. Coupons are guaranteed by the issuer (gone concern principle) except for old legacy so-called upper Tier 2 bonds, which have become rare.
	Junior subordinated (e.g. AT1 / preferred shares)	Ba1	The most junior part in the debt hierarchy. AT1 (additional tier 1) debt is issued as "going concern" capital, which means that coupons are paid as long as the capital and profit requirement are met and unless the respective regulator prohibits such payments. Capital can be fully or partly written off or converted into equities in the event of a pre-defined trigger event or a regulatory intervention. Such events would not necessarily constitute default of the issuer. Bonds in this category are issued as perpetual debt which is callable, usually after five years or more.
	Common Equity Tier 1 (CET1)		Banks need to hold a minimum amount of CET1 capital under bank capital adequacy requirements.

A LARGE BANKING CRISIS SEEMED AVERTED

The good news is that a large spill over from the events into a crisis has not materialised and is unlikely in our view. But, as covered in [Credit cycle in the wake of the incoming rate tide](#) and as investigated in [Tighter credit conditions call for increased selectivity](#) (see p6), financial conditions have tightened substantially, which shifts the focus to banks' loan books. Given the large dependency on finance, the large leverage and lower asset valuation the commercial real estate (CRE) sector has quickly come into focus as a potential challenge for bank balance sheets.

BANK LOAN BOOKS UNDER THE RADAR

CRE loans on European bank balance sheets amount to roughly €1.4 trillion which comprises of around 6.4% of the total loans, according to the European Banking Authority. This compares to roughly 20% of CRE exposure for US banks, according to Bloomberg. As the majority of CRE loans are paid back in bullet at the redemption date, which could pose large challenge to the sector as rates rise and financial conditions tighten.

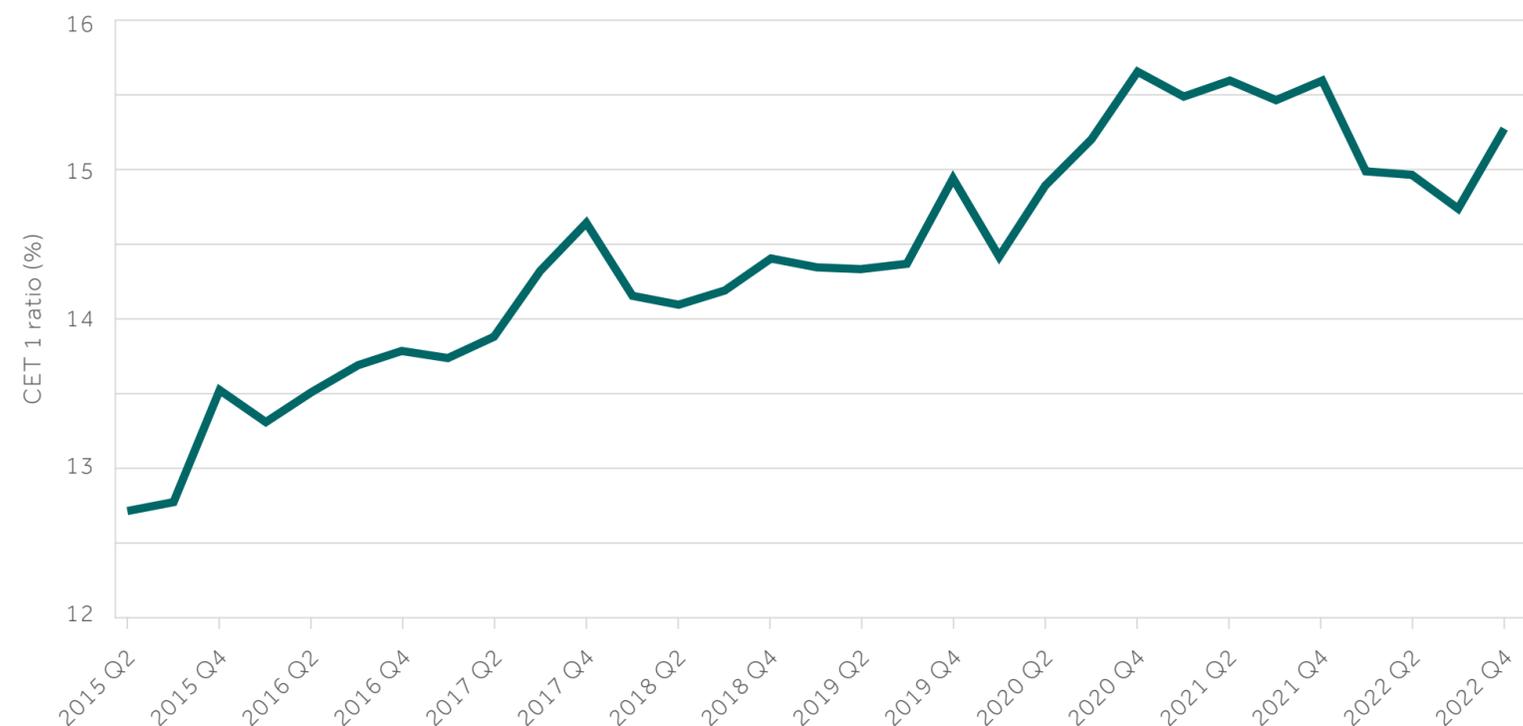
While bigger US, and especially European, banks are the main provider of credit to the sector, the proportion of the loans compared to the overall loan book of banks seems manageable. Analysts at Barclays Investment Bank calculate that a CRE loan loss rate of 5% would reduce the CET1 ratio by roughly 61 basis points (bp) in Europe.

The very limited capital impact is also a result of a more conservative approach. Firstly, LTV (loan-to-value) has fallen from 67% in 2010 to 50% in 2023. Secondly, regulators often impose a minimum weighting of 100% in risk-weighted assets (RWA), as seen in the UK, and this forces banks to maintain more equity capital (CET1) to reflect the risk related to the CRE sector.

Overall, CET1 ratios among European banks seem comfortable, averaging 15.3% at the end of 2022, which compares to 13% in 2015 and much lower equity ratios ahead of the credit crisis in 2008 (see chart, p14).

EUROPEAN BANKS' AVERAGE CET 1 RATIO ON THE RISE

European banks' equity capital (as measured by common equity tier 1 ratios) has trended up since 2015, according to ECB data



Source: European Central Bank, Barclays Private Bank, April 2023

LOWER EARNINGS EXPECTED

It seems unlikely that the headwinds coming from tighter financial conditions and the recent banking turmoil will lead to broad capital risk within bank. Still, the circumstances will be most visible in NII (net interest income: interest earned on liabilities after costs of interest from funding). A lower deposit base could potentially lead to lower base for loan growth if banks do not opt to change their funding mix. At the same time, the room for a change the funding strategy may be limited, given higher interest rate costs and the need to put more expensive capital aside to support the growth in the balance sheet.

LOCKING IN YIELDS WITH BANK BONDS

The earnings headwinds may still be sufficient for elevated spreads going forward. That said, bank-bond spreads seem to reflect the considerable uncertainties and can offer attractive opportunities, in our view.

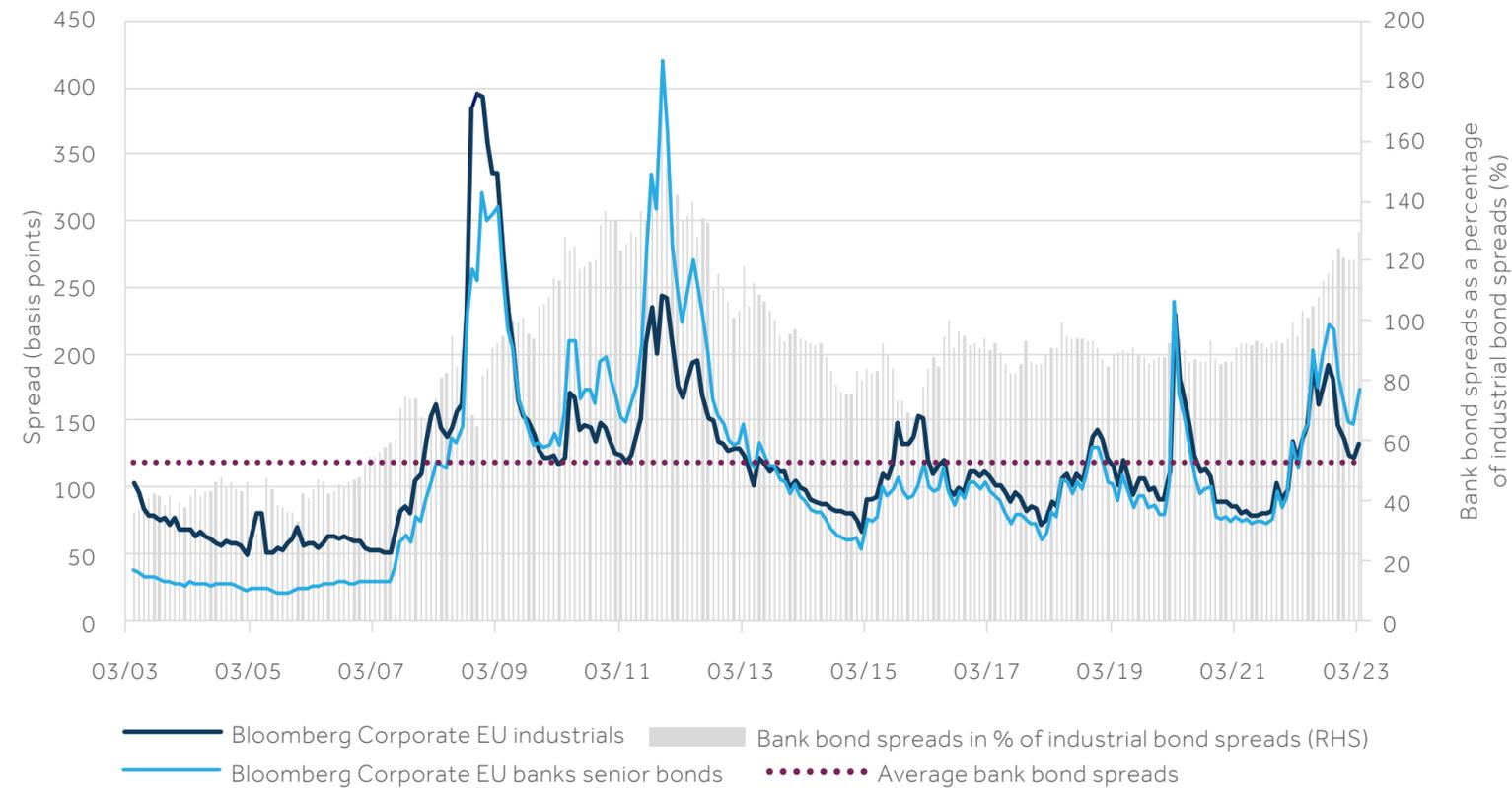
Spreads of European senior bank bonds have retreated from last October's peak levels, and during the 2020 pandemic, at around 260bp. But at 164bp, spreads still sit well above the average seen over the last 10 years of 120bp, or 110bp over 20 years (see chart). Moreover, the spread of senior bank bond spreads is 130% of those seen for non-financial corporates (which is mostly represented by the broad industrials sector).

By comparison, during the last 10 years, bank spreads were only 90% of the level seen for non-financial corporate bonds and only 50% during the last 20 years (a timeframe which includes the great financial crisis).

"The sudden deposit outflows in the US revealed the link between liquidity and capital resilience"

SPREAD ON EUROPEAN BANK BONDS

The trend in European bank and industrial bond spreads since 2003 along with an analysis of bank bond spreads against industrial debt



Investing in the broader corporate bond market by default involves exposure to bank bonds, given their large presence in the market. Rather than avoiding bank bonds altogether a consideration of bank bonds of higher quality issuers can lead to overall higher yield premium, which supports our preferred strategy to “lock in yields” (see [The road to normalisation for bond investors?](#)) in the bond market.

Author: Michel Vernier, CFA, London UK, Head of Fixed Income Strategy

Source: Bloomberg, Barclays Private Bank, April 2023

Illiquid alternatives: a song of fire and ice

Private markets and hedge funds are perceived as attractive by many investors because of the promise of high returns and diversification benefits. However, the market and funding liquidity risks can hurt portfolio return. How might investors build a holistic, strategic asset allocation with illiquid alternatives?



Please note: This article is more technical in nature than our typical articles, and may require some background knowledge and experience in investing to understand the themes that we explore below.

Strategic asset allocation is an investment approach that helps investors decide how to divide their money among different asset types like stocks, bonds, and real assets. Through diversification, they can balance risk and return and optimise their portfolio exposure to different financial markets.

The process starts with understanding an investor's goals, risk tolerance and investment timeline. An asset allocation plan is then developed, which is periodically reviewed and adjusted, based on the investor's changing needs and market conditions.

EXPANDING THE OPPORTUNITY SET

In addition to traditional asset classes, investors can broaden their investments by venturing into private markets and hedge funds. Although these two asset classes are often bundled together as illiquid alternatives, there are some key differences between them.

Private markets refer to investments in privately-held companies that are not listed on public stock exchanges. Investors typically provide capital to help finance the growth of these companies, often in exchange for equity or debt. Investments tend to be longer-term in nature, with a focus on company growth and value creation. They cannot be easily sold or transferred and may require a long lock-up period before investors can access their funds.

Hedge funds, on the other hand, raise capital from a smaller pool of individuals and institutions. They aim to generate high returns through an actively managed diversified portfolio of assets, including stocks, bonds, commodities and derivatives. They are typically more liquid investments than those in private markets but may still have restrictions on withdrawals or redemptions.

"The main goal of our analysis is to understand the impact of illiquid alternatives on the key portfolio statistics"

THE FIRE: HOT ILLIQUIDITY PREMIUM

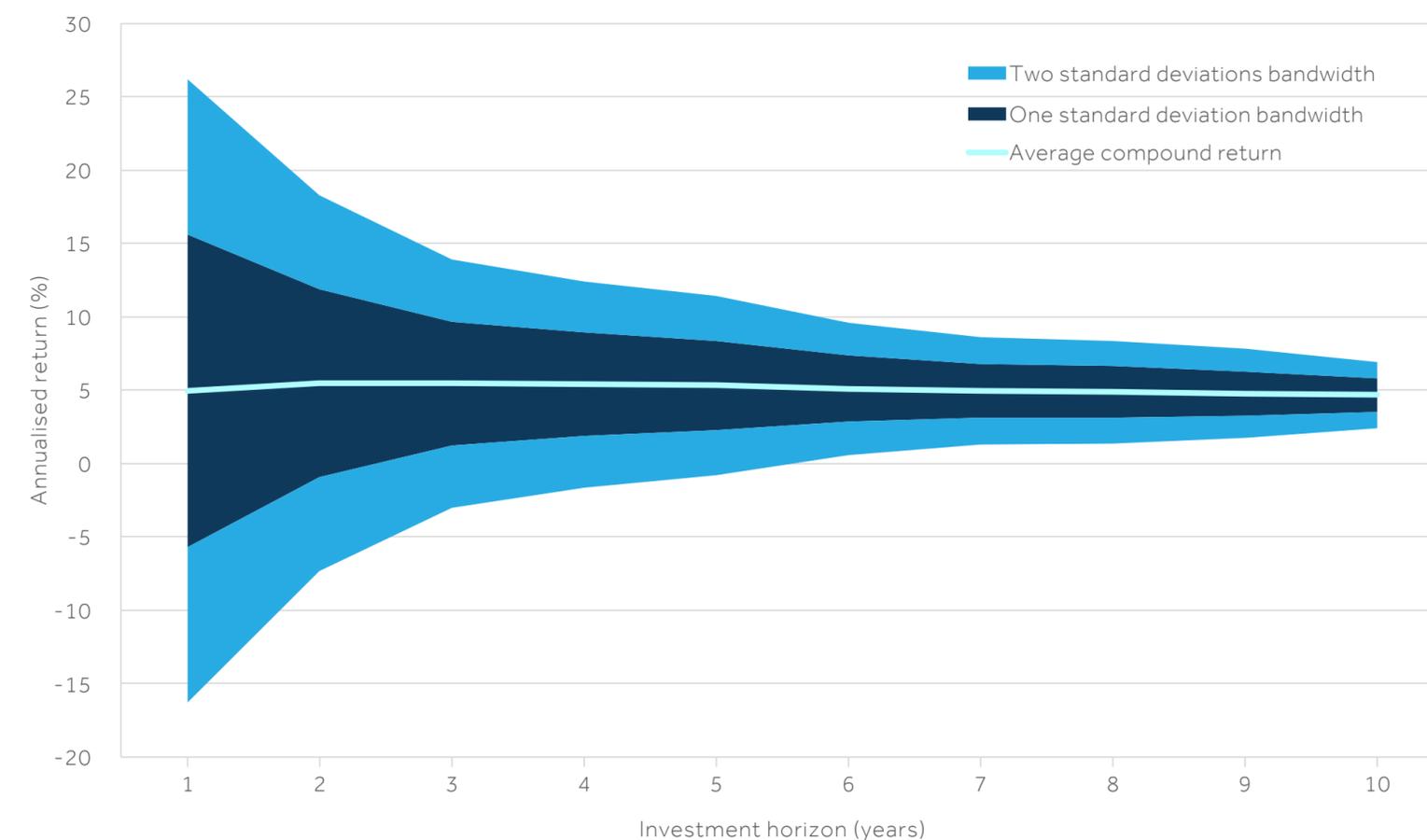
Estimating the illiquidity premium in private markets can be challenging, as private market investments are less liquid and more secret than public market investments. Therefore, any estimation procedure is subject to uncertainty and should not be taken at the face value.

Taking that into consideration, historical private equity return data can be used to estimate the illiquidity premium. The difference in annualised cumulative returns between private equity investments and publicly traded equities can be used as a proxy of the illiquidity premium (see chart).

"The results indicate that – over the last two decades – the illiquidity premium for investments with holding period of up to five years has varied substantially. At a 95% confidence level, the short end of the curve has swung between -16% and 26% over the last twenty years"

A TERM STRUCTURE OF THE ILLIQUIDITY PREMIUM IN PRIVATE EQUITY MARKETS

The distribution of annualised illiquidity premium in the private equity markets over different time periods of up to 10 years from 2000 until 2022. The private equity market proxy is the Preqin Quarterly Private Equity index, whereas the public equity benchmark is MSCI World Net Total Return index



Sources: Bloomberg, Preqin, Barclays Private Bank, April 2023

We calculate the illiquidity premium for different investment horizons, ranging from one to ten years. This approach allows us to analyse the term structure of the distribution of the illiquidity premium.

The results indicate that – over the last two decades – the illiquidity premium for investments with holding period of up to five years has varied substantially. At a 95% confidence level, the short end of the curve has swung between -16% and 26% over the last twenty years.

During this period, longer-term private equity investors have been consistently rewarded with a positive illiquidity premium. Those who stayed in the market for ten years enjoyed returns of 2-6% per annum (with an average return of 4.3%). Therefore, allocating a significant portion of the portfolio to private equity can boost investment returns.

THE ICE: A SLIPPERY LIQUIDITY SLOPE

Nevertheless, investing in less liquid alternatives has risks, especially during a sell-off in the equity market. During such times, investors might make impulsive decisions that harm their portfolio's long-term performance.

In his famous book 'A Treatise on Money' published in 1936, John Maynard Keynes wrote: "There is, clearly, no absolute standard of "liquidity" but merely a scale of liquidity – a varying premium of which account has to be taken ... in estimating the comparative attractions of holding different forms of wealth. The conception of what contributes to 'liquidity' is a partly vague one, changing from time to time and depending on social practice and institutions."

Surprisingly, if we fast forward to 2023, liquidity remains an elusive concept that is difficult to capture entirely, even with modern economic theories and quantitative tools.

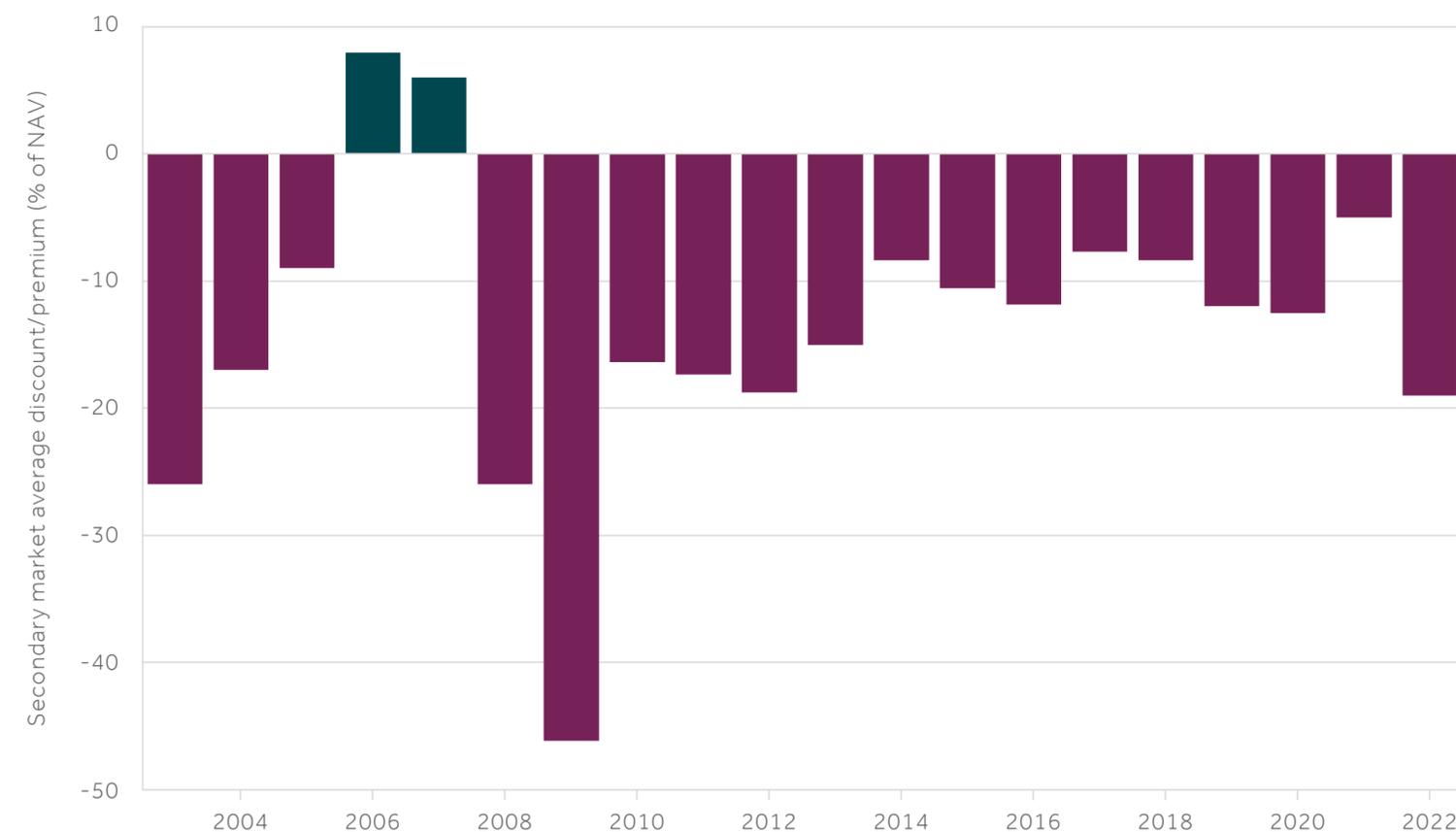
However, certain operational measures of liquidity have been developed over the last couple of decades. The most common approach is to distinguish between two different types of liquidity risk.

One is the market liquidity risk, which is related to the ability to liquidate assets relatively quickly and at minimum cost. For example, if there is a sudden increase in market volatility or a decrease in market depth, investors might not be able to sell their holdings quickly or at a fair price due to a lack of buyers in the market (see chart).

The other is the funding liquidity risk, which is associated with the ability and the cost of generating cash in order to meet financial obligations as they come due. This can occur when an investor has difficulty obtaining short-term funding, such as loans or lines of credit, or when the cost of borrowing becomes too high (see chart, p19).

PRIVATE EQUITY IS TYPICALLY SOLD AT A DISCOUNT IN THE SECONDARY MARKET

The average private equity discount/premium in the secondary market exhibits large swings over time. The grand total average from 2003 until 2022 is approximately -13%

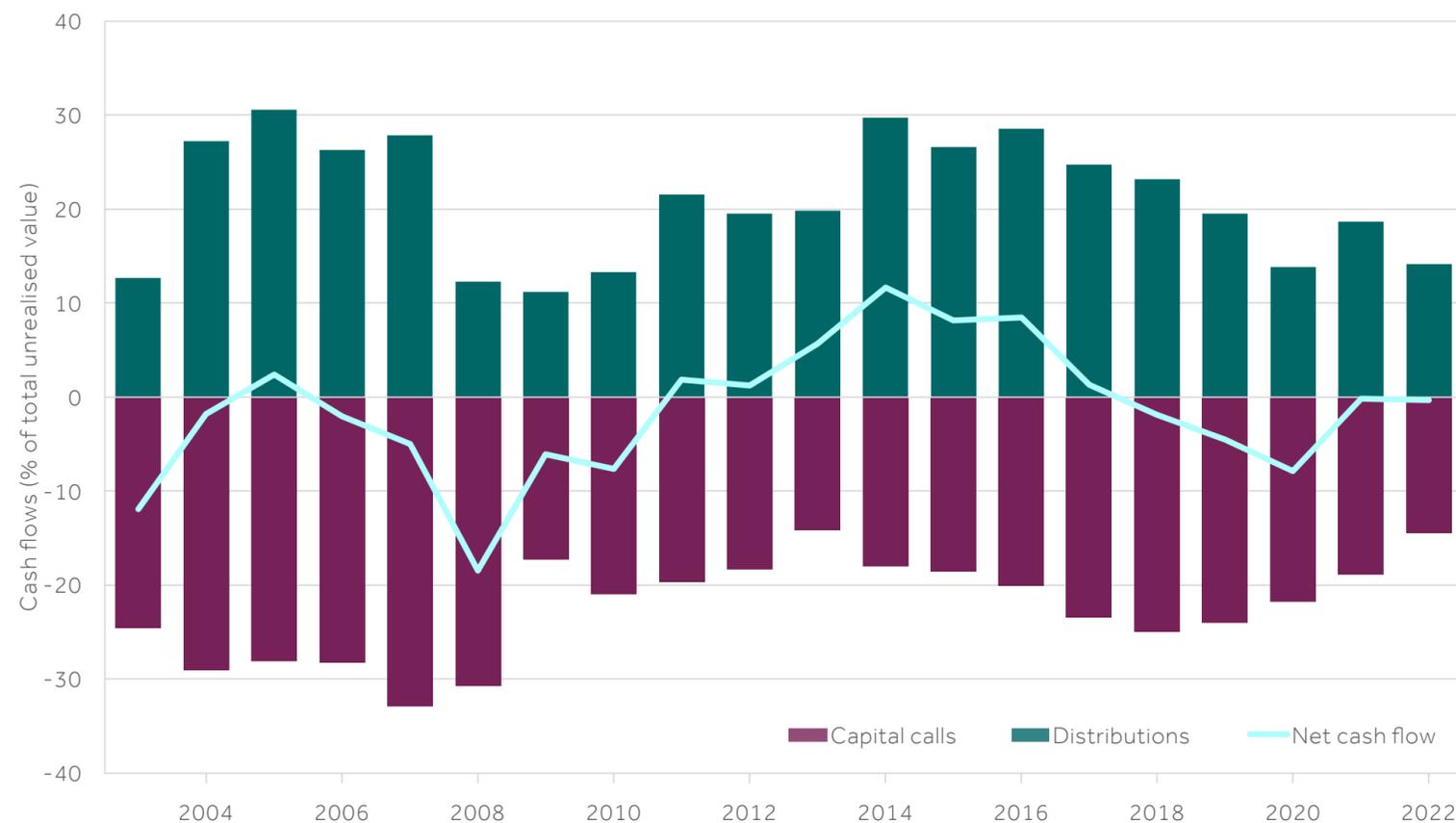


Sources: Jefferies, Pine Bridge, Greenhill Cogent, Secondaries Investor, Barclays Private Bank, April 2023

In the absence of access to external financing, a portfolio of liquid assets and illiquid alternatives has market and funding liquidity risks that become mutually reinforcing, and an investor could default on their obligations. For example, financing capital calls with listed equities during a sell-off would be very costly and inefficient.

PRIVATE EQUITY CAPITAL CALLS AND DISTRIBUTION SIGNIFICANTLY FLUCTUATE OVER TIME

Capital calls (purple bars), distributions (teal bars) and net cash flows (light blue line) from 2003 until 2022, expressed as a fraction of the estimated total private equity market’s unrealised value.



Sources: Preqin, Barclays Private Bank, April 2023

HOPE FOR THE BEST, PLAN FOR THE WORST

To counteract such pessimistic scenarios, adhering to a well-planned and systematic investment strategy is the most effective approach. In particular, investors need to judge the degree of illiquidity their portfolios may encounter during a future economic downturn. In turn, they should assess which asset allocation policy would provide sufficient flexibility in terms of spending.

This can be achieved in three steps. First, investors should evaluate the liquidity of private markets and hedge funds by analysing the lock-up periods, redemption terms and provisions, expected cash flow dynamics (or capital calls and distributions) and other relevant factors. For example, if an investor has a short-term investment horizon, it might be best to avoid investing in long-term illiquid assets that could lock up their capital for several years.

Second, investing in a diversified portfolio of private assets can help manage liquidity risk. A well-diversified portfolio can reduce the impact of the illiquidity of individual holdings during periods of market stress.

In the third step, investors should determine the adequate level of liquidity reserves that are necessary to meet cash flow needs in the short term. This could involve keeping some portion of the portfolio in liquid assets such as cash or short-term bonds. A prudent approach would be to run a stress test, identify potential vulnerabilities and make portfolio adjustments accordingly.

HOLISTIC ASSET ALLOCATION

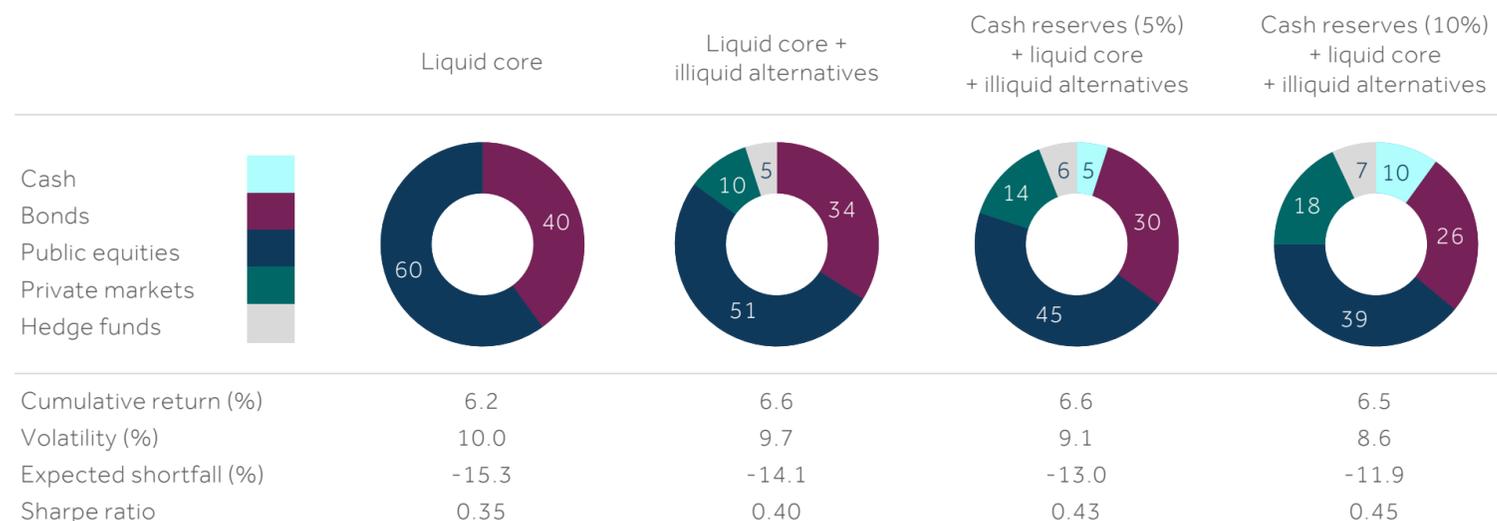
To illustrate the impact of the including private market and hedge fund investments in a portfolio, the starting point is the traditional 60-40 equity-bond portfolio that constitutes the liquid core (see chart, p20).

The main goal of our analysis is to understand the impact of illiquid alternatives on the key portfolio statistics, along with the interaction between potential cash reserves and the total allocation to liquid core and illiquid alternatives in the portfolio.

Based on Preqin’s data for assets under management for private markets and hedge funds, a sub-portfolio of illiquid alternatives is used with an asset mix that consists of private equity (42%), private debt (11%), private real assets such as real estate, infrastructure and natural resources (17%) and hedge funds (30%).

AN EXAMPLE OF HOLISTIC STRATEGIC ASSET ALLOCATION

A comparison of the key portfolio statistics for four asset mixes with varying cash reserves and exposure to the liquid core and illiquid alternatives. The reported figures are based on our latest Capital Market Assumptions for US dollar investors



Sources: Barclays Private Bank, April 2023

STRESS-READY

As discussed already, the key determinant of the optimal asset allocation mix with illiquid alternatives is the investor’s ability to finance capital calls during market stress. In particular, we consider a stress-test scenario to be one in which equities lose about 50%, which is approximately the level observed during the Global Financial Crisis.

To limit the market and funding liquidity risk, we assume that investors are required to maintain sufficient exposure to liquid assets and to cover capital calls, on an annual basis, for about 20% of their total exposure to private markets (see earlier capital-calls chart).

Considering the fact that over the last two decades the longest peak-to-trough period for equities was about 2.5 years, we impose a somewhat conservative restriction that the total allocation to liquid assets (the cash reserves and the liquid core) can finance stressed levels of capital calls for three subsequent years.

Given the set of stress-test conditions discussed above and our [What might stagflation mean for long-term return forecasts analysis](#), the expected risk-adjusted returns of a traditional balanced portfolio can be substantially improved by incorporating illiquid assets.

In the absence of cash reserves, our analysis indicates that the overall exposure to illiquid assets for private wealth investors should not exceed 15% in the portfolio.

Indeed, every additional percentage of cash allocation – coupled with an identical increase in the illiquid alternatives and two percent cut in the liquid core – will actually preserve the expected portfolio return and lower the volatility and expected shortfall.

Authors: Nikola Vasiljevic, Ph.D., Head of Quantitative Strategy, Zurich, Switzerland; Lukas Gehrig, Quantitative Strategist, Zurich, Switzerland

Targeting alpha in Asian equities

While Asian economies account for close to half of global growth and some of the world's largest companies, they are often shunned by Western investors. Find out why the region offers more opportunities to bolster a portfolio's risk-return profile than you might think.



FIGHTING THE HOME BIAS

As discussed in [Overcoming home bias when investing](#), too much exposure to local financial markets can hurt portfolio returns. Yet, investors are often uncomfortable investing in markets that feel foreign to them.

More recently, we've seen increasing interest in emerging market equities and bonds, driven by the view that the global hiking cycle in interest rates is coming to an end. Yet, Asian equity markets remain underrepresented in many investors' portfolios, especially in Europe and the US.

For some investors, it's easy to justify avoiding investing in a region. First and foremost, Asia is physically (and often culturally) distant from the West and corporate governance is frequently seen as weak. Second, recent geopolitical tensions (around Taiwan in particular) have dented investors' appetite. Third, policies, whether their regulatory, monetary or fiscal, appear somewhat disconnected from what is happening in the rest of the world.

Yet, the Asia Pacific region represents 44% of global economic growth and has accounted for 62% of global GDP growth in the last 10 years¹.

IT'S NOT THE GROWTH STORY IT USED TO BE

But things are changing fast in the most populous region on the globe. China used to be the growth engine of the world, providing cheap labour and a fast-expanding supply of workers. But the Chinese population is now ageing at warp speed and fertility rates are expected to fall (see chart). The proportion of the country's population that is over 60 years old is projected to reach 28% by 2040².

Similarly, South Asia has between 10% and 18% of its gross domestic product (GDP) at risk due to climate change, claimed the World Economic Forum last year³. This is roughly treble the economic growth at risk as that of North America, and 10-times more than the least-affected region, Europe.

Given potential changes to Asian growth and population dynamics in coming decades, the way to invest in the region ought to change. Buying and holding exposure to the area because of its economic prospects is a strategy of the past. That being said, it remains a very fertile hunting ground for those that know where to look.

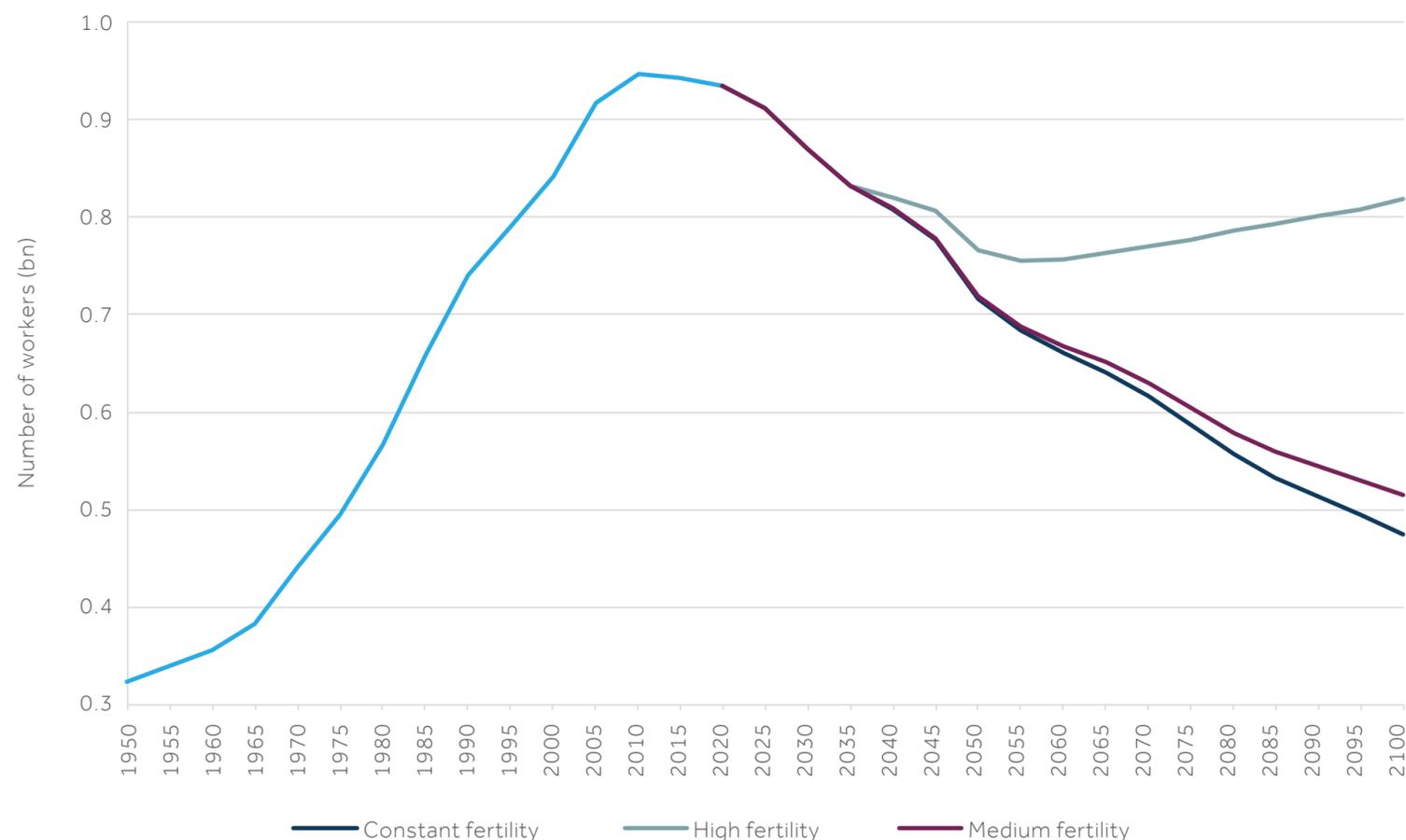
¹. Asia Pacific, World Economics, April 2023 [https://www.worlddeconomics.com/Regions/Asia-Pacific/#:~:text=World%20Economics%20has%20combined%2023,years%20\(2012%2D2022\)](https://www.worlddeconomics.com/Regions/Asia-Pacific/#:~:text=World%20Economics%20has%20combined%2023,years%20(2012%2D2022).).

². Ageing and health in China, WHO, April 2023 <https://www.who.int/china/health-topics/ageing>

³. How hard could climate change hit the global economy, and where would suffer most?, World Economic Forum, 22 April 2022 <https://www.weforum.org/agenda/2022/04/climate-change-global-gdp-risk/>

CHINA'S LABOUR FORCE IS SET TO DECLINE RAPIDLY

The size of China's working population is expected to shrink over the rest of this century, with the pace of decline linked to fertility rates



Sources: UNDESA, Barclays Private Bank, April 2023

LESS EQUITY RESEARCH MEANS MORE OPPORTUNITIES

One reason why it can be easier to find investing opportunities in Asian equities is that there is limited coverage of them by Wall Street investment banks, reducing the volume of work that needs to be sifted through. The median stock in the S&P 500 is covered by 22 sell-side analysts, according to Bloomberg data. In the MSCI Asia Pacific, which consists of 1,488 stocks, the median number of analysts following a given company is 15.

More importantly, around 13% of the companies included in the MSCI Asia Pacific index are covered by five or less analysts. In the US, this number is 1%. In other words, there are a lot fewer eyes scrutinising Asian companies' performance.

In order to generate performance in excess of their benchmark (known as "alpha"), fund managers and stock pickers need an edge. They need to identify trends and data points that are unknown to their majority of investors.

This can be achieved much more easily, and consistently, in less-covered markets. Of course, alpha generation is not guaranteed. But the likelihood of being able to create it is, statistically speaking, greater in Asia than say when investing in US large-cap stocks.

LOCAL KNOWLEDGE IS PARAMOUNT

Local knowledge of a region can also help to navigate what some would think of as unorthodox policies.

Here, Japan springs to mind. Indeed, the country seems to be operating in a world of its own with a debt-to-GDP ratio of 226% and a central bank that effectively controls the yield curve and owns three-quarters of the country's exchange-traded funds. While many may see this context as a clear "no-go" when it comes to local investments, it can also represent a great opportunity for those who understand the Japanese model.

In fact, this opportunity may be even more relevant at this point in time. Indeed, with Japanese headline inflation at 3.2% in March⁴, it is widely expected that the central bank will be forced to abandon, or at least tweak, its yield-curve-control (YCC) policy when it next meets, in mid-June. This momentous change in policy could open the door to a new era when it comes to investing in Japanese assets.

“In other words, there are a lot fewer eyes scrutinising Asian companies' performance”

MITIGATING RISKS

Unfortunately, understanding the far-reaching implications of scrapping YCC in Japan or the various policies announced by the Chinese authorities this year is complicated. This is especially the case in today's markets, which often seem to surprise investors with their reaction to events.

This is why, when investing in Asia, it is important to focus on finding opportunities to boost returns rather than purely gaining exposure to the market. In other words, focus on the alpha and not the beta.

In addition, neutralising market risk allows portfolio performance to capture the skill of investment professionals more cleanly, while avoiding being wrong-footed if markets react unexpectedly to economic data.

Investing in Asia need not just be about trying to “blow the lights out” through a focus on high-growth, highly-speculative companies in that part of the world. Instead, adding market-neutral exposure to the region can help to further diversify portfolios. In doing so, it can help enhance returns, especially in terms of predictability and without compromising the risk budget.

Author name: Julien Lafargue, London UK, Chief Market Strategist

⁴. Tokyo inflation cools for a second month, but exceeds BoJ target, Reuters, 31 March 2023 <https://www.reuters.com/markets/asia/inflation-japans-capital-slows-2nd-month-still-above-boj-target-2023-03-30/>

How to invest "in" our planet

Investing with a goal to help preserve biodiversity, particularly through nature-based solutions, is an emerging opportunity for investors who want to protect their portfolios and the planet.



The choice of language for the theme of the 2023 Earth Day, an annual event to inspire individual action to protect the environment, was specific and intentional. For a second year, the call was to "Invest in our Planet".

From a financial perspective, investing "in" the planet points to valuing and providing finance to manage, preserve and restore the environment and biodiversity. This article analyses why and how biodiversity can feature when building investors' portfolios to manage risks and find opportunities through nature-based solutions.

FROM PROTEST ORIGINS TO PROACTIVE PROTECTION

The first Earth Day in 1970, followed a devastating oil spill off the coast of California that inspired 20 million Americans to protest against the human-driven damage to our planet and communities¹. Subsequently, the event has become a global movement for positive, individual action for the environment.

Earth Day this year reminds us of two environmental challenges investors face – climate change and the loss of biodiversity. While climate change has been the most visible environmental concern, the destruction of natural ecosystems poses its own threat to the planet.

The two challenges are also inextricably linked². Global warming can lead to significant loss of biodiversity. Loss of biodiversity, particularly through changes of land use, can boost greenhouse gas emissions. And with little sign of the ravaging of nature slowing, this is likely to amplify the effects of climate change.

"Most public awareness and action have been centred on limiting the effects of, and increasingly adapting to, climate change. However, managing, preserving and restoring nature is just as critical"

¹ Earth Day every day, Earth Day, April 2023 <https://www.earthday.org/>

² Biodiversity - our strongest natural defense against climate change, United Nations, 29 April 2023 <https://www.un.org/en/climatechange/science/climate-issues/biodiversity>

UNDERSTANDING THE VALUE OF BIODIVERSITY

So, what does biodiversity mean? Biodiversity was coined in 1985 as a contraction of “biological diversity”³.

One useful, and poignant, definition, explains it as “the complex web of varied and interdependent ecosystems that sustains all life on Earth.”⁴ The last five words highlight how critical biodiversity is. In all parts of the world, human activity is altering biodiversity, and more broadly the planetary boundaries⁵ we need to survive.

Human activities are damaging or eliminating nature habitats on land and in the water. They are also reducing the ability of the planet to absorb and store, or sequester, carbon through natural processes. For example, natural carbon sinks, such as forests, peatlands, saltmarshes, mangroves and seagrass meadows, are being removed to make way for agricultural or commercial development.

IMPACT OF GLOBAL WARMING

Indirectly, climate change is also damaging biodiversity⁶. For example, climate change-induced warmer water temperatures and higher acidity levels are killing coral reefs⁷. This, in turn, reduces biodiversity, carbon sequestration and even exposes coastal communities more to the effects of increased storm intensity⁸.

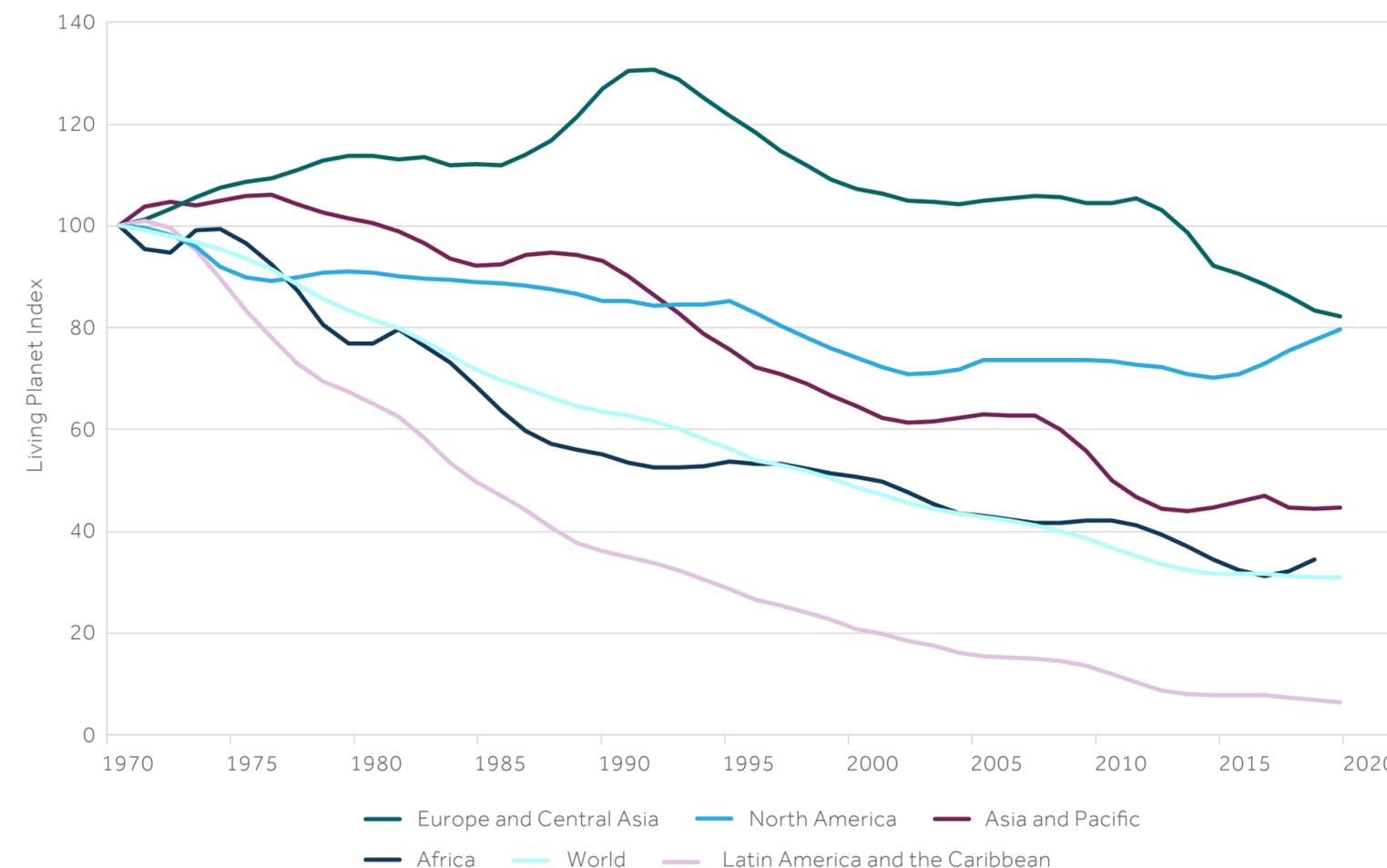
To appreciate the scale of these effects, the Living Planet Index provides a simplified, quantitative illustration of biodiversity changes (see chart). While there are caveats to the data, overall, it finds that between 1970 and 2018, on average, population size plunged by 69% across the more than 30,000 populations studied⁹.

And while differences exist within regions and species, and in some cases, populations are increasing, the direction and scale of biodiversity loss is obvious.

Finally, there is an important distinction between the challenge of biodiversity compared with climate change. Greenhouse-gas emissions can be halted or reversed, eventually finding a level (hopefully in line with the Paris Agreement¹⁰) at which people will have to adapt. However, once a species becomes extinct, there is no return. Therefore, preserving and restoring biodiversity should be a preventative measure rather than a problem to be adapted to later.

BIODIVERSITY LOSS HAS OCCURRED IN EVERY REGION OF THE WORLD

The changes in biodiversity since 1970, according to the Living Planet Index, by region. The index measures the state of biodiversity diversity based on population trends in vertebrate species



Source: Living Planet Report (2022), World Wildlife Fund (WWF) and Zoological Society of London, Barclays Private Markets, April 2023

³ Origin of the Term Biodiversity, Sahotra Sarkar, BioScience, Volume 71, Issue 9, September 2021, Page 893, <https://doi.org/10.1093/biosci/biab071>

⁴ What is the UN biodiversity conference?, Grantham Research Institute on Climate Change and the Environment, 4 October 2022 <https://www.lse.ac.uk/granthaminstitute/explainers/what-is-the-un-biodiversity-conference/>

⁵ The nine planetary boundaries, Stockholm Resilience Centre, April 2023 <https://www.stockholmresilience.org/research/planetary-boundaries/the-nine-planetary-boundaries.html>

⁶ How does biodiversity affect biodiversity?, The Royal Society, 29 April 2023 <https://royalsocietypublishing.org/doi/10.1098/rsos.230101>

⁷ Coral bleaching and ocean acidification are two climate-related impacts to coral reefs, National Marine Sanctuaries, 29 April 2023 <https://floridakeys.noaa.gov/corals/climate-threat.html>

⁸ Coral reefs and climate change, IUNC, March 2021 <https://www.iucn.org/resources/issue-brief/coral-reefs-and-climate-change>

⁹ Living Planet Index: what does an average decline of 69% really mean?, Our World in Data, 13 October 2022 <https://ourworldindata.org/living-planet-index-decline>

¹⁰ The Paris Agreement, United Nations Climate Change, April 2023 <https://unfccc.int/process-and-meetings/the-paris-agreement>

GLOBAL COMMITMENT TO PRESERVE BIODIVERSITY

As part of the global response to biodiversity challenges, the fifteenth United Nations Conference of the Parties (COP-15) to the Convention on Biological Diversity, made important progress in December 2022¹¹.

At the COP-15's conclusion, four goals and 23 targets were agreed by more than 190 global governments for achievement by 2030. Among the global targets, these included: cutting global food waste in half, raising financial flows from developed countries to at least US\$30 billion per year and mobilising at least \$200 billion per year in biodiversity-related funding from public and private sources.

Most importantly, they pledged to conserve 30% of the world's land and 30% of the ocean by 2030. This "30x30" rallying cry¹² is akin to "1.5 degree" of the 2015 Paris Agreement. If the 30x30 ambition follows a similar pattern, then having clear national commitments and mandates, will lead to increased legislation, regulatory enforcement and public capital.

MANAGING INVESTMENT RISKS FROM BIODIVERSITY

As a starting point to integrate biodiversity into portfolios, investors can get to grips with, and understand, how well their portfolio holdings are managing biodiversity risk. Damaging biodiversity loss poses significant financial risks for many sectors. Obvious primary industries, or those involved in producing or obtaining raw materials, are extractives, forestry, farming and fishing. But even cosmetic or pharmaceutical companies rely on raw materials derived from nature.

More generally, investors will need to recognise and account for companies impact on the environment. Businesses can't exploit the planet without potential damage to their reputation or subsequent legal action which might hit profits.

In addition, previously externalised environmental impacts and costs will have to become part of companies' costs as governments impose greater regulation and duties on industry to try and protect biodiversity.

ADDING EXPOSURE TO NATURE AND NATURE-BASED SOLUTIONS

Additionally, investors who want to use their capital to make a positive contribution to biodiversity have a small but growing range of potential opportunities. "Nature-based solutions" are "actions to protect, sustainably manage and restore natural or modified ecosystems, that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits"¹³.

For example, instead of building man-made infrastructure to reduce flooding, coastal erosion and storm-surge risks, or planting mangroves offer a viable alternative¹⁴. Not only can they achieve these aims, but they also provide a natural habitat for fish, birds and other life.

Thus far, governments and philanthropists have primarily been funders of such solutions. Many projects are difficult to access in terms of size, business model and investment structure. However, an increasing range are scaling up the number of investments and maturing to absorb more private investment.

More broadly, there are more companies that address biodiversity issues through efforts such as reforestation, regenerative agriculture, supply-chain monitoring and product certifications.

INVESTING IN NATURE TO MAKE A DIFFERENCE

Most public awareness and action have been centred on limiting the effects of, and increasingly adapting to, climate change. However, managing, preserving and restoring nature is just as critical.

Moreover, investing "in" nature can help to address both climate change and biodiversity on Earth Day, and every day. It can also uncover new opportunities able to boost portfolio diversification, to protect and grow your assets while making a positive contribution to our world.

Author: Damian Payiatakis, London UK, Head of Sustainable & Impact Investing

¹¹ COP15 ends with landmark biodiversity agreement, United Nations Environment Programme, December 2022 <https://www.unep.org/news-and-stories>

¹² 30x30 Ambition: Next Steps after Montreal, World Economic Forum; 19 January 2023 <https://www.weforum.org/events/world-economic-forum-annual-meeting-2023/sessions/30x30-ambition>

¹³ Nature-based solutions, International Union for Conservation of Nature, April 2023 <https://www.iucn.org/our-work/nature-based-solutions>

¹⁴ Mangroves for coastal defence, Guidelines for coastal managers & policy makers, The Nature Conservancy, 2014 <https://www.nature.org/media/oceansandcoasts/mangroves-for-coastal-defence.pdf>

The importance of an optimistic outlook

Having appropriate downside portfolio protection and diversification is important. However, solely focussing on that can limit long-term gains. Maintaining optimism is important in investing, even during stressful financial market sell-offs.



In this month's publication we have discussed reasons for investor optimism in particular regions, such as the Middle East and Asia, to name but two.

Due to the way our brains are wired, it is natural, particularly during period of volatility in financial markets, to focus on the downside when it comes to portfolio returns. However, to be a successful investor it is important to balance attitudes towards portfolio gains and losses, and the emotions that are associated with them.

Being too pessimistic on the outlook for markets, or individual stocks, might be costly. Being prudent and considering risks need not mean being overly cautious and limiting the upside potential for long-term gains.

For example, cash provides safety and comfort, and has performed well in the face of much market turbulence over the last year, compared to other asset classes. However, over many years, will it provide adequate returns to preserve and grow wealth versus risk assets? History shows this not to have been the case; inflation erodes the value of cash, which is a guaranteed capital loss (assuming insufficient savings rates, and/or strategies, are in place to counter it).

INVESTING IN HUMAN INGENUITY

While never a guarantee of future performance, history provides reason for investors to be optimistic because of the power of innovation, which is what drives economic growth and markets.

Humans are ingenious creatures, and throughout the course of history people have had so-called eureka moments and pursued the continual improvement of every aspect of our lives. One such aspect relates to our mortality. The chart (see p28) shows the dramatic improvement in life expectancy at birth, since 1960.

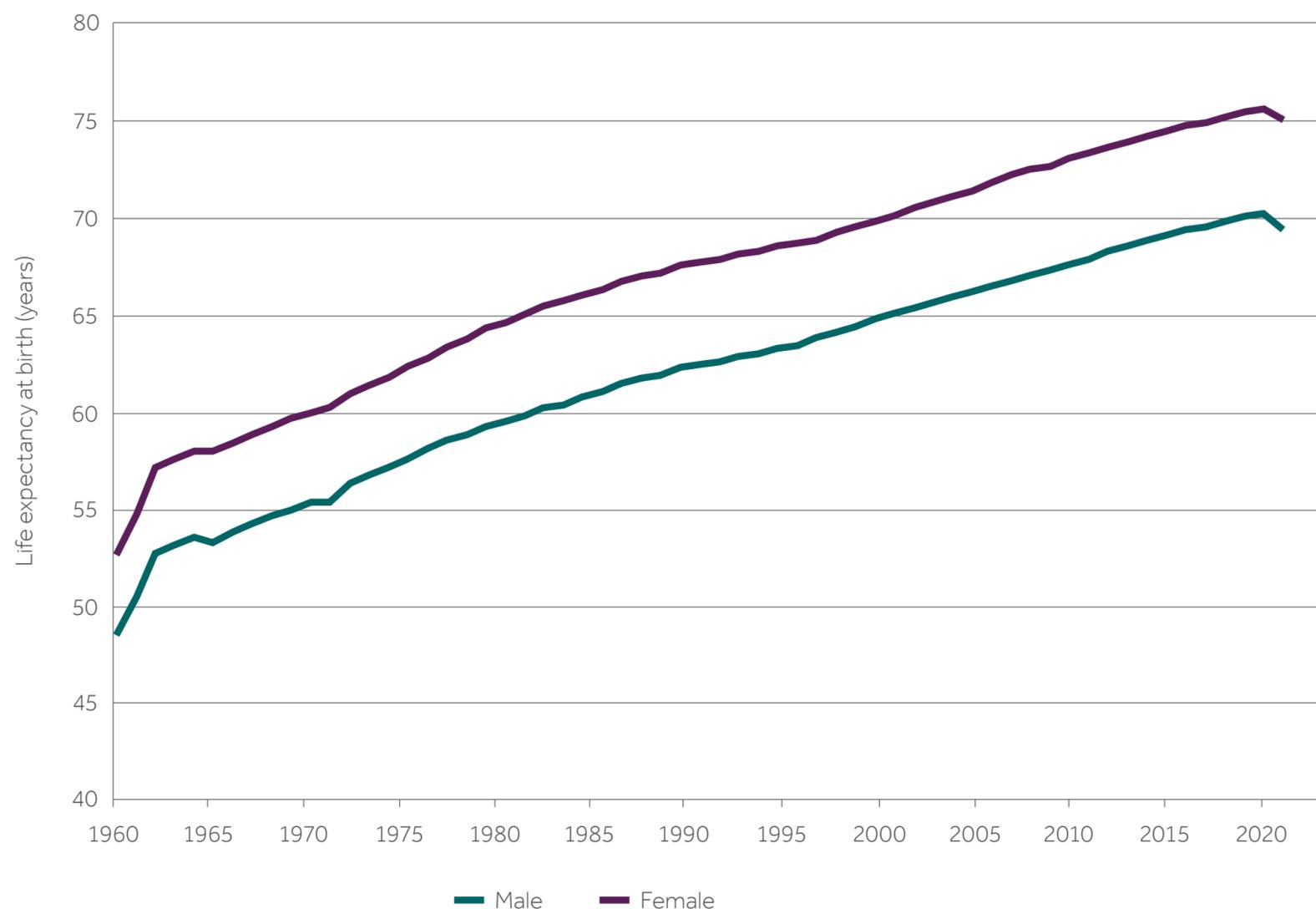
POTENTIAL BENEFITS OF TECHNOLOGICAL PROGRESS

Too much of a focus on the news headlines, can easily induce pessimism. Meanwhile, technology continues to improve. A good recent example is in generative artificial intelligence, such as the ability of ChatGPT to answer queries with human-like responses. Despite many unknowns and an element of fear, the technology promises many uses for businesses and people alike.

Whilst there has been much discussion about automation costing jobs, the counter argument is that these tools are likely to free up time for humans that can be put to better and higher-value uses. This reallocation of resources promises to raise productivity with positive implications for economic growth.

LIFE EXPECTANCY HAS INCREASED DRAMATICALLY SINCE 1960

The trend in global life expectancy at birth, since 1960, is one of ever-longer lifespans



Source: The World Bank, Barclays Private Bank, April 2023

¹ The average yearly return of the S&P 500 since 1957, when it first became an index of 500 stocks, is 10.13%, as of the end of December 2022. Source: Official Data, April 2023 <https://www.officialdata.org/us/stocks/s-p-500/1957?amount=100&endYear=2022>

² Barclays Equity Gilt study, 2022, Barclays Investment Bank, July 2022 <https://www.cib.barclays/news-and-events/2022-equity-gilt-study.html>

When you invest in markets, you are in essence investing in human ingenuity as much as anything else. It's relentless progress, in the face of obstacles, should provide reasons for hope. Being optimistic about long-term prospects for stock markets, regardless of any short-term challenges, is backed by decades of economic history¹. That said, doing so when market valuations are plunging can be difficult and requires investors to have composure.

STICKING TO THE PLAN

Having the right amount of optimism during challenging periods can help with making the right investment decisions and sticking to the plan. When shocks happen and hit portfolio returns, it can be challenging to keep looking on the bright side.

However, extreme swings in volatility are part of the investment journey. The world, and investment markets, regularly face instability. But this need not prevent an investor from reaching their goals if they can see it through (and have the right strategies in place).

At any point there are a host of risks, both in the present and on the horizon, that could suggest delaying making investments or even selling them.

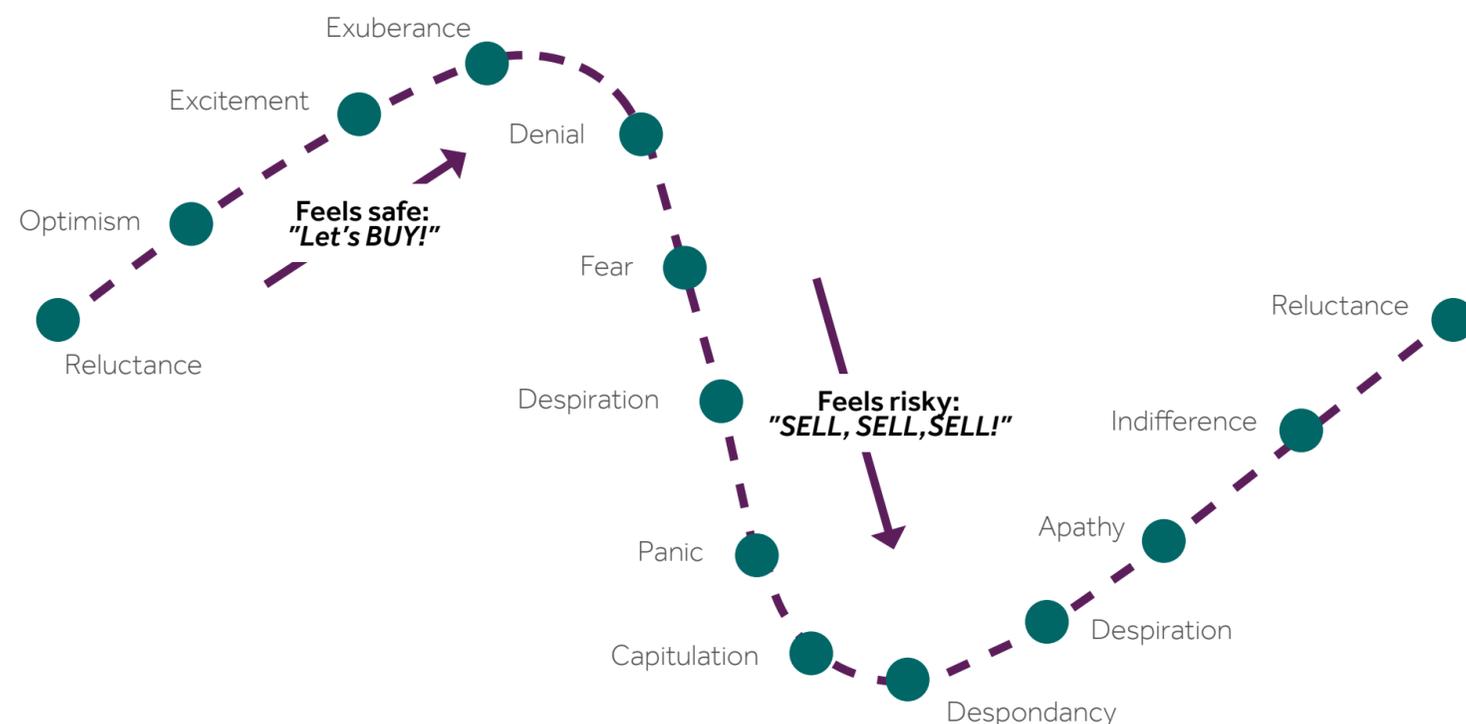
The reality is that falling markets eventually recover, due to the regular innovative developments already discussed. Bear markets, which are classified as falls of at least 20% from their peak, are typically much shorter than bull markets (those that are more than 20% above the prior bottom, and less frequent).

As a result, the long-term case for investing in risk-assets is strong, in particular when considering longer investment horizons. The Barclays Equity-Gilt study, which looks at the performance of UK equities against UK government bonds and cash from 1899-2022, finds that over any two-year period the probability of equities outperforming cash is 69%. Over a ten-year period, this rises to 91%. Nothing is guaranteed when investing but these numbers are certainly food-for-thought.

"Over any two-year period the probability of equities outperforming cash is 69%. Over a ten-year period this rises to 91%"

THE CYCLE OF MARKET EMOTIONS

From optimism to pessimism and back again. Investors experience a natural cycle of emotions, as markets move from booms to busts, that can derail objectives if acted on when they are too extreme



Source: Barclays Research, Barclays Private Bank, April 2023. For illustrative purposes.

YOU CAN HAVE TOO MUCH OF A GOOD THING

Whilst a healthy dose of optimism is valuable, it is also possible to go too far, especially during strong bull markets or a new investment craze, when sentiment is high (see chart).

Beware of optimism bias, where investors think that bad things can only happen to others and not themselves. This can increase portfolio risk as investors put in place less portfolio protection. In extreme cases, this can contribute to investment "bubbles" forming, and over-optimism can lead to overconfidence, which has been shown to lead to increased trading activity, and subsequent falls in performance.

STRIKING A BALANCE

Successful long-term investing usually involves striking the right balance between potential gains and losses when building a portfolio. It shouldn't involve a binary situation of either being in the market when feeling optimistic, or being out of the market when feeling pessimistic. Instead, being invested while being aware of (and resilient to) the pessimistic scenarios, provides better potential for a rewarding experience.

A well-diversified, balanced investment portfolio is usually the best strategy for long-term investing. Such an approach can limit the impact of unexpected tail risks and reduce the volatility of portfolio returns.

In the face of much uncertainty and heightened risk today, that also seem unlikely to reduce soon, the value and logic of being diversified across asset classes, sectors and regions, shines through.

Author: Alexander Joshi, London UK, Head of Behavioural Finance

Multi-asset portfolio allocation

Barclays Private Bank discusses asset allocation views within the context of a multi-asset class portfolio. Our views elsewhere in the publication are absolute and within the context of each asset class.



	-		=		+
Cash and short duration bonds					
Fixed income					
Developed market government bonds					
Investment grade bonds					
High yield bonds					
Emerging market bonds					
Equities					
Developed market equities					
Emerging market equities					
Other assets					
Alternative trading strategies					
Commodities					

- denotes a cautious view = denotes a neutral view + denotes a positive view

CASH AND SHORT DURATION BONDS

- Given the heightened level of uncertainty in financial markets, and to manage portfolio risks, we prefer higher-quality and liquid opportunities.

FIXED INCOME

- More opportunities are popping up in fixed income
- We still prefer developed market government bonds as a hedge against any macro volatility
- In credit, the higher-quality segment is preferred, while remaining selective elsewhere
- In high yield, where selection is key, our exposure is relatively low, as spreads have room to widen further in an adverse scenario
- We are cautious on the emerging markets segment.

EQUITIES

- Equities still seem to be relatively more appealing than bonds for long-term investors
- Yet, we are highly selective in our allocation
- In line with our long-term investment philosophy, portfolios remain geared towards high-quality, cash-generative and conservatively-capitalised businesses
- As a function of bottom-up selection, more opportunities are seen in developed market equities compared to their emerging market peers.

ALTERNATIVE TRADING STRATEGIES (ATS)

- There are a limited number of opportunities in the ATS space, as the cost/benefit trade-off can be challenging
- Our focus is on strategies that offer diversification benefits due to their low correlation to equity markets.

COMMODITIES

- As a risk-mitigating asset, gold remains the only direct commodity exposure held in portfolios
- From a portfolio management perspective, we believe that our risk budget is better spent outside of the asset class.

Author: Julien Lafargue, CFA, London UK, Chief Market Strategist

privatebank.barclays.com

Investments can fall as well as rise in value. Your capital or the income generated from your investment may be at risk.

This communication:

- (i) Has been issued by the Investments division at Barclays Private Bank (Barclays) and is provided for information purposes only and is subject to change. It is indicative only and not binding. References to Barclays means any entity within the Barclays Group of companies, where "Barclays Group" means Barclays and its affiliates, subsidiaries and undertakings.
- (ii) Is not research nor a product of the Barclays Research department. Any views expressed in this communication may differ from those of the Barclays Research department. All opinions and estimates are given as of the date of this communication and are subject to change. Barclays is not obliged to inform recipients of this communication of any change to such opinions or estimates.
- (iii) Is general in nature and does not take into account any specific investment objectives, financial situation or particular needs of any particular person.
- (iv) Does not constitute an offer, an invitation or a recommendation to enter into any product or service and does not constitute investment advice, solicitation to buy or sell securities and/or a personal recommendation. Any entry into any product or service requires Barclays' subsequent formal agreement which will be subject to internal approvals and execution of binding documents.
- (v) Is confidential and is for the benefit of the recipient. No part of it may be reproduced, distributed or transmitted without the prior written permission of Barclays.
- (vi) Has not been reviewed or approved by any regulatory authority.

Any past or simulated past performance including back-testing, modelling or scenario analysis, or future projections contained in this communication is no indication as to future performance. No representation is made as to the accuracy of the assumptions made in this communication, or completeness of, any modelling, scenario analysis or back-testing. The value of any investment may also fluctuate as a result of market changes.

Where information in this communication has been obtained from third party sources, we believe those sources to be reliable but we do not guarantee the information's accuracy and you should note that it may be incomplete or condensed.

Neither Barclays nor any of its directors, officers, employees, representatives or agents, accepts any liability whatsoever for any direct, indirect or consequential losses (in contract, tort or otherwise) arising from the use of this communication or its contents or reliance on the information contained herein, except to the extent this would be prohibited by law or regulation. Law or regulation in certain countries may restrict the manner of distribution of this communication and the availability of the products and services, and persons who come into possession of this publication are required to inform themselves of and observe such restrictions.

You have sole responsibility for the management of your tax and legal affairs including making any applicable filings and payments and complying with any applicable laws and regulations. We have not and will not provide you with tax or legal advice and recommend that you obtain independent tax and legal advice tailored to your individual circumstances.

Barclays Bank PLC is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority (Financial Services Register No.122702) and is a member of the London Stock Exchange and NEX. Registered in England. Registered No. 1026167. Registered Office: 1 Churchill Place, London E14 5HP.

Barclays Bank Ireland PLC, trading as Barclays Private Bank, is regulated by the Central Bank of Ireland. Registered in Ireland. Registered Office: One Molesworth Street, Dublin 2, Ireland, D02 RF29. Registered Number: 396330. VAT Number: IE4524196D. Calls are recorded in line with our legal and regulatory obligations, and for quality and monitoring purposes.

Barclays offers private and overseas banking, credit and investment solutions to its clients through Barclays Bank PLC and its subsidiary companies. Barclays Bank PLC is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority (Financial Services Register No. 122702) and is a member of the London Stock Exchange and Aquis. Registered in England. Registered No. 1026167. Registered Office: 1 Churchill Place, London E14 5HP. Barclays Bank PLC, Jersey Branch is regulated by the Jersey Financial Services Commission. Barclays Bank PLC, Jersey Branch is regulated by the Guernsey Financial Services Commission under the Protection of Investors (Bailiwick of Guernsey) Law 1987, as amended. Barclays Bank PLC, Jersey Branch has its principal business address in Jersey at 13 Library Place, St Helier, Jersey and is regulated by the Jersey Financial Services Commission. Barclays Bank PLC, Isle of Man Branch has its principal business address in the Isle of Man at Barclays House, Victoria Street, Douglas, Isle of Man and is licensed by the Isle of Man Financial Services Authority. Barclays Bank PLC, Guernsey Branch has its principal place of business at St Julian's Court, St Julian's Avenue, St Peter Port, Guernsey and is licensed by the Guernsey Financial Services Commission under the Banking Supervision (Bailiwick of Guernsey) Law 1994, as amended, and the Protection of Investors (Bailiwick of Guernsey) Law 1987, as amended.

Barclays offers private banking products and services to its clients through Barclays Bank PLC and its affiliates. In the Principality of Monaco, Barclays Bank PLC operates through a branch which is duly authorised and falls under the dual supervision of the Monegasque regulator 'Commission de Contrôle des Activités Financières' (with English version Private Bank Regulatory Straplignes – January 2023 Version 1.0 13 Restricted - Internal regards to investment services) and the French regulator 'Autorité de Contrôle Prudentiel et de Résolution' (in respect of banking & credit services and prudential supervision). The registered office of Barclays Bank PLC Monaco branch is located at 31 avenue de La Costa, MC 98000 Monaco – Tel. + 377 93 15 35 35. Barclays Bank PLC Monaco branch is also registered with the Monaco Trade and Industry Registry under No. 68 S 01191. VAT No. FR 40 00002674 9. Barclays Bank PLC is registered in the United Kingdom under No.1026167, authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority. The registered offices of Barclays Bank PLC are located at 1 Churchill Place, London E14 5HP.

Barclays Private Asset Management (Monaco) SAM – Barclays Private Asset Management (Monaco) S.A.M., a limited liability company (Société Anonyme Monégasque) operating under Monegasque Law, with a share capital of €1,005,000, having its registered office in Monaco at 31 avenue de la Costa, B.P. 4 – MC 98001 Monaco Cedex. - Tél. : +377 93 10 51 51, registered in the Monaco Trade and Industry Registry under No. 94 S 03039 – with S.S.E.E. N° 671C06692, with VAT number: FR 00 00003617 7 regulated by the Monegasque Regulator "Commission de Contrôle des Activités Financières"

Barclays Bank (Suisse) SA is a Bank registered in Switzerland and regulated and supervised by FINMA. Registered No. CH-660.0.118.986-6. Registered Office: Chemin de Grange-Canal 18-20, P.O. Box 3941, 1211 Geneva 3, Switzerland. Registered branch: Beethovenstrasse 19, P.O. Box, 8027 Zurich. Registered VAT No. CHE-106.002.386. Barclays Bank (Suisse) SA is a subsidiary of Barclays Bank PLC registered in England, authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority. It is registered under No. 1026167 and its registered office is 1 Churchill Place, London E14 5HP.

Barclays offers private banking products and services to its clients through Barclays Bank PLC and its subsidiary companies. Barclays Bank PLC is registered in England and authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority. Registered No. 1026167. Registered Office: 1 Churchill Place, London E14 5HP. Barclays Bank PLC (DIFC Branch) (Registered No. 0060) is regulated by the Dubai Financial Services Authority. Barclays Bank PLC (DIFC Branch) may only undertake the financial services activities that fall within the scope of its existing DFSA licence. Principal place of business: Private Bank, Dubai International Financial Centre, The Gate Village Building No. 10, Level 6, PO Box 506674, Dubai, UAE. This information has been distributed by Barclays Bank PLC (DIFC Branch). Certain products and services are only available to Professional Clients as defined by the DFSA.