

MACQUARIE ASSET MANAGEMENT

A retightening of policy mix: Impact on growth and inflation

Fixed Income Strategic Forum 2023 | Issue 03



Graham McDevitt | Patrick Er

While a disinflationary trend has emerged and continues to play out, economic growth has proven to be resilient, especially in the US, despite economic headwinds including significantly tight monetary policy since mid-2022. Our analysis for Issue 03 of the Fixed Income Strategic Forum 2023 suggests that the current policy mix of easier fiscal policy and tighter monetary policy may revert to an overall tighter stance in 2024, mainly due to a gradual diminishing of the fiscal policy impulse while the monetary policy stance remains tight. Households and businesses whose incomes are slowing significantly are likely to bear this burden, at a time when their balance sheets are expected to weaken. This should prolong the disinflationary trend but reinstate the slowing growth outlook closer to our yearlong base-case call for a mild cyclical recession.

Introduction

A year ago, as the global supply recovery from the COVID-19 pandemic settled into a slow but strengthening trend going into 2023, we believed demand would take centre stage in determining economic outcomes. Our base-case outlook through 2023 was underpinned by diminishing fiscal policy support and significant monetary policy tightening, which would drive demand deceleration, culminating in a cyclical recession (like in 2001) and the decline of inflation toward central bank targets. However, global economies, especially the US, have proved resilient. This has driven global bond yields higher despite the expected emergence of disinflation. In this note, we present our analysis from Issue 03 of the Strategic Forum 2023 on these current macro trends (illustrated using US data) and, more importantly, how their projected trajectories will affect the growth and inflation outlook into 2024.

Prelude: How did we get here?

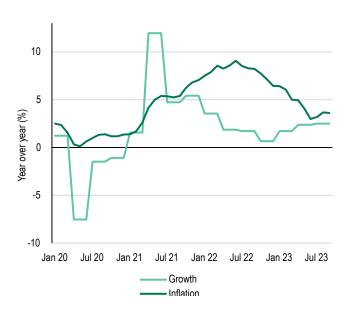
As 2023 unfolded, with the supply recovery broadening and strengthening and demand slowing (Figures 1a and 1b), inflation trended lower, as expected. When demand exceeds supply, inflation rises; but when supply exceeds demand, inflation falls. Only the magnitudes are uncertain. But the current interplay between the paths of supply and demand does not offer a similar definitive outcome on growth: it could slow into either stagnation or recession. More analysis on the intensity of demand deceleration is needed, which will be discussed in the sections that follow.

Figure 1a:
The path of demand and supply since the COVID-19 pandemic

1.2 Inflation decelerating period 1.1 1.0 ndex February 2020 = 1 Inflation accelerating period 0.9 8.0 0.7 Supply > Demand 0.6 Jan 20 Jul 20 Jan 21 Jul 21 Jan 22 Jul 22 Jan 23 Jul 23 Demand (Composite ISM New Orders) Supply (Composite ISM Production + Import)

Sources: Macrobond, Macquarie.

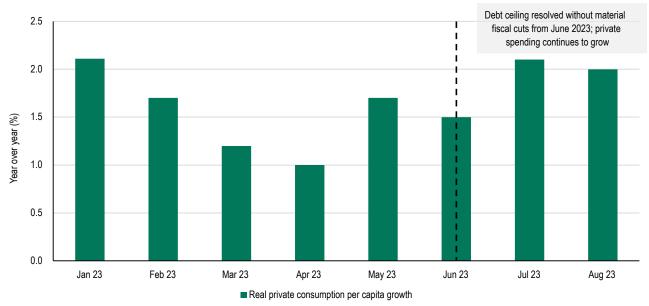
Growth and inflation since the COVID-19 pandemic



At the time of Issue 02 of the Strategic Forum in May, a significant event that could intensify demand deceleration and thereby pose a negative growth risk had emerged in the US. This was due to the need to extend the debt ceiling. Historically, significant spending reductions have followed fractious negotiations to a debt ceiling resolution, hence the heightened concerns of a severe growth outcome (i.e. the much-feared "hard landing" after mid-2023).

Fast-forward to Issue 03 and market nerves have been much less frayed thanks to one of the more benign resolutions to the debt ceiling issue. Fears of a severe hit to demand did not materialise. In Figure 2, we can see that private spending began to move higher with the suspension of the debt ceiling in June 2023.

Figure 2: **Private consumption spending reaccelerates after debt ceiling resolution**



Sources: Macrobond, Macquarie.

To summarise, growth has been higher than anticipated, although inflation has declined in line with our expectations thanks to the significant supply recovery. In the next section, we offer an explanation of the perception of "resilience," which we use to form the basis for assessing the outlook for growth and inflation at the end of this note.

The role of "policy mix" and its changing impact on the broader economy

Since 2022, the policy mix - the combination of fiscal and monetary policy - has changed materially. This has significantly impacted demand and, hence, macroeconomic outcomes. The policy mix progressively tightened going into 2022, reversing the extreme easing of 2020-2021, then changed again as 2023 unfolded. We make a few salient observations:

1. Monetary policy

Historically, interest rate hikes alone have not led to recessions. This is because rate changes create winners (savers) and losers (borrowers). That said, higher interest rates in the current tightening cycle – which began at the end of 1Q22 – have worked as expected on rate-sensitive sectors such as residential investment, which contracted significantly (Figure 3a). Gross domestic product (GDP) growth tends to react within a year after residential investment responds, but in 2023 this has not repeated (Figure 3b, which shows better-than-expected GDP growth in 1H23).

Figure 3a:

The effect of interest rates on residential investment

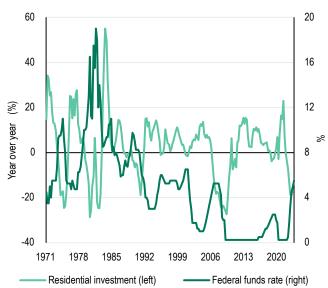
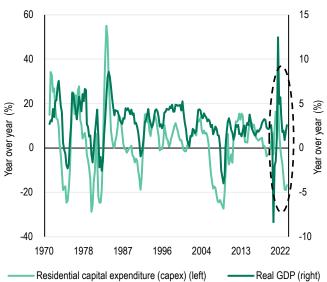


Figure 3b:

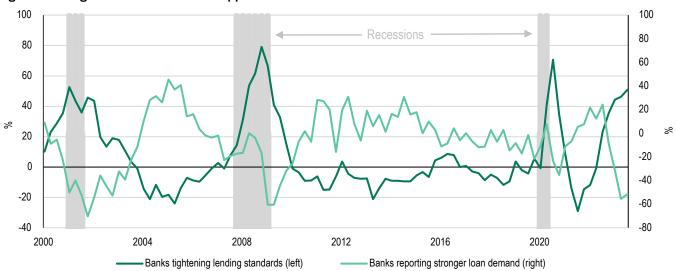
Residential capex leads GDP by no more than 1 year



Source: Macrobond.

Higher rates, when prolonged, tend to be followed by financial stress, which prompts tighter lending standards, as occurred in the wake of the US regional banking crisis in 1Q23. Historically, rate hikes and tighter credit conditions have resulted in a recession, every time. But this time around, tighter lending standards have coincided with lower demand for loans; tighter lending standards are less impactful if "borrowers are not borrowing" (Figure 4). So, credit conditions have indeed tightened through 2023 but not as much as when compared to conditions preceding prior recessions. However, this alone seems insufficient to explain the modest negative impact of one of the most intense rate-hiking cycles since the late 1970s/early 1980s. Given that the transmission of monetary policy seems to have worked as expected, the following section presents a rationale for its lack of a broader impact.

Figure 4: Tighter lending standards versus less appetite for loans

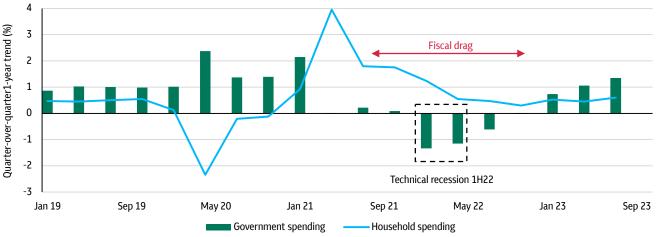


Source: US Federal Reserve. "Banks tightening lending standards" is based on the Senior Loan Officer Opinion Survey (SLOOS) on Bank Lending Practices.

2. Fiscal policy

Fiscal policy, unlike rate hikes, directly impacts economic activity, especially if spending is engaged. Coupled with easier monetary policy, fiscal spending worked through 2020-2021 to stave off the worst-case scenario from pandemic lockdowns. The subsequent ending of pandemic support programs resulted in a fiscal drag that contributed greatly to the technical recession of 1H22, even before the impact of rate hikes was felt (Figure 5).

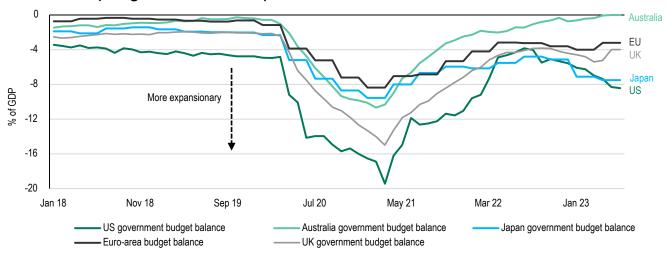
Figure 5: Fiscal impact contributes to technical recession



Sources: Macrobond, Macquarie.

First, the US federal government eased off, albeit slightly, the fiscal brakes in 2H22. Then, major adjustments were made to transfer programs in January 2023, such as raising cost-of-living payments to Social Security, effectively boosting beneficiaries' nominal incomes by almost 9%; these are cohorts who tend to spend almost 100% of their incomes. Finally, defence spending increased, partly related to the Russia-Ukraine war. This launched the US federal government's spending growth higher through 1H23. With the debt ceiling ultimately proving to be no more than a speed bump, fiscal policy expanded into 3Q23, by more than most equivalent countries (Figure 6).

Figure 6: Relative country budget balances: US "exceptionalism"

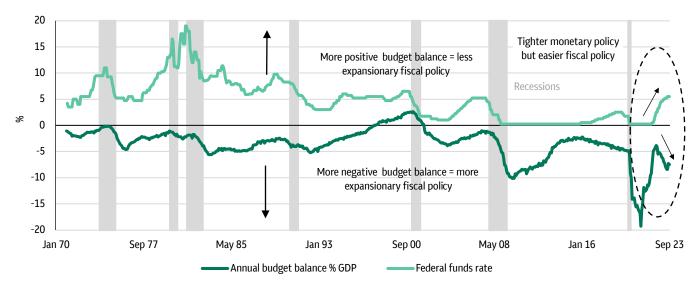


Sources: Macrobond, Macquarie.

The pickup in fiscal spending also "crowded in" private spending. An example is the fiscal-related industrial policies that enabled an easing of bottlenecks in key input sectors such as semiconductors, thus adding to overall economic activity, including boosting the ongoing supply recovery.

In summary, the policy mix that left 1H22 in relatively tight mode – with steep rate hikes and an effective fiscal drag – changed in 2023 to one in which tighter monetary policy was accompanied by a somewhat neutral to expansive fiscal policy. Rarely has the US economy experienced a policy mix of tight monetary policy and easy fiscal policy under such late-cycle economic conditions (Figure 7).

Figure 7: **Policy mix in fiat money era**

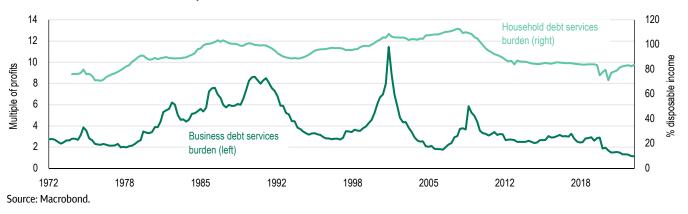


Sources: Macrobond, Macquarie.

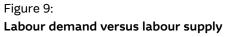
3. Prevailing conditions of the private sector

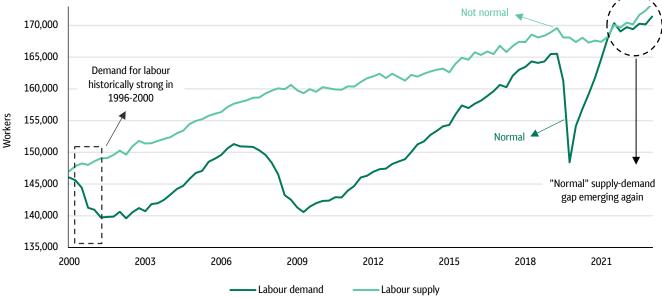
While the changing policy mix was the key factor behind the "resilient economy" narrative, we should recognise that prevailing conditions did matter, particularly in the US. The balance sheet positions of households and businesses were generally in better shape when policy tightening emerged, largely due to the repairs implemented after the global financial crisis. Thus, current debt burdens (Figure 8), reflecting the private sector's lack of desire to borrow as alluded to above, are not at levels that significantly impede spending. Although for some countries (e.g. Australia), serious concerns remain.

Figure 8: Contained debt burden enables private balance sheet cushion



Moreover, the normalising of labour markets in the immediate post-pandemic recovery period (Figure 9) meant improving job prospects and nominal wage income growth. This enabled some offset to the cost-of-living pressures due to the lingering effects of pandemic-related supply shocks and steadied household balance sheets when the policy mix tightened into 2022.





Sources: Macrobond, Macquarie.

The net result of this section's analysis points to a change in the policy mix due to the fiscal easing in 2023 as the driver behind the "slowing of the slowdown" and the shift in consensus toward a "soft landing" outlook. Of course, this is with support from a better set of prevailing conditions. We therefore believe the outlook for the policy mix holds the key to the likely economic trajectory going forward.

The "policy mix" outlook

Globally, in general, there is increasing desire to reduce government deficits and debt. In the US, particularly, roadblocks to further fiscal support may emerge sooner, given the start of its new fiscal year (on 1 October 2023) when spending decisions are made. What is known for now is that cost-of-living adjustment increases will be much lower due to lower inflation (e.g. Social Security adjustments will be about 3%, almost one-third of 2023's increase). Note that the forbearance of student loan repayments, a major pandemic support program, also ended at this time. As events continue to unfold, the risks will likely tilt to less spending given the current fractious state of Congress. Finally, in a presidential election year – like 2024 – absent a major emergency, fresh fiscal spending bills tend not to be a priority. Essentially, all these manoeuvres point to a diminished fiscal impulse from 4Q23 onward and a potential return of fiscal drag.

The monetary policy stance should remain tight – in the US, the Federal Reserve has pushed rates to 5.5%, and long bond yields have launched higher. To gauge the extent of tightness of monetary policy, we utilise our proprietary Macquarie "rule of thumb", which measures the nominal target policy rate against the trending growth rate of consumer spending (Figure 10) – movements above 2.5% are historically coincident with the onset of recession. In 2023, this "rule" has moved toward the 2.5% threshold, implying that US monetary policy is indeed "overtightened" and **is likely to remain so for a significant period.**

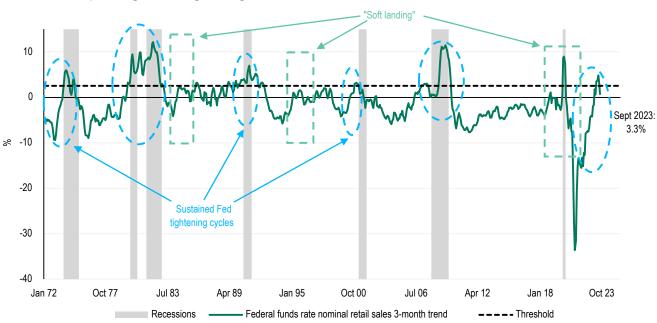


Figure 10: Rule of thumb pointing to overtightening

Sources: Macrobond, Macquarie.

We believe that this tighter policy mix will likely have negative consequences on the broader economy going forward. Moreover, the prevailing conditions will no longer be as supportive, with the cushion from private balance sheets likely to weaken as income growth declines. The latter is premised on labour demand having peaked and poised to decelerate just as labour supply is rising. This implies lower wages growth, which leads to slower household spending. Businesses, as recipients of spending, should then post slower revenue growth after a lag, and hence a weakening profit outlook as high input costs are prolonged (i.e. low inflation, not deflation).

To summarise, the supportive policy mix stance in 2023 is about to shift tighter from 4Q23 and will be loaded on households and businesses whose incomes are poised to grow much more slowly. We will now discuss how the expected policy mix could impact the paths for growth and inflation.

Impact on growth and inflation

The outlook for inflation will be driven by a combination of structural and cyclical forces. Structurally, if the ongoing aggregate supply recovery meets a reignited demand deceleration, then inflation should continue to decline. Cyclically, the outcome hinges crucially on how the two forces of exogenous external energy prices interact with the expected easing of major domestic price pressures, such as rental inflation in the US. We expect the latter to dominate.

Thus, our base case is for inflation to trend back toward central bank targets, especially in the US; but going forward, it could be volatile due to the impact of cyclical forces. There is also less certainty on the question of inflation sustainability at or below target in the medium-to-longer term. For that to happen, demand deceleration needs to intensify further toward outright demand destruction.

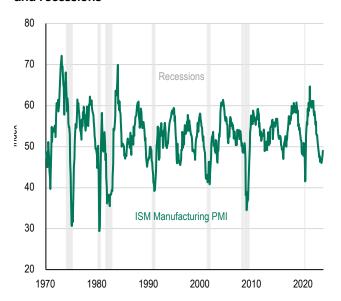
The outlook for economic growth remains hazier, as the expected paths for demand and supply tend to paint a less definitive picture on spending and output. We do continue to expect lower growth to emerge. But while major indicators of growth currently suggest that a base-case recession similar to a cyclical 2001-style recession is most likely – especially in the US and possibly worse in the EU and UK – a stagnation scenario cannot be ruled out. The likelihood of recession will increase if the expected fiscal drag causes an intensifying of demand deceleration. With that in mind, we are watching the indicators in Figures 11a and 11b in assessing the growth outlook. (Please refer to Table 1 in the Appendix for a more complete list of indicators to watch.)

Figure 11a:

Conference Board Leading Economic Index (LEI) and recessions

15 **US Conference** 10 **Board LEI** 5 YoY (%) -5 -10 Recessions -15 -20 1970 1980 1990 2000 2010 2020

Figure 11b:
ISM Manufacturing Purchasing Managers' Index (PMI)
and recessions



Source: Macrobond.

Financial crisis?

Our analysis of the policy mix outlook suggests a prolonged period of "overtightening" going into 2024. Such a tight policy mix environment has historically caused something to break in the financial economy. Could this repeat? Was the US regional banking crisis in 1Q23 a warning of things to come? If history is any guide, financial dislocations can emerge from places that are hard to predict. Therefore, we recommend both caution and vigilance because an unexpected financial dislocation might be contagious to the real economy (i.e. cause a more serious recession). In closing, we find it interesting to note that historically, interest rate cuts have been motivated mainly by dislocations in financial markets rather than by real economic developments (see Table 2 in the Appendix).

Conclusion

In Issue 03 of the Strategic Forum 2023, we presented evidence that a less-tight-than-anticipated policy mix – reflecting relatively expansive fiscal policy (more so after the US debt ceiling resolution) that offsets continued tight monetary policy – was (and likely still is) the critical factor underpinning the resilient economy narrative, especially in the US. In addition, the more-robust-than-usual private sector balance sheets have helped cushion the blows from potential headwinds.

Going forward, we expect the policy mix to revert to a tighter stance overall, mainly due to a gradual diminishing of the prevailing fiscal policy boost, while monetary policy should remain tight. Households and businesses whose incomes are slowing significantly will bear the burden, at a time when their balance sheet cushion is expected to diminish.

This implies that the demand deceleration trend will re-intensify. This view has underpinned our base-case call for a cyclical recession like the one in 2001 following the tech crash. The risks on either side remain: stagnation, defined as positive but near-zero growth with a harder landing, requiring a serious financial dislocation. Finally, in conjunction with the continuing supply recovery, this result keeps alive our expectation for lower inflation closer to the central bank target ranges within the next 12 months, or maybe sooner with "transitory deflation" a possibility.

Appendix

Table 1 - Suggested indicators watch list

Table 1 - Suggested indicators watch list				
Indicators for:				
Economic growth:				
Conference Board LEI				
ISM Manufacturing PMI				
Composite ISM PMI - New Orders Sub-Index				
Inflation:				
Federal Reserve Bank of New York's Global Supply Chain Pressure Index				
US shelter rental prices				
Global oil prices				
Global overall commodity prices				
Fiscal policy path:				
US budget balance (estimated from Daily Treasury Statements)				
Monetary policy path:				
Job openings and quits				
Initial jobless claims				

Source: Macquarie (2023).

Temporary employment

Table 2A summary of what coincided or triggered the first rate cut after a significant hiking cycle: rarely rate cuts after a sustained and/or significant hiking cycle were for purely unemployment or "victory over inflation" reasons.

Rate cuts	Recession followed	Cut before recession	Reasons
1981	Yes	No	Significant rising unemployment from elevated (above-trend) levels; some banking distress but not severe yet (that would come in 1982).
1984	No	N/A	Banking distress leading to the Continental Illinois failure. At the time, it became the largest bank failure since the Great Depression.
1987*	No	N/A	Black Monday.
1989	Yes	Yes	Savings and loan (S&L) crisis peaking; junk bond crisis leading to big name failures in the months ahead (e.g. Drexel less than a year later).
1994	No	N/A	Bonds selloff; prolonged Latin American debt crisis (e.g. peso crisis) impacting US banks.
1998*	No	N/A	Long-Term Capital Management (LTCM), Russian default, etc.
2001	Yes	Yes	Tech crash; emerging market debt crisis (e.g. Argentina) impacting US banks.
2007	Yes	Yes	US financial crisis contagion; credit fund redemptions freeze (e.g. BNP Paribas, Bear Stearns).
2019	No	N/A	Repo/LIBOR spike/money market redemptions.
?	?	?	?

Source: Macquarie (2023). *Not a sustained rate hiking cycle because financial dislocation caused an early reversal.

IMPORTANT INFORMATION

The opinions expressed are those of the author(s) are as of the date indicated and may change based on market and other conditions. The accuracy of the content and its relevance to your client's particular circumstances is not guaranteed.

This market commentary has been prepared for general informational purposes by the team, who are part of Macquarie Asset Management (MAM), the asset management business of Macquarie Group (Macquarie), and is not a product of the Macquarie Research Department. This market commentary reflects the views of the team and statements in it may differ from the views of others in MAM or of other Macquarie divisions or groups, including Macquarie Research. This market commentary has not been prepared to comply with requirements designed to promote the independence of investment research and is accordingly not subject to any prohibition on dealing ahead of the dissemination of investment research.

Nothing in this market commentary shall be construed as a solicitation to buy or sell any security or other product, or to engage in or refrain from engaging in any transaction. Macquarie conducts a global full-service, integrated investment banking, asset management, and brokerage business. Macquarie may do, and seek to do, business with any of the companies covered in this market commentary. Macquarie has investment banking and other business relationships with a significant number of companies, which may include companies that are discussed in this commentary, and may have positions in financial instruments or other financial interests in the subject matter of this market commentary. As a result, investors should be aware that Macquarie may have a conflict of interest that could affect the objectivity of this market commentary. In preparing this market commentary, we did not take into account the investment objectives, financial situation or needs of any particular client. You should not make an investment decision on the basis of this market commentary. Before making an investment decision you need to consider, with or without the assistance of an adviser, whether the investment is appropriate in light of your particular investment needs, objectives and financial circumstances.

Macquarie salespeople, traders and other professionals may provide oral or written market commentary, analysis, trading strategies or research products to Macquarie's clients that reflect opinions which are different from or contrary to the opinions expressed in this market commentary. Macquarie's asset management

business (including MAM), principal trading desks and investing businesses may make investment decisions that are inconsistent with the views expressed in this commentary. There are risks involved in investing. The price of securities and other financial products can and does fluctuate, and an individual security or financial product may even become valueless. International investors are reminded of the additional risks inherent in international investments, such as currency fluctuations and international or local financial, market, economic, tax or regulatory conditions, which may adversely affect the value of the investment. This market commentary is based on information obtained from sources believed to be reliable, but we do not make any representation or warranty that it is accurate, complete or up to date. We accept no obligation to correct or update the information or opinions in this market commentary. Opinions, information, and data in this market commentary are as of the date indicated on the cover and subject to change without notice. No member of the Macquarie Group accepts any liability whatsoever for any direct, indirect, consequential or other loss arising from any use of this market commentary and/or further communication in relation to this market commentary. Some of the data in this market commentary may be sourced from information and materials published by government or industry bodies or agencies, however this market commentary is neither endorsed or certified by any such bodies or agencies. This market commentary does not constitute legal, tax accounting or investment advice. Recipients should independently evaluate any specific investment in consultation with their legal, tax, accounting, and investment advisors. Past performance is not indicative of future results

This market commentary may include forward looking statements, forecasts, estimates, projections, opinions and investment theses, which may be identified by the use of terminology such as "anticipate", "believe", "estimate", "expect", "intend", "may", "can", "plan", "will", "would", "should", "seek", "project", "continue", "target" and similar expressions. No representation is made or will be made that any forward-looking statements will be achieved or will prove to be correct or that any assumptions on which such statements may be based are reasonable. A number of factors could cause actual future results and operations to vary materially and adversely from the forward-looking statements. Qualitative statements regarding political, regulatory, market and economic environments and opportunities are based on the team's opinion, belief and judgment.

Other than Macquarie Bank Limited ABN 46 008 583 542 ("Macquarie Bank"), any Macquarie Group entity noted in this document is not an authorised deposit-taking institution for the purposes of the Banking Act 1959 (Commonwealth of Australia). The obligations of these other Macquarie Group entities do not represent deposits or other liabilities of Macquarie Bank. Macquarie Bank does not guarantee or otherwise provide assurance in respect of the obligations of these other Macquarie Group entities. In addition, if this document relates to an investment, (a) the investor is subject to investment risk including possible delays in repayment and loss of income and principal invested and (b) none of Macquarie Bank or any other Macquarie Group entity guarantees any particular rate of return on or the performance of the investment, nor do they guarantee repayment of capital in respect of the investment.

Past performance does not guarantee future results.

Diversification may not protect against market risk

Natural or environmental disasters, such as earthquakes, fires, floods, hurricanes, tsunamis, and other severe weather-related phenomena generally, and widespread disease, including pandemics and epidemics, have been and can be highly disruptive to economies and markets, adversely impacting individual companies, sectors, industries, markets, currencies, interest and inflation rates, credit ratings, investor sentiment, and other factors affecting the value of the Strategy's investments. Given the increasing interdependence among global economies and markets, conditions in one country, market, or region are increasingly likely to adversely affect markets, issuers, and/or foreign exchange rates in other countries. These disruptions could prevent the Strategy from executing advantageous investment decisions in a timely manner and could negatively impact the Strategy's ability to achieve its investment objective. Any such event(s) could have a significant adverse impact on the value and risk profile of the Strategy

Market risk is the risk that all or a majority of the securities in a certain market – like the stock market or bond market – will decline in value because of factors such as adverse political or economic conditions, future expectations, investor confidence, or heavy institutional selling. International investments entail risks including fluctuation in currency values, differences in accounting principles, or economic or political instability. Investing in emerging markets can

be riskier than investing in established foreign markets due to increased volatility, lower trading volume, and higher risk of market closures. In many emerging markets, there is substantially less publicly available information and the available information may be incomplete or misleading. Legal claims are generally more difficult to pursue.

Currency risk is the risk that fluctuations in exchange rates between the US dollar and foreign currencies and between various foreign currencies may cause the value of an investment to decline. The market for some (or all) currencies may from time to time have low trading volume and become illiquid, which may prevent an investment from effecting positions or from promptly liquidating unfavourable positions in such markets, thus subjecting the investment to substantial losses.

Credit risk is the risk of loss of principal or loss of a financial reward stemming from a borrower's failure to repay a loan or otherwise meet a contractual obligation. Credit risk arises whenever a borrower expects to use future cash flows to pay a current debt. Investors are compensated for assuming credit risk by way of interest payments from the borrower or issuer of a debt obligation. Credit risk is closely tied to the potential return of an investment, the most notable being that the yields on bonds correlate strongly to their perceived credit risk.

Fixed income securities and bond funds can lose value, and investors can lose principal, as interest rates rise. They also may be affected by economic conditions that hinder an issuer's ability to make interest and principal payments on its debt. This includes prepayment risk, the risk that the principal of a bond that is held by a portfolio will be prepaid prior to maturity at the time when interest rates are lower than what the bond was paying. A portfolio may then have to reinvest that money at a lower interest rate.

A cost-of-living adjustment (COLA) is an increase in Social Security benefits to counteract inflation. The global financial crisis (GFC) refers to the period of extreme stress in global financial markets and banking systems between mid-2007 and early 2009.

Gross domestic product (GDP) is a measure of all goods and services produced by a nation in a year. It is a measure of economic activity.

Inflation is the rate at which the general level of prices for goods and services is rising, and, subsequently, purchasing power is falling. Central banks attempt to stop severe inflation, along with severe deflation, in an attempt to keep the excessive growth of prices to a minimum. Liquidity risk is the possibility that securities cannot be readily sold within seven days at approximately the price at which a fund has valued them.

Recession is a period of temporary economic decline during which trade and industrial activity are reduced, generally identified by a fall in GDP in two successive quarters.

The Senior Loan Officer Opinion Survey (SLOOS) on Bank Lending Practices is a survey conducted by the US Federal Reserve Board to gain insight into bank lending practices and conditions.

The Conference Board Leading Economic Index (LEI) is constructed using 10 component indicators to summarize and reveal common turning points in the economy in a clearer and more convincing manner than any individual component. The LEI is a predictive variable that anticipates (or "leads") turning points in the business cycle by around seven months.

The Federal Reserve Bank of New York's Global Supply Chain Pressure Index integrates transportation cost data and manufacturing indicators to provide a gauge of global supply chain conditions.

The Institute for Supply Management (ISM) New Orders Index, ISM Production Index, and ISM Imports Index monitor the volume of new orders, production, and imports, respectively, based on the ISM's surveys of manufacturing and services firms.

The ISM Manufacturing Purchasing Managers' Index (PMI) is an indicator of the economic health of the manufacturing sector. The Manufacturing PMI is a composite of five indices with equal weights: New Orders, Production, Employment, Supplier Deliveries, and Inventories. A Manufacturing PMI reading above 50% indicates that the manufacturing economy is generally expanding; below 50% indicates that it is generally contracting.

Index performance returns do not reflect any management fees, transaction costs or expenses. Indices are unmanaged and one cannot invest directly in an index.

Macquarie Group, its employees and officers may act in different, potentially conflicting, roles in providing the financial services referred to in this document. The Macquarie Group entities may from time to time act as trustee, administrator, registrar, custodian, investment manager or investment advisor, representative or otherwise for a product or may be otherwise involved in or with, other products and clients which have similar investment objectives to those of the products described herein. Due to the conflicting nature of these roles, the interests of Macquarie Group may from time to time be inconsistent with the Interests of investors. Macquarie Group entities may receive remuneration as a result of acting in these roles. Macquarie Group has conflict of interest policies which aim to manage conflicts of interest.

All third-party marks cited are the property of their respective owners.

© 2023 Macquarie Group Limited

macq.co/MAM-Public-Investments

Contact us

Americas

Market Street Philadelphia 215 255 1200 mim.americas@macquarie.com

EMEA

Ropemaker Place London 44 20 303 72049 mim.emea@macquarie.com

Australia

Martin Place Sydney 1 800 814 523 mim@macquarie.com

Asia

Harbour View Street Hong Kong 852 3922 1256 macquarie.funds.hk@macquarie.com