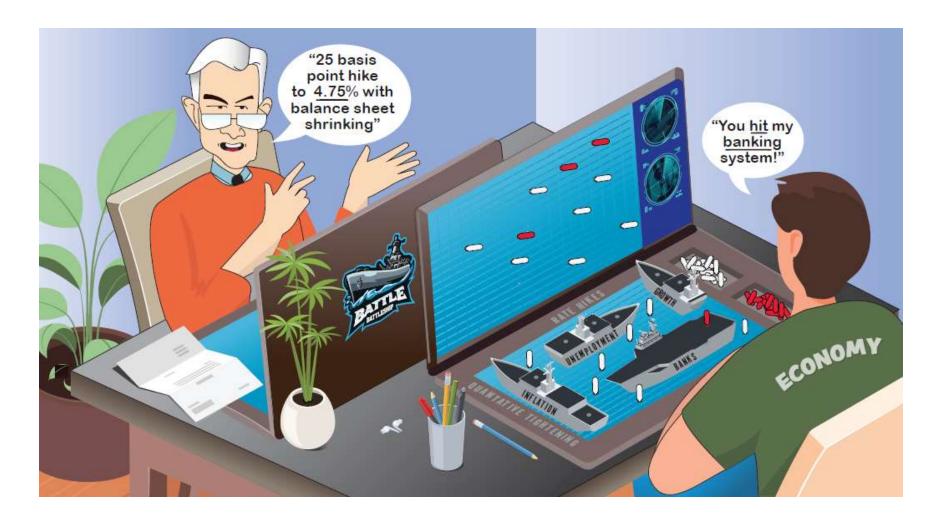


1Q 2023: Fed Tightening Finally Had Dramatic Impact





1Q 2023: Higher Rates Consistently Create Challenges for Markets

- The first quarter started with a strong rally in both rates and credit markets as investors seemed to grow comfortable with the idea the Fed was finally ahead of the curve on inflation. Data in February suggested otherwise, however, as still high inflation and stronger than expected employment data forced markets to reconsider, driving rates higher and credit spreads wider.
- A surge in rates and the expectation of additional Fed rate hikes pushed government bond prices lower. This combined with a drain on deposits, forced Silicon Valley Bank (SIVB) to sell Treasuries at a loss to shore up liquidity, spooking investors, and causing an oldfashioned bank run. Contagion soon spread to other, similar, regional banks such as Signature Bank, First Republic, Western Alliance, and PacWest, causing regulators to take over both SIVB and Signature.
- SIVB's collapse was driven more by a duration mismatch between assets and liabilities, and challenges from a concentrated base of deposits that proved more volatile (less "sticky") than traditional retail deposits. Large, money center banks in the U.S. were largely immune from the volatility, and actually saw deposit inflows in March.
- Stress spread quickly to Europe, with Credit Suisse coming under the microscope given ongoing operational challenges, despite fundamentally strong capitalization metrics. Ultimately, the Swiss National Bank (SNB) stepped in to facilitate a merger with UBS, creating a Swiss banking giant, and restoring order (at least temporarily) to the global banking system.

Our View: The Dodd-Frank reforms of the banking system had their intended effect, and money center banks (the so-called Big 6) in the U.S. are fundamentally solid with far better liquidity and capitalization ratios than existed before the Global Financial Crisis. While regional banks aren't subject to the same stringent regulatory requirements, and it is certainly possible that other regionals could face similar circumstances, our view is that it is not indicative of broader systemic problems in the banking system.



1Q 2023: Fed Responded Quickly to Bank Crisis, But Still Hiked Rates

- Having learned from past crises, the Fed responded swiftly to the unfolding banking crisis, guaranteeing the security of all depositors, regardless of size at both SIVB and Signature. It also launched the Bank Term Funding Program (BTFP) which allows any bank to post Treasury or agency securities to the Fed as collateral for a one year loan for the full par value of the security.
- The Fed's dramatic response caused tremendous volatility in Treasury markets with the 2 year yield Treasury falling over 100 bps (from 5.07% to 3.98%) in 3 days. Investors were quick to adjust expectations for further tightening, with a lower peak Fed Funds rate and cuts pulled forward to the summer of this year. Some pundits even called for 25 basis points of easing at the March meeting, though markets eventually settled on a 25 bp hike, which the Fed ultimately delivered.
- The Fed deposit guarantee and the BTFP, combined with the SNB's decisive action on Credit Suisse, calmed markets considerably by the end of March. Though each of the banks that ultimately required regulators to take over and provide a solution had unique challenges, markets remain nervous, and there remains the potential for additional bank volatility.
- As evidence of this nervousness, smaller banks saw steady deposit outflows during March as depositors moved their money to higher
 yielding money market funds or the security of larger banks. The outflows of deposits and likely tighter lending standards coming as
 smaller banks look to bolster the quality of their loan books suggest overall credit conditions will be tighter going forward, especially for
 small business and commercial real estate lending, which are dominated by regional banks.

Our View: It is too early to say if the bank crises experienced in March are contained or harbingers of additional stress to come. Even so, some things seem likely - a noticeable tightening of lending and financial conditions for all banks, especially regionals, making credit both more difficult to attain and more expensive. The more rigorous credit underwriting is likely to exacerbate the negative fundamental issues around commercial real estate helping to accelerate the timing and potentially extend the length of a coming recession.



1Q 2023: Inflation Remains Elevated

- Despite the recent focus on the banking sector and the need for emergency actions to ensure sufficient liquidity, the Fed still has to deal with inflation at 6%, well above the 2% target, driven largely by the cost of services, which has been much slower to fall than the prices of physical goods.
- Goods inflation is relatively easy to tame as demand falls, prices can be marked down to clear inventory lowering realized inflation,
 which is exactly what we have seen as goods inflation has been flat to slightly negative recently.
- The cost of services, however, is much more dependent on the cost of labor, and wages tend to be sticky that is, once they go higher, it is difficult to shift them lower. As a result, when demand for services falls, prices don't drop nearly as quickly because wages can't be cut to reflect current market conditions. Instead, since wages can't be reduced, headcount eventually falls to rationalize costs, leading to higher unemployment and lower costs, a process which takes far longer to work through.
- Even with inflation running high and the yield curve remaining inverted, markets have significantly repriced expectations for Fed action. At the beginning of March, expectations were for 3-4 additional 25 basis point (bp) hikes this year, with no cuts anticipated until 2024, while by the end of March markets were priced for a roughly 50/50 chance of one additional 25 bp hike (after the 25 bp increase in March) and then 3-4 25 bp cuts by the end of this year.

Our View: Given that inflation is still significantly higher than the Fed's 2% target, they may try to keep rates higher for longer to slow down economic activity, push unemployment higher, and bring inflation closer to target. However, once they do start to cut, they are likely to have to cut far more quickly than the slow pace currently priced into markets. Importantly, though inflation is the priority for the Fed, their policies require a functioning financial system to impact the real economy, and if financial stress becomes so acute that markets stop working, they will do what's necessary to restore market functionality and deal with inflation later.



1Q 2023: Global Central Banks Face Similar Challenges

- Credit markets in Europe were roiled by the details of the SNB assisted takeover of Credit Suisse (CS) by UBS. In particular, the \$17 billion of CS AT1 securities, which rank above equity in the capital structure, were completely wiped out by regulators, despite equity holders receiving a ~\$3bn payout.
- The move was legal, as language allowing such an outcome was written into the original bond indentures (with similar language also existing in many Asian bank AT1 documents), but nevertheless, took many investors by surprise. Prices fell sharply on other AT1 bonds before stabilizing after regulators in the UK, Europe and elsewhere reaffirmed their commitment to respecting the priority of payments in the capital structure.
- Like the Fed in the U.S., global central banks face an array of challenges balancing financial stability concerns with the need to bring down inflation. For example, in the UK, shop price inflation, a measure created in 2005 to reflect the prices Britons actually pay in stores, hit a new record of 8.9% in March.
- Even Japan saw rising inflation with year over year headline CPI of 3.3%. However, unlike in Europe, where markets still anticipate 1-2 additional interest rate hikes early this year by both the Bank of England and the ECB, the Bank of Japan remains committed to an easy monetary policy and yield curve control, though with modestly looser bands than previously.
- The People's Bank of China is the only other major central bank still pursuing an easier policy, with the government taking steps to prop up the economy and support further growth. In particular, central government borrowing in the first quarter reached 277 billion yuan, the highest level since the data was first reported in 1997 in an effort to help local governments deal with increasing financial stress.

Our View: Synchronized tightening on the part of central banks around the world (with the notable exceptions of Japan and China) will continue to weigh on global economic growth. Those dynamics make it less likely that there is any region of the world sufficiently robust to power global growth in the likely event of a U.S. recession. As long as inflation remains elevated, central banks will continue to see constraints in their ability to respond to slowdowns.



1Q 2023: Credit Markets Have Been Remarkably Stable

- Banks dominated the headlines in March, though credit markets struggled across the board pushing the overall market close to the
 widest levels seen toward the end of 2022, before markets stabilized and recovered somewhat to end the quarter around 135 bps over
 Treasuries.
- Despite the weakness in regional banks, large money center banks actually outperformed for the quarter. Though they still trade wider than the overall corporate index, that difference shrunk in March as large banks benefited from deposit inflows from smaller institutions and the widespread belief that they remain "too big to fail".
- The strict regulatory environment of those large banks was validated by their performance through this challenging period. However, given the volatility, longer term there will likely be more restrictive regulations for banks of all sizes, with tighter limits and bigger capital buffers. While this should ultimately be a positive for bank credit strength, earnings may suffer relative to the past.
- High yield markets were surprisingly resilient during the quarter, with spreads actually tightening 14 bps notwithstanding weakness through March given broader market volatility. The sector benefited from a lack of issuance in March, with less than \$5bn of new bonds sold during the month as issuers opted not to access the market given all of the volatility.
- Unsurprisingly, with the Fed lifting rates, banks have been tightening lending standards to high yield issuers for well over a year, and
 recent events are likely to magnify that trend. Historically, there has been a very strong correlation of spreads to tighter lending
 standards, suggesting that assuming lending standards stay elevated, high yield spreads should also move higher as credit to lower
 quality borrowers is restricted, increasing the risk of defaults.

Our View: The recent bank failures suggest a tightening of credit conditions and increased probability of a recession this year, an outcome that is not at all priced into broader credit markets. Although there are pockets of opportunity in select sectors and issuers, we expect overall spreads to widen this year. That said, both investment grade and high yield issuers started this downturn from a position of relative strength as far as balance sheets go, so spreads may not reach the wides experienced in the last several cycles. As usual, we believe a disciplined process of incremental additions at wider spreads is the best way to capitalize on this uncertain future.



1Q 2023: Opportunities and Signs of Weakness in Securitized Sectors

- Higher Treasury volatility and fears of bank selling drove agency mortgage spreads wider during March. Investors anticipated the deposit outflow from smaller banks would force them to liquidate assets, including agency mortgages.
 - With much of the agency MBS market trading at prices in the \$80s, such sales would generate large realized losses, which can now be easily avoided by lending those securities to the Fed via the recently introduced Bank Term Funding Program, making those sales less likely.
 - Additionally, those deposits that leave don't disappear, some of them end up at larger banks, which generally hold a higher percentage of their assets in securities, including agency MBS, which should help to offset potential selling pressure.
- Mortgage rates remain high, making refinancing highly unattractive for most borrowers. As a result, voluntary prepayment rates have been historically low, and markets price most residential MBS as if those low rates will persist for the life of the loans. While refi rates will stay very low as long as rates remain high, once those rates come down, refi rates should return to more normal levels, providing a tailwind to residential MBS at discount prices.
- Consumer ABS showed increasing usage of credit cards and rapidly rising loss rates on unsecured consumer lending, especially among the lowest income cohorts. Though consumer spending has held up well given the abundant excess savings accumulated during the COVID lockdowns, growing stress on the lowest tier of borrowers suggest pending weakness.
- Several high profile defaults on commercial real estate properties during the quarter, together with rising office vacancies in all major
 metropolitan areas, indicate a coming reset of commercial property valuations. Given the flexibility of commercial real estate lenders
 and sponsors to extend and modify troubled loans, this will likely take several years to unfold, but widening spreads in lower rated CMBS
 tranches suggest investors are beginning to recognize the increasing risk.

Our View: Agency MBS remains one of the most attractive opportunities in fixed income, especially considering the wide spreads, lack of credit risk, strong liquidity, backstop by the Fed, and expected low issuance for the foreseeable future given high rates and limited refi activity. Nonagency MBS has benefited from several years of rising home prices and offers solid fundamentals and attractive yields, even in an environment where home prices fall modestly. Caution is warranted in many parts of the CMBS market, though there are still compelling properties and issues for those investors willing and able to do the necessary underwriting. Going forward, as stress materializes in office buildings around the world, and that gets reflected in prices, we expect there to be tremendous opportunity up and down the capital structure in CMBS deals.



1Q 2023 Core and Core Plus Fixed Income Positioning Summary

We remain somewhat cautious overall given the likelihood of recession and the potential for additional volatility. However, we remain diligent in applying our disciplined process of using that volatility to add risk to the portfolio at more attractive levels to maximize long-term performance.

Characteristic	Positioning	Comments
Duration	Ended the quarter approximately 0.5 years long versus the benchmark	Though lower over the quarter, rates are still too high given the recessionary risk, with the 10- Year yield above our estimate of long-term sustainable levels
Curve	Expectations for a steeper curve	Overweight to the 2-Year and 5-Year part of the curve given expectations that the Fed will overshoot and have to ease to support the economy
Governments	Underweight, with an emphasis on on-the-run securities	 On-the-run Treasury securities provide much greater liquidity Modest position in TIPS given attractive breakeven inflation levels
MBS	Agency MBS – overweight	Preference for agency MBS given attractive spread levels, with an emphasis on highly liquid TBAs
	 Non-Agency MBS – increased allocation, with bias to add further 	 Maintain emphasis on high quality legacy non-agency MBS bonds Look to add exposure in newer issues including RPLs, NPL, prime jumbo, and CRT, especially those with embedded home price appreciation
ABS	Small Overweight	 Prefer AAA and AA rated CLOs given better liquidity, robust structures, and attractive spreads Maintain modest position in senior and subordinate FFELP student loan ABS
CMBS	Neutral	Emphasis on super senior single asset single borrower non-agency CMBS holdings, while continuing to look for opportunities down the capital structure
Investment Grade Credit	Neutral	 Look to take advantage of volatility and add on weakness and trim into strength Positioning remains concentrated in high conviction names, money center banks, and defensive sectors like communications and non-cyclicals, particularly healthcare Minimal exposure to cyclical credit sectors and non-corporate credit
High Yield	Small allocation – bias to add	Emphasize defensive credits and select, high conviction idiosyncratic issuers
International	Small allocation – bias to add	Slowing growth and a tightening Fed has historically been a difficult environment for EM issuers



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Fixed income investments entail interest rate risk, the risk of issuer default, issuer credit risk, and price volatility risk. Strategies investing in bonds can lose their value as interest rates rise and an investor can lose principal. Mortgage-backed and other asset-backed securities often involve risks that are different from or more acute than risks associated with other types of debt instruments. MBS related to floating rate loans may exhibit greater price volatility than a fixed rate obligation of similar credit quality. With respect to non-agency MBS, there are no direct or indirect government or agency guarantees of payments in pools created by non-governmental issuers. Non-agency MBS are also not subject to the same underwriting requirements for the underlying mortgages that are applicable to those mortgage-related securities that have a government or government-sponsored entity guarantee. The strategy's investments denominated in foreign currencies will decline in value if the foreign currency declines in value relative to the U.S. dollar. The securities markets of emerging market countries can be extremely volatile. Securities prices and returns will fluctuate with market conditions, currencies and the economic and political climates where the investments are made.

All information is as of the date of this presentation unless otherwise indicated.

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