## *“Stand by me nobody knows the way it’s gonna be”*

Failure of Tech friendly banks – Silicon Valley & Signature – and demise of private banking crown jewels – First Republic Bank & Credit Suisse – sent shockwaves through the global banking system instilling fears of a contagion.

Nobody knows how this film “Bank Run 2023” will play out, but our sense is that if it does it will be “short and extreme” because while bank run seldom happens, when it does, it’s no marathon, rather a sprint. Regardless, it accelerates or not, there are likely to be long term economic consequences from banking channel.

With that in mind, in our latest Market Insights, we first cover the US regional fallen angels, the importance of US regional banks, and what this regional banking crisis may portend for US economy. With the help of T-Accounts we then map the flow-of-funds that may have taken place among US regional banks, US big banks, and the FED, along with base and worst-case scenarios for banking sector.

Furthermore, we try to make sense of recent price action and signal from financial markets. Last but not the least, we try to preempt reaction function of policy makers given the situation at hand and the signposts that may help investors in navigating this uncertain environment.

## US fallen angels and regional banks.

The troubles at these innovative regional banks have been classic case of reflexivity[1] between the value of their stock prices and their deposit franchises – in simple words a crisis of confidence.

It’s true that these banks – with Silicon Valley Bank being an outlier – had large unrealized losses on their asset side but it’s also true that these losses were not related to any toxic credit but to high quality duration and that their deposit franchises had unrealized gains too which could be monetized through fee income and a positive net-interest-margin: call it a high customer life-time value (CLTV) of the rich and famous depositors.

| | Silicon Valley | Signature | First Republic | Bank of America | US Bank |
|---|---|---|---|---|---|
| Uninsured Deposits | 94% | 80% | 68% | 47% | 52% |
| Non-Interest Deposits | 49% | 36% | 35% | 37% | 23% |
| CET1 adjusted | -0.10% | 6.10% | 4.70% | 3.10% | 3.00% |
| Return on Assets 2022 | 0.76% | 1.17% | 0.85% | 0.89% | 0.94% |

*Source: FFIEC call reports, 10k, JPM*

In fact, First Republic Bank has had the best credit underwriting history among US banks, across economic cycles may it be TMT bubble or GFC, whereas Signature bank had predominantly capital call lines of credit which are some of the stronger 1st lien underwritten loans in the banking industry.

**However, what’s truer is that a bank own neither its customers nor its deposits!** As stock prices fell significantly, uninsured depositors were faced with prisoner’s dilemma: if I don’t withdraw my deposit but others do, I will lose, so I must withdraw. Where do I take my deposit? To bigger banks including Bank of America, which according to veteran analyst “Richard Christopher Whalen” has a negative CET1 ratio if its long duration loans were to be marked-to-market.

So why is Bank of America still standing? Because of depositors’ confidence i.e., its deposit franchise. In return for this confidence it instills, Bank of America milks fee income and positive net-interest-margin into the future i.e., unrealized gains on deposits. That’s reflexivity too and perhaps that’s why Berkshire has 10% (still?) stake in Bank of America despite its unrealized losses.

The key takeaway is that the unrealized loss on banking system balance sheet is a mirror image of unrealized gain on households/corporate balance sheets who refinanced at extremely low fixed interest rate whereas the unrealized gain from deposit franchise was supposed to be a mirror image of unrealized loss on households/corporate who were comfortable to keep their deposits below market interest rates. But the issue is that banking assets are locked whereas deposits are not.

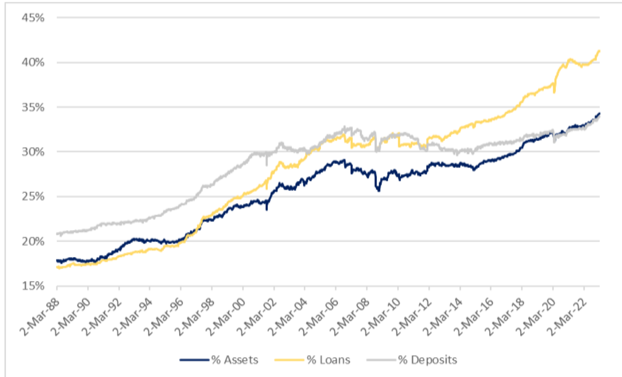
This brings us to the importance of US regional banks. US banking system is unique in the sense that a large portion of credit creation in US is at the behest of regional banks. Because, these banks are closer to their customers, both borrowers and depositors, than larger globally systematic important banks (GSIB), they are an important engine of innovation for domestic US economy. Evidence lies in the statistics which show that regional banks account for almost 40% of US banks’ credit (Chart

[1] reflexivity refers to circular relationships between cause and effect, especially as embedded in human belief structures. Within economics, reflexivity refers to the self-reinforcing effect of market sentiment.

Copyright © Farro Capital 2023

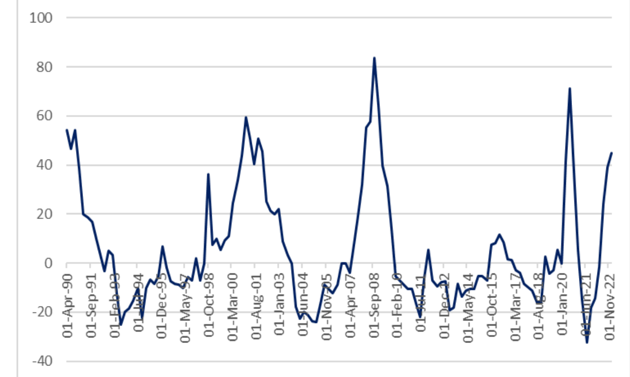
1). So, at a time when lending standards have already been tightening, any further regional bank failures that seep into larger banking system are likely to have a pronounced impact – both cyclical and structural – on US economic growth (Chart 2).

**Chart 1: Share of regional banks in US banking sector.**




*Source: St Louis FED*

**Chart 2: % of banks tightening lending standards.**




*Source: St Louis FED*

## Flow-of-funds and FED balance sheet.

Deposits that left failed and under duress regional banks simply went to the big banks but what matters now is where these deposits will eventually end up. Unless deposits are guaranteed, there are two scenarios that we foresee, one not so good and the other quite bad.

### Scenario 1:

**Deposits flow from regional bank to big banks….**

| Regional Banks | | | |
|---|---|---|---|
| **ASSET** | | **LIABILITY** | |
| Reserves (bn) | -140 | Deposit (bn) | -140 |
| **Big Banks** | | | |
| **ASSET** | | **LIABILITY** | |
| Reserves (bn) | +140 | Deposit (bn) | +140 |
| **Banking sector** | | | |
| **ASSET** | | **LIABILITY** | |
| Reserves (bn) | - | Deposit (bn) | - |

**Regional banks borrow from FED to fill reserves.**

| Regional Banks | | | |
|---|---|---|---|
| **ASSET** | | **LIABILITY** | |
| Reserves (bn) | +140 | Deposit (bn) | -140 |
| **Banking Sector** | | | |
| **ASSET** | | **LIABILITY** | |
| Reserves (bn) | +140 | Deposit (bn) | - |
| **Federal reserve** | | | |
| **ASSET** | | **LIABILITY** | |
| Term lending (bn) | +140 | Reserves (bn) | +140 |

*Equals to the change in loans on FED balance sheet from 8th to 16th March.*

If deposits continue to flow from regional banks to big banks, overall banking sector deposits will be unchanged, but profitability of regional banks will come under extreme pressure as these deposit outflows will be replaced by FED liquidity at market interest rates. Overall, the ability of US banking sector to intermediate credit will diminish – tightening in US financial conditions.

As a side note, the term lending facility by FED adds new liquidity to the system in the shape of bank reserves but does not create any new deposits, unlike QE which creates both reserves for banks and deposits for non-banks, and those deposit then often make their way into financial markets bidding up asset prices.

### Scenario 2:

**Deposits flow from banking sector to treasuries….**

| Banking sector | | | |
|---|---|---|---|
| **ASSET** | | **LIABILITY** | |
| Reserves (bn) | -2000 | Deposit (bn) | -2000 |
| **Money mkt funds** | | | |
| **ASSET** | | **LIABILITY** | |
| Treasuries (bn) | +2000 | Units (bn) | +2000 |

**All banks borrow from FED in droves to fill their reserves.**

| Banking sector | | | |
|---|---|---|---|
| **ASSET** | | **LIABILITY** | |
| Reserves (bn) | +2000 | Deposit (bn) | -2000 |
| **Federal reserve** | | | |
| **ASSET** | | **LIABILITY** | |
| Term lending (bn) | +2000 | Reserves (bn) | +2000 |

If contagion spreads across large US banks too, deposits could eventually disintermediate from overall banking sector and move into money market funds or direct treasury accounts that would leave a big liquidity hole in US banks which then will have nowhere to go but to the FED facility in droves. This scenario will first crush dollar liquidity but then propel FED to take drastic actions to inject liquidity. Accompanied by an extreme tightening in financial condition, followed by the end of current and beginning of a new regulatory regime for US banking sector, cost of capital will increase significantly for US banks.

Copyright © Farro Capital 2023 

## Recent price action and market signal.

If one had slept on 12th March and woken up on 18th March, they would not have considered last week's price action in markets as something too unusual – just a repricing of global growth expectations, but not anything close to a big bang banking crises in the making (Table 1).

However, if one would have looked under the hood, two things would have stood out: i) the extreme divergence between rates and equities volatility (Chart 3), and ii) outperformance of growth vs value stocks (Chart 4). Nonetheless, it would have been hard to reconcile the sharp move in short term yields, which dropped by >100bps, with a normal move in equities and credit.

One plausible explanation for this uncanny cross-asset price action is positioning: Hedge Funds & CTAs may have been big on value and rates trades that got unwound, so equities and credit market took these big moves in rates as half-truths only. The other plausible explanation is that equity and credit risk is still mis-priced given the uncertain environment.

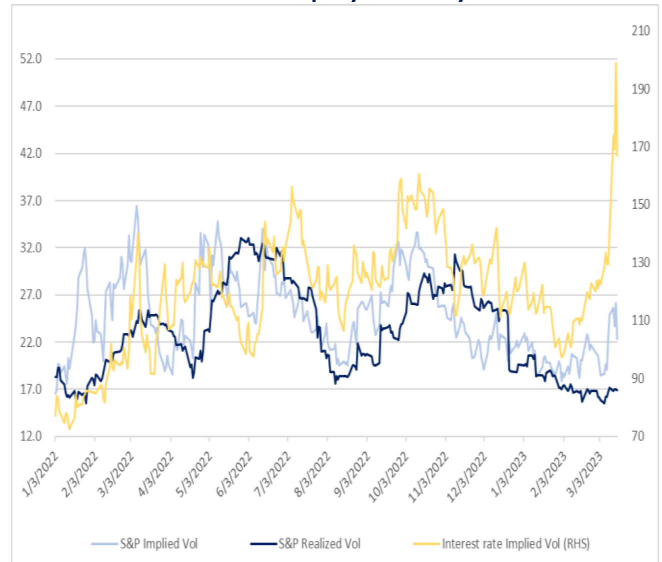
Idiosyncrasies aside, it would be fair to say that global financial conditions have not worsened much in last 1 week given the big drop in short and long-term nominal interest rates, the decline in short and long-term real interest rates, the steepening in yield curve, and the normalization in inflation expectations. For now, risk markets think this contagion will be contained.

**Table 1: Global financial markets.**

| | | 30-Dec-22 | 10-Mar-23 | 17-Mar-23 | 1W | YTD |
|---|---|---|---|---|---|---|
| Equities | S&P 500 | 3840 | 3862 | 3917 | 1.43% | 2.01% |
| | NASDAQ | 10466 | 11139 | 11631 | 4.41% | 11.13% |
| | DOWJONES | 33147 | 31910 | 31862 | -0.15% | -3.88% |
| | STOXX 600 | 425 | 454 | 436 | -3.85% | 2.69% |
| | HANG SENG | 19781 | 19282 | 19442 | 0.83% | -1.71% |
| | US Equity Volatility | 21.67 | 24.8 | 25.51 | 2.86% | 17.72% |
| | US Rates Volatility | 121.6 | 140.1 | 180.1 | 28.59% | 48.10% |
| Credit | US HY Spread | 4.81% | 4.61% | 5.03% | 0.42% | 0.22% |
| | US CCC Spread | 11.57% | 10.60% | 11.65% | 1.05% | 0.08% |
| | US HY bonds | 73.6 | 73.4 | 73.4 | -0.10% | -0.35% |
| | EU HY Spread | 4.94% | 4.40% | 5.14% | 0.74% | 0.20% |
| | EU HY bonds | 89.7 | 91.5 | 87.9 | -3.86% | -1.93% |
| | AT1 Bonds | 23.8 | 24.0 | 22.0 | -8.66% | -7.58% |
| | EM Corp bonds | 42.8 | 43.3 | 43.0 | -0.65% | 0.58% |
| Rates | 2yr US Yield | 4.41% | 4.58% | 3.83% | -0.76% | -0.59% |
| | 10yr US Yield | 3.88% | 3.70% | 3.43% | -0.27% | -0.45% |
| | 30yr US Yield | 3.97% | 3.71% | 3.63% | -0.08% | -0.34% |
| | 10-2 US Curve | -0.53% | -0.88% | -0.40% | 0.49% | 0.14% |
| | 10yr US Inflation BE | 2.30% | 2.29% | 2.09% | -0.20% | -0.21% |
| | 10yr US Real Yield | 1.58% | 1.44% | 1.29% | -0.15% | -0.29% |
| | 10 yr German Bund | 2.44% | 2.51% | 2.11% | -0.40% | -0.33% |
| | 10yr Italian Bond | 4.57% | 4.32% | 4.06% | -0.26% | -0.51% |
| | BTP Spread | 2.13% | 1.81% | 1.95% | 0.14% | -0.18% |
| | 10 yr China Bond | 2.89% | 2.88% | 2.87% | -0.01% | -0.02% |
| Others | EUR/USD | 1.079 | 1.064 | 1.067 | 0.28% | -1.11% |
| | Gold | 1830 | 1868 | 1994 | 6.71% | 8.95% |
| | Oil | 80.51 | 76.68 | 66.74 | -12.96% | -17.10% |

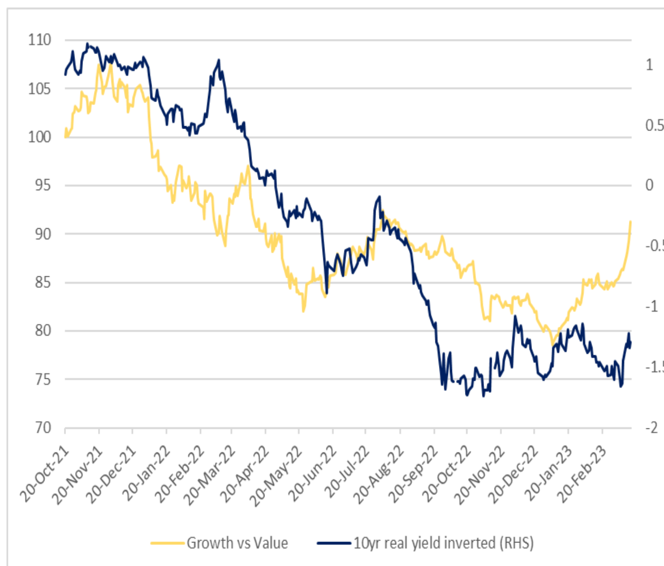
*Source: Bloomberg*

**Chart 3: Interest rate vs Equity volatility.**



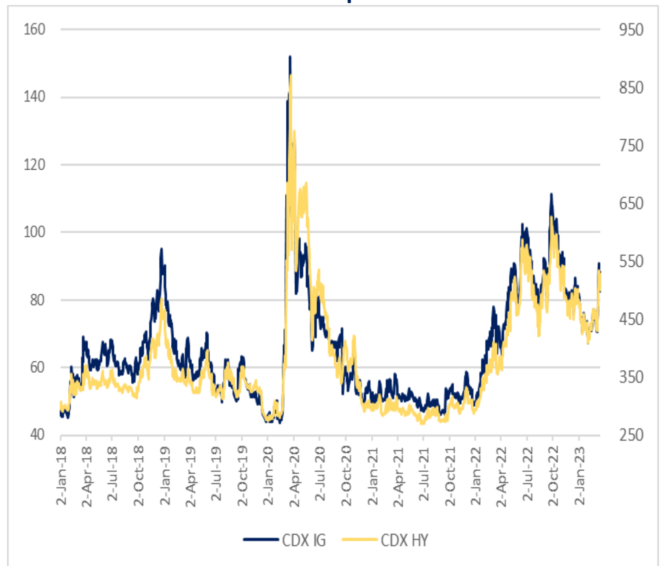

*Source: Bloomberg*

**Chart 4: Growth vs Value.**




*Source: Bloomberg*

**Chart 5: US IG and HY credit spreads.**




*Source: Bloomberg*

Copyright © Farro Capital 2023 

## Policy reaction function and signpost to watch.

Global central banks have acted instantly with FED and SNB lending facilities and FED daily dollar swap lines. These actions, if/when the need arises, shall create fresh bank reserves (new money) to contain financial (liquidity) stress in a crises situation with the goal to prevent reduction in commercial banks' lending. In summary the basic aim has been to achieve financial stability.

While the bone of contention in markets have been whether the FED will hike or pause this week, its exactly this prompt action taken on financial stability that makes it likely that FED will not budge on price stability and will hike policy rate by 25bps in the upcoming meeting. From out vantage point, it was either contagion and no rate hike or no contagion and rate hike.

Going forward, it is going to be tricky so to monitor the contagion, we recommend investors' watch the following indicators closely:

i. Usage of FED lending facility.
ii. Big banks CDS spread.
iii. FRA-OIS spread.
iv. Cross currency basis swap spread.

So far, the usage of FED lending facility seems to be driven by those banks that have been in the news in the last 1 week, given the evidence that its San Francisco FED and New York FED balance sheets that have expanded, roughly in line with deposit withdrawal at Silicon Valley & First Republic Bank in California and Signature Bank in New York. Meanwhile, Big Banks CDS spreads have widened but remain below their October 2022 highs. Similarly, FRA-OIS and cross currency basis swap spreads have widened too but have not crossed October 2022 highs.

Wish everyone a good week ahead!

Copyright © Farro Capital 2023

**Disclaimer:** This publication has been prepared by Farro Capital Pte. Ltd. (Farro) for accredited investors (as defined in Section 4A of the Securities and Futures Act, Chapter 289 of Singapore). Accredited investors are assumed to be better informed and better able to access resources to protect their own interests, and therefore require less regulatory protection. Investors who agree to be treated as accredited investors therefore forgo the benefit of certain regulatory safeguards. For example, issuers of securities are exempted from issuing a full prospectus registered with the Monetary Authority of Singapore in respect of offers that are made only to accredited investors, and intermediaries are exempted from a number of business conduct requirements when dealing with accredited investors. You should consult a professional adviser if you do not understand any consequence of being treated as an accredited investor.

The publication is provided on a general basis for information purposes only, and does not constitute an invitation, recommendation, offer or solicitation to acquire, purchase or subscribe for any funds managed by Farro Any offer or solicitation will be made only upon execution of completed information memorandum, subscription application and relevant documentation, all of which must be read in their entirety. The information contained herein is not to be relied on as investment, legal, tax or other advice as it does not take into account the investment objectives, financial situation or particular needs of any specific investor. Investments in funds are subject to investment risks, including the possible loss of the principal amount invested. The value of units and shares and the income from them may fall or rise and investors may not get back the amount originally invested. Currency exchange rate changes may cause the value of overseas investments to rise or fall. Past performance is not necessarily indicative of future performance. This publication may contain forward-looking statements that involve risks and uncertainties. Actual future performance, outcomes and results may differ materially from those expressed in forward-looking statements as a result of a number of risks, uncertainties and assumptions. Opinions and estimates are subject to change without notice.

Advice should be sought from an independent financial adviser regarding the suitability of the funds before purchasing any shares in the funds. If you decide not to seek advice from an independent financial adviser, you should consider carefully whether the funds are suitable for you. You should read the relevant offering materials carefully before making any investment decision.

While care has been taken in preparing the information contained herein, the information is provided to you without warranty of any kind, whether express or implied. Farro makes no representation or warranty as to the accuracy, completeness or reliability of the information and shall not have any liability for any representations (express or implied) regarding the information contained herein, or for any omissions from this publication, or any other written or oral communications transmitted to investors.

This publication has not been reviewed by the Monetary Authority of Singapore.

Copyright © Farro Capital 2023