Lessons from the Fall: A Comparative Analysis of Recent US Bank Failures and the Resilience of the Philippines' Top Banks

JP Morgan's acquisition of First Republic Bank's assets for \$10.6 billion last week (Reuters) marks the third bank failure in the US banking system, in the span of two months. Silicon Valley Bank was the first domino to fall, back in March 10. It was quickly followed by Signature Bank, just two days after.

In this article, we will first discuss the key factors that led to First Republic's fall. We will then analyze the financials of the top Philippine banks to assess the risk of a similar bank failure happening here in the country.

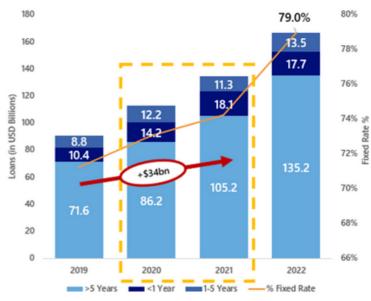
Figure 1: First Republic Bank Deposits 2019 to 2022 200 98% 95.3% 180 96% \$66bn 25.2 160 94% 92.4% 140 92% Deposits (in USD Billions) 120 90% 8.7 78.1 88.7 100 88% ASA 80 86% 59.9 60 84% 43.1 40 82% 70.8 62.6 46.3 20 80% 33.1 0 78% 2019 2022 2020 2021 Savings Account Time Deposits CASA Ratio Current Account

First Republic Bank

The story of First Republic Bank's fall started with a \$66 billion "problem". To be more specific, **the bank saw an influx of \$66 billion worth of deposits during the pandemic** (see Figure 1). The Covid lockdowns brought most business activity to a halt and left limited opportunities for discretionary consumption. As a result, businesses & wealthy individuals found themselves with a surplus of cash, which they subsequently parked in the bank.

With the sudden inflow of funds, First Republic was faced with a question: Where to invest the money? A prudent answer would have been to invest in short-term loans or bonds, given the historically low interest rates at the time & the short-term nature of the deposits (virtually all the new deposits were in the form of CASA deposits, bringing up the bank's CASA ratio to 95.3%). The bank, however, had different plans. First Republic, in 2020-21, opted to invest **\$34** billion in 10+-year (~80% fixed-rate) home mortgage loans (see Figure 2). It also bought ~**\$5 billion in long-term held-to-maturity debt** securities (see Figure 3).

Figure 2: First Republic Bank Loans (per Maturity Bucket) 2019 to 2022

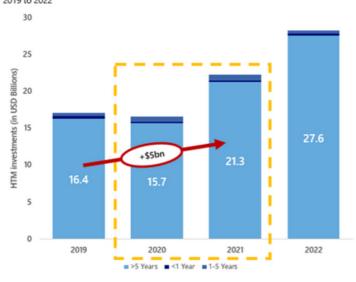


Source: First Republic Bank Financial Statements

Source: First Republic Bank Financial Statements; NRI Analysis

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Figure 3: First Republic HTM Debt Securities (per Maturity Bucket) 2019 to 2022

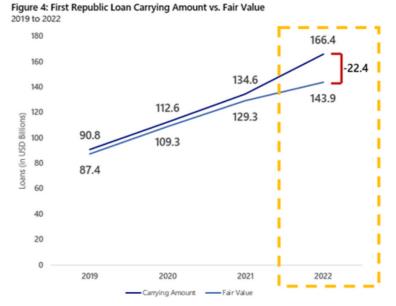


Source: First Republic Bank Financial Statements

The problem with this investment strategy quickly became apparent in 2022. In that year, the US Fed rapidly raised policy rates to the tune of 425 basis points, in a bid to tame inflation. The sharp rise in interest rates significantly affected the fair value of fixed income securities – with long-term fixed rate assets hit the hardest.

This phenomenon can be clearly seen by comparing the carrying amount and fair value of First Republic's loan and held-tomaturity portfolios. This analysis shows \$22.4 billion worth of unrealized losses in First Republic's loan portfolio (see Figure 4) and another \$5.7 billion in its held-tomaturity portfolio (see Figure 5). This \$28.1 billion in "hidden" unrealized losses is larger than the bank's equity and regulatory capital of \$17.5 billion and \$19.1 **billion**, respectively.

We call these unrealized losses "hidden" since these do not affect a bank's equity and regulatory capital. This is because, unlike trading (FVTPL) and available-for sale (FVOCI) securities which are carried in the financial statements at fair value, loans and held to maturity debt investments are carried at amortized cost.



Source: First Republic Bank Financial Statements; NRI Analysis



Figure 5: First Republic HTM Debt Securities Carrying Amount vs. Fair Value

On its own, the unrealized losses should not have necessarily been fatal. As the bonds and the loans move closer to maturity, the fair value would have inched up closer to par. In addition, when (or should I say if?) the direction of interest rates reverses, then fixed income security prices should eventually recover.

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Time, however, was not in First Republic's side. The fatal blow came in the first quarter of 2023, when retail depositors pulled out ~\$100 billion of deposits – reversing the ~\$85 billion inflow from 2019 to 2022. This large outflow would force the bank to liquidate part of its loan and HTM portfolios, which would cause the "hidden" unrealized losses to be recognized and essentially wipe out the bank's equity.

A syndicate of large banks, led by JP Morgan and Citibank, attempted to stabilize the First Republic by way of a \$30 billion deposit back in March, but this was not enough. As such, on May 1, 2023, the FDIC seized First Republic's assets and sold it to JP Morgan (Reuters).

The Recipe for a 2023 Bank Run

The story of First Republic bears a lot of similarities with the fall of Silicon Valley Bank and Signature Bank. It can be summarized in seven steps:

- 1. It started with an **influx of cheap demand deposits**, because of the pandemic.
- 2. The banks then **invested in long-term**, **fixed-rate debt securities**. In the case of First Republic, it was in long-term mortgage loans. For Silicon Valley Bank, it was in long-term government bonds.
- 3. Interest rates rose sharply in 2022, due to the rapid policy rate hikes by the US Fed.
- 4. This rise in rates significantly hit the value of fixed-income securities.
 Portfolios which are overweight on duration were hit the hardest.
- 5. As the lockdowns eased, businesses and consumers **withdrew their surplus cash**.

6. Banks were forced to liquidate their longterm investments at a loss to meet the withdrawals – even to the point of wiping out the bank's equity and regulatory capital.
7. The bank's clients notice the drop in capital and withdraw all their deposits in panic – kicking-off a vicious cycle.

Taking all this information into account, we propose this framework. We think that a bank faces a higher risk of a bank run in 2023 if it:

- 1. Had a **rapid increase in CASA deposits** over the past three years.
- 2. Invested most of the deposit proceeds in **long-term, fixed rate debt securities.**
- 3. Has a **significant amount of "hidden losses"** in its amortized cost portfolio (loans or investments) – enough to wipe out its regulatory capital.
- 4. Experienced a drop in deposits in the 1st quarter of 2023.

An Analysis of the Top Philippine Banks

We will now attempt to apply this framework (see Figure 6) to the top three Philippine banks: (a) BDO, (b) BPI, and (c) Metrobank.

Metric	BDO	BPI	MBT	Average	First Republic
1 Pandemic Deposit Growth					
CAGR (2019 to 2022)	9.0%	7.3%	9.0%	8.4%	25.1%
CASA Ratio (2019 to 2022)	79.7%	75.0%	69.6%	74.7%	89.5%
2 Share of Long-Term Fixed Rate Deb	t Instrume	nts			
% of Loans with >5 Years Maturity	48.7%	36.3%	34.2%	39.7%	81.3%
% of Loans with Fixed Rates	23.0%	7.9%	17.6%	16.2%	79.0%
% of Investments with >5 Years Maturity	52.8%	64.4%	51.1%	56.1%	97.5%
3 Hidden Losses in Amortized Cost P	ortfolio (in	USD Billior	ns)		
Unrealized Gain (Losses) in Loan Portfolio	0.7	6.5	0.1	2.4	-22.4
Unrealized Gains (Losses) in HTM Portfolio	-0.7	-0.5	-0.1	-0.5	-5.7
Total Unrealized Gains (Losses)	0.0	6.0	-0.1	2.0	-28.2
4 Post-Pandemic Deposit Growth					
Deposit QoQ Growth (1Q-2023)	0.1%	2.5%	1.9%	1.5%	-40.8%

Figure 6: Key Metrics of Top Philippine Banks vs. First Republic

Source: BDO, BPI, Metrobank, and First Republic Bank Financial Statements; NRI Analysis

1. Rapid increase in CASA deposits during the pandemic?

From 2019 to 2022, BDO, BPI, & Metrobank saw deposit CAGRs between 7-9%. Although these figures are higher than their pre-pandemic growth rates, they're considerably slower, and hence potentially more sustainable, than First Republic's surge of 25.1% over the same period.

Furthermore, the CASA ratios of BDO (79.7%), BPI (75.0%), and Metrobank (69.6%) were significantly lower than First Republic's ratio of 89.5%. This lower CASA ratio indicates a more stable deposit base, as a larger proportion of deposits are in the form of time deposits which are less likely to be withdrawn immediately. This potentially insulates these banks from sudden, large-scale withdrawals, enhancing their financial stability.

2. Significant exposure to long-term fixed rate debt securities?

BDO, BPI, and Metrobank have a significantly lower percentage of their loans and investments with maturities exceeding five years compared to First Republic Bank. Specifically, BDO has 48.7% of loans and 52.8% of investments, BPI has 36.3% of loans and 64.4% of investments, and Metrobank has 34.2% of loans and 51.1% of investments maturing in more than five years. In contrast, First Republic has a staggering 81.3% of loans and 97.5% of investments with such extended maturities. This shorter loan and investment tenor for the three banks reduces their portfolio duration, making them less susceptible to the impacts of interest rate movements.

BDO, BPI, and Metrobank also maintain a lower proportion of fixed rate loans (23.0%, 7.9%, and 17.6% respectively) compared to First Republic, which has 79.0% of its loans with fixed interest rates. As a result, these three banks have greater flexibility to reprice their loans upwards in response to increasing interest rates, thereby reducing market price risk.

3. Significant "hidden losses" in its loan and held-to-maturity portfolio?

BDO, BPI, and Metrobank's loan and debt investment portfolios exhibit financial resilience with virtually no "hidden" unrealized losses, a stark contrast to First Republic Bank, which "hides" significant total unrealized loss of \$28.2 billion in its amortized cost portfolio. This financial landscape indicates that if BDO, BPI, and Metrobank were faced with an emergency (say, a sudden withdrawal of client deposits) requiring the liquidation of their loan and investment portfolios, there would be no negative effect on their equity or regulatory capital.

4. Drop in deposits in Q1-2023?

Deposit growth for the top three banks showed no signs of reversing, growing at an average of 1.5% quarter on quarter.

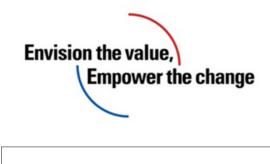
The catastrophic fall of First Republic Bank offers a stark warning for the banking industry, underlining the critical importance of prudent financial management, particularly in times of crisis. However, upon analysis, the top Philippine banks - BDO, BPI, and Metrobank, appear to have effectively mitigated the risk of a similar downfall, demonstrating sustainable growth rates, more stable deposit bases, and significantly less exposure to long-term, fixedrate debt securities.

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Furthermore, they do not bear any substantial "hidden" unrealized losses, suggesting that their equity and regulatory capital would remain intact even in an emergency scenario. Despite the challenging economic landscape, these banks have also sustained consistent deposit growth into Q1 2023. Overall, while the banking industry remains under pressure, BDO, BPI, and Metrobank have so far navigated the volatile environment effectively, demonstrating resilience and robust financial health.

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Allan Tripon Jr. is the Business Strategy Consulting Head of Nomura Research Institute Singapore – Manila Branch. He specializes in topics on financial markets, company valuation, economics, accounting, and taxation.

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