

Regional Banks

Financial Services

February 8, 2023

Industry Rating

Market Weight

Investment Thesis

We recommend a **Market Weight** rating for the Regional Banks industry. We expect the industry to endure the current economic challenges amid rising interest rates leading to inversion of the yield curve, slowing economic growth adversely affecting asset growth (loan book) and non-interest (fee based) income. While the widening of the net interest spread provides significant risks as short-term deposits become more and more expensive, regional banks have a stronghold in the markets they serve, having built strong ties with the community. And, with demand for capital still going strong, there is a cushion for the banking industry with a potential to earn greater spreads.

Drivers of Thesis

- Increase in interest rates leading to higher net interest income led by better interest spreads, bringing in higher free cash flows for the banks.
- Increase in aggregate household debt levels backed by a robust labor market despite broader economic concerns. This presents an opportunity for banks to lock in loans at higher interest rates.
- The banking industry is undergoing a technological transformation, with investments in Artificial Intelligence (AI), Fintech, open banking, and cryptocurrencies. This presents opportunities as well as threats for all banking entities.

Risks to Thesis

- Prolonged inversion of yield curve can adversely affect profitability as it makes borrowing expensive and lending cheaper, eating into the profits of the bank.
- Higher Yields also affect holding value of fixed income securities, resulting in mark-to-market losses on the balance sheet.
- Tighter monetary policies make borrowing expensive for households and businesses. This could discourage entities from taking out loans, slowing down growth of the banks' loan portfolios.
- New trends in the banking sector could disrupt the traditional business model of banks. This could force the banks' hand into technologies and products they do not fully understand. It would become imperative for all banks to invest heavily to survive which is a challenge as the industry is heavily regulated and isn't used to moving quickly.

Key Industry Statistics

(Source: FactSet)

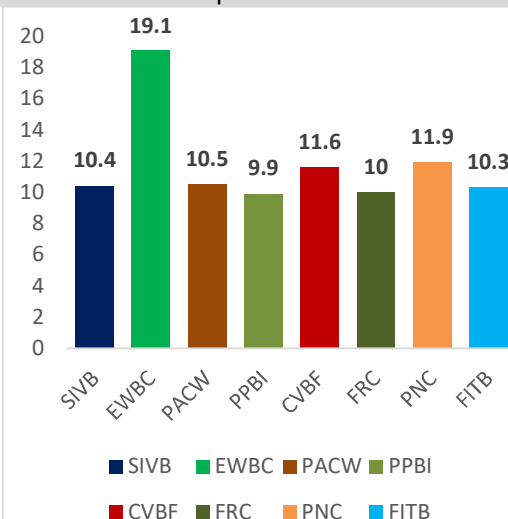
Main Competitors

Market Cap.

SVB Financial Group	\$18.91 B
East West Bancorp	\$11.6 B
PacWest Bancorp	\$3.91 B
Pacific Premier Bancorp	\$3.5 B
CVB Financial	\$3.6 B
First Republic Bank	\$29.6 B
PNC Financial Services	\$66.4 B
Fifth Third Bancorp	\$26.7 B

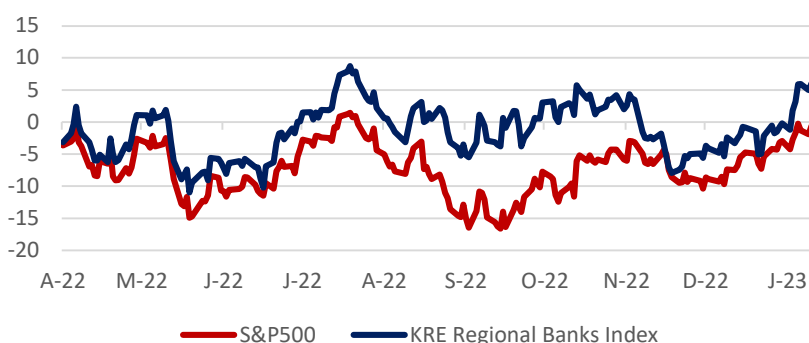
Price/Book Value

SVB Financial Group	1.18
East West Bancorp	1.31
PacWest Bancorp	0.39
Pacific Premier Bancorp	0.79
CVB Financial	1.13
First Republic Bank	0.19
PNC Financial Services	1.29
Fifth Third Bancorp	0.80



Return On Equity

12 Month Performance



Industry Description

The Regional Banks industry in the US comprises commercial banks with operations not limited to one state. What differentiates the Regional Banks with large commercial banks is the much smaller scope of operations. These banks offer a variety of services not limited to deposits, mortgages and loans, investment banking, brokerage services, etc. These banks have deep rooted relationships in the community which enables them to provide the full host of services as a large bank with better service.

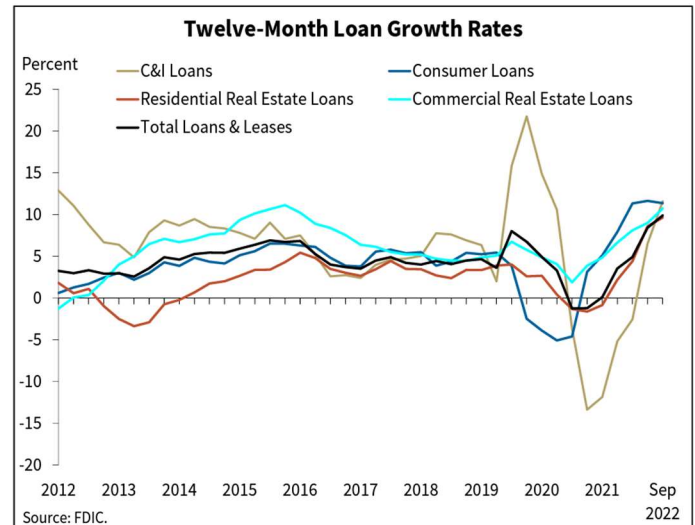
REGIONAL BANKING INDUSTRY

The US Regional Banks industry typically consists of banks with \$50-\$500 billion AUM and operates in multiple states. Over the past 5 years, the regional banks industry has benefited from increased consumer confidence and debt levels but faced a decline due to the Covid-19 impact on the economy. Over the next 5 years, the industry is expected to grow as the coronavirus concerns fade and there is an increase in the Fed Funds Rate (FFR). Rising interest rates are expected to not affect consumer debt as household debt is expected to increase. The industry is expected to reach a revenue of \$315 billion by 2026.²

Bank Assets

Banks earn revenue from a range of sources referred to as "earning assets," including loans and securities. Over the five-year period ending 2021, the annual growth rate of net loans was 3.0%. Meanwhile, banks also hold securities on their balance sheets, including investment securities which account for a significant portion of their earnings. These securities are usually invested in fixed-income instruments and make up \$6.1 trillion of U.S. banks' holdings, according to the FDIC. Trading securities are held primarily for capital gains and are marked-to-market daily, leading to more volatile earnings. U.S. Treasury securities are considered risk-free, with their rate often used as a benchmark for other securities. Other types of securities held by banks include mortgage-backed securities, municipal bonds, and equity securities, the latter being the riskiest but making up a small portion of their portfolios.

As we can see in the above table, Commercial and Industrial (21%), Residential Mortgages (20%) and Nonfarm Non-residential real estate (15%) make up most of the overall loan portfolio for banks in the US as of Q3 2022. We believe mortgage, construction and auto loans will face the most challenges going forward, in an environment which is anticipating a recession.



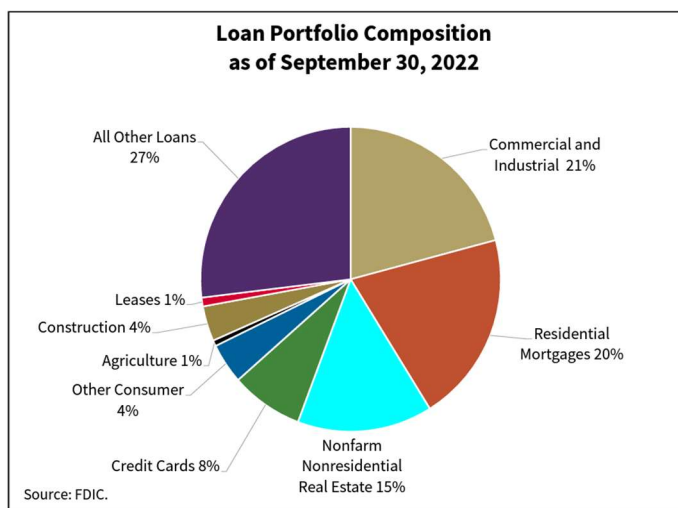
Source: FDIC

In the chart above, we can see the loan growth rates for the different categories over the last year. While Commercial & Industrial loans and Consumer loans declined sharply since the onset of the pandemic, recovery in the Consumer segment can be seen since early 2021, showcasing strong consumer sentiment and the effect of stimulus checks. And while the C&I category took longer to recover, it has done it swiftly. We expect loan growth to be muted across segments as interest rates increase and people become apprehensive of taking on debt at higher interest rates.

Bank Liabilities

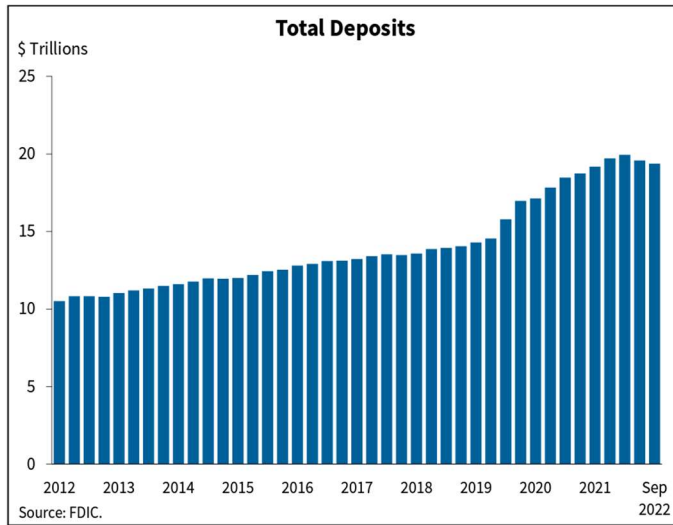
Deposits are a crucial component of a bank's liabilities and include various types such as consumer demand and time deposits, corporate demand and time deposits, foreign deposits and borrowings, and negotiable certificates of deposit. Consumer savings plans with banks consist of demand deposits and time deposits and are a crucial source of funds.

As seen in the table below, despite low interest rates, deposits held in domestic offices have grown at an average annual rate of 5.7% over the five-year period ended 2019.



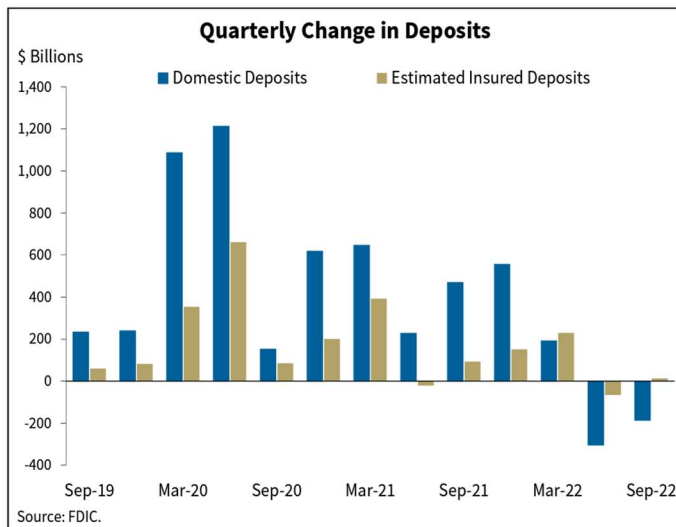
Source: FDIC

The growth in deposits increased significantly in 2020 (13.0%) due to Covid-19 concerns but has since slowed down to 6.7% in 2021 and 2.1% Y/Y as of Q2 2022.



Source: FDIC

Over the last 12 months, with the Fed increasing interest rates, interest rates on various treasury and corporate bonds have risen. We believe this has led to investors moving their capital into these fixed income securities from bank deposits in search of better yields. This is evident in the decline in total deposits and quarterly change in deposits tables given below.



Source: FDIC

Increasing Share of Non-interest Income

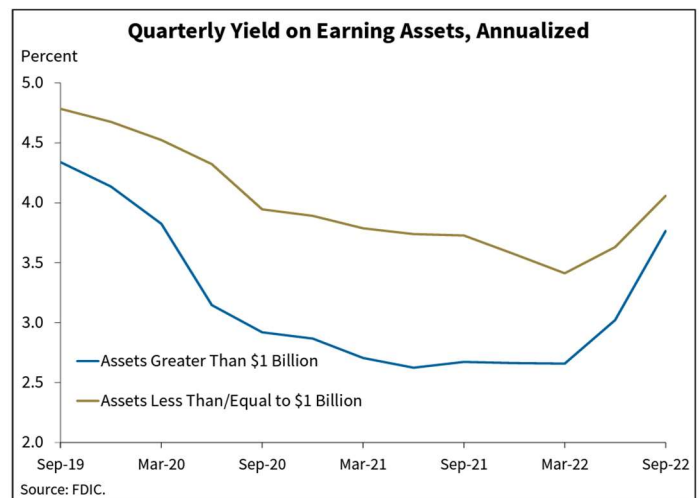
It has been observed that the generation of non-interest income by U.S. banks has increased since 2019, with banks seeking to diversify their fee-based revenue streams. The

growth in non-interest income has not been uniform, with a decline seen at banks with assets less than \$10 billion and an increase seen at larger banks. The overall non-interest income in U.S. banks has risen by 17.2% from Q1 of 2019 to Q1 of 2022, while net interest income has fallen by 0.89% over the same period. The non-interest income growth has leveled off, with larger banks having an advantage in generating fee income due to their scale. Acquisitions of fee-based businesses and partnerships with nonbank companies have been pursued by some banks to improve their non-interest-income portfolios. Diversification of revenue sources has become important for banks as economic uncertainty arises.

Key Financial Metrics

Yield on earning assets (YEA)

This ratio is used to compare the risk profile of a bank's loan portfolio with other banks. If the YEA is high relative to that of other banks, it may indicate a high-risk portfolio of earning assets, particularly high-risk loans. If it is substantially lower than that of other banks, it may show conservative lending practices or troubled loans that are yielding less than they should.

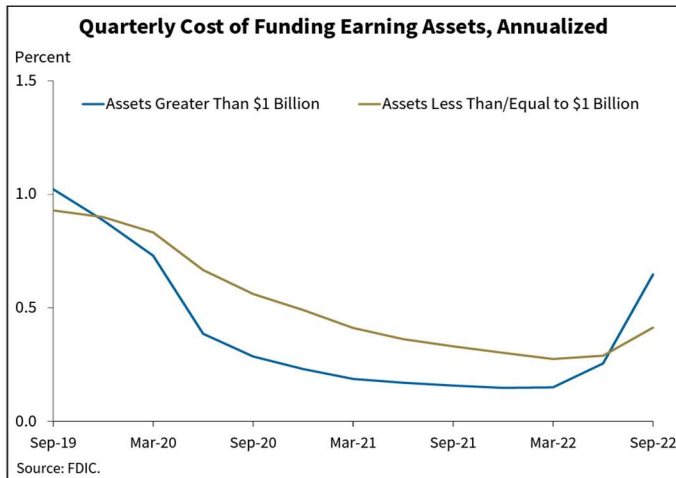


Source: FDIC

Cost of funding earning assets (COF)

The cost of funding earning assets refers to the expense incurred by a financial institution in obtaining the funds required to finance its earning assets, such as loans, mortgages, and investments. This cost includes interest payments on deposits, borrowing costs, and any fees associated with obtaining funding.

The table below shows the rapidly increasing COF for banks, which is up from 0.2% in March 2022 to 0.65% as of September 2022. While it hasn't reached Covid levels yet, it is fast approaching the 1% mark, indicating challenges for banks to attract deposits and further increase costs.



Source: FDIC

Net Interest Spread

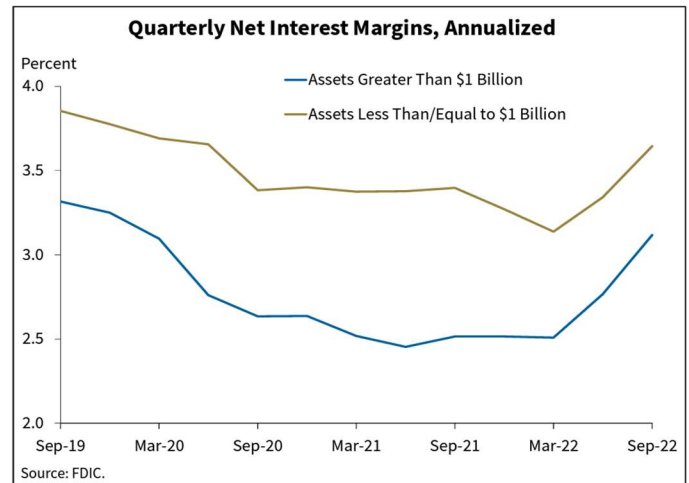
The net interest spread is the difference between the interest earned on earning assets and the interest paid on funding sources. It is a measure of the profitability of lending and deposit-taking operations. A higher net interest spread indicates a greater return on its earning assets relative to the cost of funding those assets.

Net Interest Margin

Net interest margin (NIM) represents the amount of money a financial institution earns from its interest-generating activities, such as lending and investing, after deducting the cost of funding those activities. A higher NIM indicates a higher return on assets relative to the cost of funding those assets and is therefore more profitable.

Company	Net Interest Margin
SVB Financial Group	2.12%
First Republic Bank	2.69%
East West Bancorp	3.45%
PacWest Bancorp	3.49%
PNC Financial Services	2.77%
Fifth Third Bancorp	17.28%
Pacific Premier Bancorp	3.53%
CVB Financial	3.29%

Source: FactSet



Source: FDIC

Provision for Loan Losses

A provision for loan losses (often referred to as a loan loss reserve or loan loss provision) is an expense set aside by a financial institution to cover the estimated losses on its loan portfolio. The purpose of the provision is to ensure that the financial institution has sufficient funds available to cover potential loan losses in the future. The provision is based on the financial institution's assessment of the collectability of its loans and is typically calculated using statistical models that consider factors such as loan type, loan-to-value ratio, credit score, and economic conditions. It is an important component of a financial institution's risk management process.

Company	Loan Loss Provision/ Interest Income
SVB Financial Group	7.40%
First Republic Bank	1.87%
East West Bancorp	3.22%
PacWest Bancorp	1.57%
PNC Financial Services	3.09%
Fifth Third Bancorp	8.55%
Pacific Premier Bancorp	0.63%
CVB Financial	2.06%

Source: FactSet

The table above shows the loan loss provision in our peer set. It can be a leading indicator of future NPAs.

Non-Interest Income

Non-interest income refers to income generated by a financial institution from sources other than interest-earning activities, such as lending and investing. Non-

interest income can come from a variety of sources, including fees and commissions, gains on securities transactions, and income from insurance operations. It is an important component of a financial institution's overall revenue, as it can help to diversify its income streams and reduce its dependence on interest income. Additionally, non-interest income can provide a more stable source of revenue, as it is not as directly impacted by changes in interest rates as interest income.

Company	% of Non-Interest Income
SVB Financial Group	27.82%
First Republic Bank	18.12%
East West Bancorp	11.01%
PacWest Bancorp	5.24%
PNC Financial Services	48.72%
Fifth Third Bancorp	46.09%
Pacific Premier Bancorp	11.55%
CVB Financial	9.18%

Source: FactSet

Typically, Regional banks are not as well diversified as large banks, which can be seen in the chart above. As the size of the bank increases, the share of non-interest income is observed to increase, with Fifth-Third, SVB and PNC.

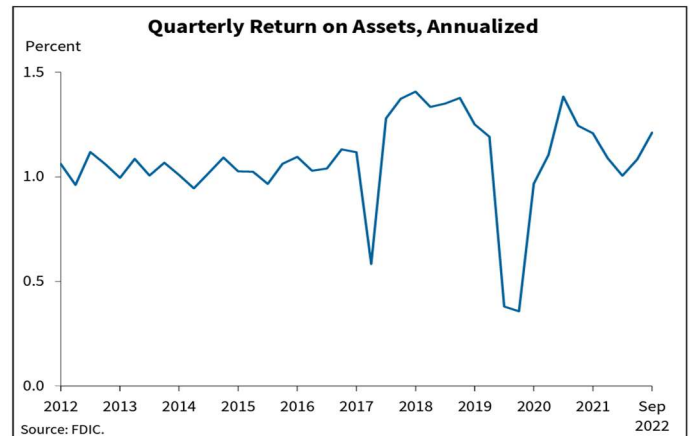
Non-Interest Expenses and Efficiency Ratio

Non-interest expenses are the expenses incurred by a financial institution in its operations that are not directly related to the generation of interest income. These expenses can include salaries and benefits, marketing and advertising, technology and communications, occupancy and equipment, and other general and administrative expenses. The efficiency ratio is a financial metric that measures a financial institution's ability to control its expenses relative to its revenue. It is calculated as the ratio of non-interest expenses to the sum of net interest income and non-interest income. A lower efficiency ratio indicates that a financial institution can control its expenses more effectively and is therefore more efficient in its operations.

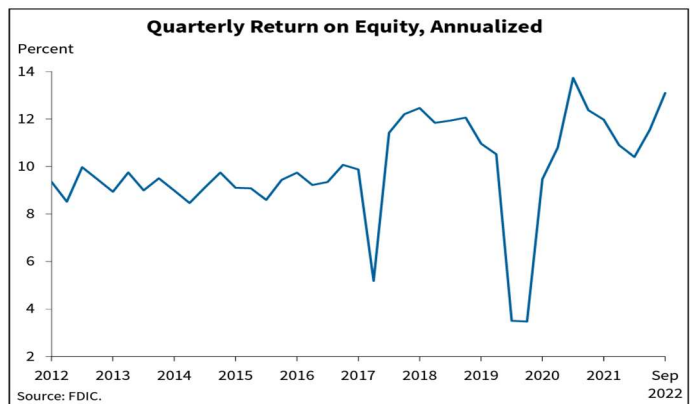
Return on Assets & Return on Equity

Return on assets (ROA) is useful for comparing the profitability of different banks, as it considers both the size and efficiency of the bank. It is also useful for comparing the profitability of a bank over time, as it reflects the bank's ability to generate income from its assets.

Return on Equity (ROE) measures a bank's profitability by calculating the amount of return generated relative to the amount of equity invested by shareholders.



Source: FDIC



Source: FDIC

Company	ROE	ROA
SVB Financial Group	9.09%	0.71%
First Republic Bank	10.00%	0.84%
East West Bancorp	19.10%	1.80%
PacWest Bancorp	10.50%	1.02%
PNC Financial Services	11.90%	1.07%
Fifth Third Bancorp	10.30%	1.17%
Pacific Premier Bancorp	9.90%	1.31%
CVB Financial	11.70%	1.46%

Source: FactSet

The above table shows the ROE and ROA for our peer set. The banks with the highest ROE and ROA are East West Bank and CVB Financial. SVB and Pacific Premier have the lowest Return Ratios. This is interesting to see, as these banks work with businesses in a larger proportion.

Allowance for Loan Losses

The Allowance for Loan Losses (ALL) is a provision that banks set aside to cover the estimated losses on their loan portfolio. It is a crucial aspect of a bank's financial management, as it helps ensure that the bank has sufficient funds to cover potential loan defaults.

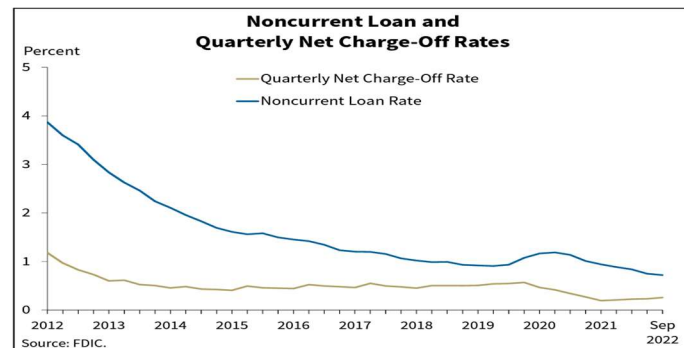
Company	Loan Loss Provision/ Interest Income
SVB Financial Group	7.40%
First Republic Bank	1.87%
East West Bancorp	3.22%
PacWest Bancorp	1.57%
PNC Financial Services	3.09%
Fifth Third Bancorp	8.55%
Pacific Premier Bancorp	0.63%
CVB Financial	2.06%

Source: FactSet

Banks use various methods, such as historical loss experience, current economic conditions, and individual loan evaluations, to estimate the amount of the allowance needed. The ALL is recorded as a deduction from the loan portfolio on a bank's balance sheet and is periodically reviewed and adjusted based on changes in the loan portfolio or economic conditions. Having an adequate allowance for loan losses is important for the stability and solvency of the bank, as it helps mitigate the impact of loan defaults and protects the bank's financial performance. The allowance also serves as a signal to regulators and investors of the bank's risk management practices and financial health.

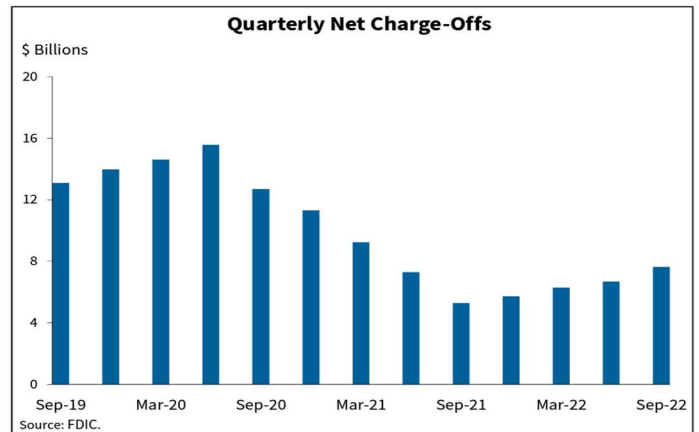
Net charge-offs

Net Charge-Offs (NCOs) describe the amount of loan or lease balances that a bank writes off as uncollectible. It represents the amount of loans that a bank has determined cannot be recovered and is recorded as an expense on the bank's income statement.



Source: FDIC

Net charge-offs are calculated as the total amount of charge-offs during a given period, minus any recoveries of previously charged-off loans during that same period. Net charge-offs are important indicators of a bank's credit quality and loan portfolio performance. High levels of net charge-offs can indicate poor underwriting practices, an increase in loan defaults, or a weak economic environment.



Source: FDIC

Non-performing loans

Non-performing loans (NPLs) are loans that are in default or are close to default, meaning the borrower has failed to make payments for an extended period. They are a key indicator of a bank's credit quality and loan portfolio performance. NPLs are considered a significant risk for banks, as the likelihood of recovery of the loan amount decreases with the length of time the loan remains in default. Banks are required to set aside reserves for NPLs to cover potential losses, which can impact their profitability and solvency. The level of NPLs in a bank's portfolio is closely monitored by regulators and investors, as high levels of NPLs can indicate weak credit risk management practices and a potentially unstable financial situation.

Company	Non-Performing Assets/Total Assets
SVB Financial Group	0.06%
First Republic Bank	0.05%
East West Bancorp	0.16%
PacWest Bancorp	0.26%
PNC Financial Services	0.36%
Fifth Third Bancorp	0.26%
Pacific Premier Bancorp	0.14%
CVB Financial	0.03%

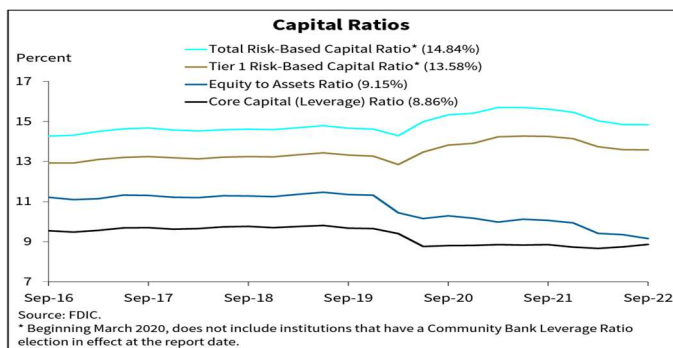
Source: FactSet

The NPAs show us the percentage of assets that are at a risk of becoming a loss for the bank. A higher number means more loans are at risk. This is a useful metric to monitor along with the loan loss provisions. In our peer set, PNC and Fifth Third bank have a higher proportion of NPA as compared to the rest of the banks.

Capital Levels

Capital levels refer to the number of financial resources that a bank holds as a cushion against potential losses. Capital is a crucial component of a bank's financial strength, as it helps absorb losses and protects depositors and other creditors in the event of financial stress.

There are several types of capital that a bank can hold, including common equity, preferred stock, and subordinated debt. The most important type of capital for a bank is common equity, also known as Tier 1 capital, which is the highest quality form of capital and provides the most effective buffer against losses.



Source: FDIC

Regulators establish minimum capital levels that banks must maintain to ensure their safety and stability. The most common measure of capital adequacy is the Tier 1 capital ratio, which is calculated as Tier 1 capital divided by risk-weighted assets.

Company	CET 1 Ratio	Tier 1 Ratio	Total Cap Ratio
SVB Financial Group	12.10%	15.40%	16.20%
First Republic Bank	9.20%	11.60%	12.60%
East West Bancorp	12.70%	12.70%	14.00%
PacWest Bancorp	8.70%	10.60%	13.60%
PNC Financial Services	8.90%	10.30%	12.30%
Fifth Third Bancorp	9.30%	10.50%	12.80%
Pacific Premier Bancorp	13.00%	13.00%	15.50%
CVB Financial	13.60%	13.60%	14.40%

Source: FactSet

Banks are required to maintain Tier 1 capital ratios at or above a specified minimum level, as determined by the

regulatory agency responsible for their supervision. Adequate capital levels demonstrate the bank's financial strength and provide confidence to depositors, creditors, and investors.

Liquidity

Liquidity refers to a bank's ability to meet its short-term obligations, such as payment of deposits and other debts, as they come due. It is a key factor in ensuring the stability and solvency of a bank, as a lack of liquidity can lead to a run on the bank and potential bankruptcy.

There are two types of liquidity:

- Funding liquidity refers to the ability of a bank to obtain the necessary funding to meet its obligations.
- Asset liquidity, which refers to the ease with which a bank can convert its assets into cash.

Banks maintain liquidity through a combination of sources, including cash on hand, short-term borrowing from other banks, and the ability to sell assets quickly. Regulators closely monitor a bank's liquidity levels to ensure that it has sufficient resources to meet its obligations and to prevent potential financial stress.

Derivatives

Banks use derivative instruments for a variety of purposes, including risk management, investment, and speculative trading.

Risk Management: Banks use derivatives to hedge against various types of financial risk, such as interest rate risk, currency risk, and commodity price risk.

Investment: Banks may also use derivatives to invest in various markets, such as commodities, currencies, and interest rates. By using derivatives, banks can gain exposure to these markets without having to hold the underlying assets.

Speculative Trading: Some banks engage in speculative trading of derivatives, using them to make bets on the direction of various markets. This can be a high-risk activity, and regulations have been put in place to limit the extent to which banks can engage in speculative trading.

Regulatory Structure

Community Reinvestment Act Reform (CRA)

The Community Reinvestment Act (CRA) is a U.S. federal law aimed at encouraging banks to support the lending needs of all communities, including low- and moderate-income neighborhoods. The Office of the Comptroller of the Currency (OCC), Federal Reserve, and Federal Deposit Insurance Corp. recently committed to modernizing the rules to better reflect the shift to online banking and have indicated they will pursue a common CRA regime. However, enforcement of the CRA may impact bank mergers and acquisitions, as branch closures during cost-cutting efforts may lead to reduced lending in low- and moderate-income communities. This has been seen in the BB&T and SunTrust merger, resulting in fewer branches opened in these communities and a shift away from minority communities. This Act is especially important for regional banks as it encourages banks to help the communities they operate in.

Comprehensive Capital Analysis and Review (CCAR)

The Comprehensive Capital Analysis and Review (CCAR) is an annual assessment conducted by the Fed to evaluate the capital adequacy and stress testing models of the largest banks. The CCAR includes both supervisory and company-run stress tests as part of the Fed's Dodd-Frank Act stress tests. The results of the 2022 CCAR showed that large banks have strong capital levels and could withstand a severe recession. The stress test scenario involved a hypothetical global recession with significant stress in commercial real estate and corporate debt markets, including a rise in unemployment and declines in economic activity, asset prices, and commercial real estate prices.

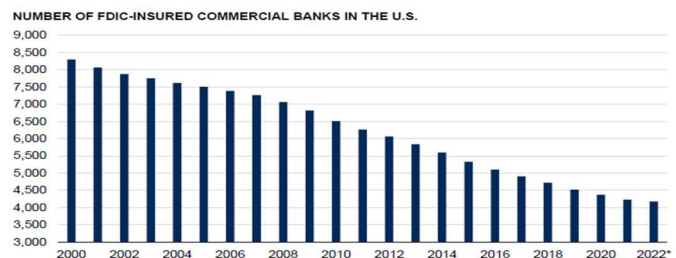
Constituents of Capital

U.S. bank holding companies (BHCs) must comply with two measures of regulatory capital adequacy set by the Federal Reserve System based on the international Basel standards. These measures are the leverage ratio and the risk-based ratio, which are calculated as the ratio of Tier 1 capital to average total consolidated assets and the ratio of Tier 1 capital to risk-weighted assets respectively. The Federal Reserve requires a minimum leverage ratio of 4% Tier 1 capital to average assets and a well-capitalized classification requires a leverage ratio of at least 5%. The total capital ratio is calculated by dividing total capital,

including Tier 2 capital, by risk-weighted assets. The Basel standards are international capital guidelines issued by the Bank for International Settlements in Basel, Switzerland to establish regulatory capital adequacy measures for banks. Basel I and II standards had limitations and were improved in Basel III, which aims to improve bank's ability to absorb shocks, risk management, and transparency. Basel IV, which was finalized in 2017, was delayed to 2023 due to Covid-19 and requires a higher capital requirement and a standardized approach to calculation of risk-weighted assets. The Current Expected Credit Loss (CECL) issued by the FASB in 2016 requires banks to factor in future economic conditions to estimate impairment in their loan and bond portfolios, leading to higher volatility of earnings, reduction in transparency, and a greater push towards shadow banking.

M&A Environment

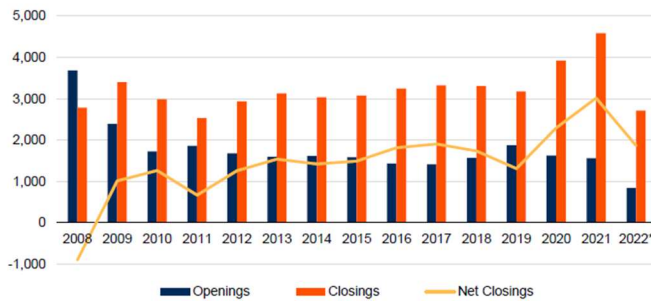
The US banking industry is expected to see a slowdown in mergers due to economic uncertainty, but in the long term, regional banks may engage in a wave of mergers due to fierce competition and the need for technology investment. The change in the Fed's threshold at which the regulator imposes tighter capital and liquidity requirements from \$250 billion to \$700 billion has increased flexibility for consolidation among banks. Mergers provide scale, geographical and product diversification, and efficiency benefits, and using cost savings from mergers to make technology investments and improve product offerings is seen as a lower risk than doing so organically.



Source: FDIC

As seen in the above chart, the number of FDIC insured commercial banks in the U.S. has been declining over the last 2 decades. This has mainly been due to acquisitions in the banking sector.

U.S. BANK BRANCH OPENINGS AND CLOSURES



Source: S&P Global Market Intelligence

The above chart shows that with the shift to digital, bank branches are declining, and closures are expected to continue, and merger activity may be an attractive option for banks facing regulatory costs and slow long-term earnings growth. Larger US regional banks with assets over \$50 billion are expected to grow deposits faster than the top four diversified banks and smaller banks.

With interest rates rising, and the cost of capital becoming more expensive, we expect the M&A environment to slow down significantly. This is not just limited to regional banks, M&A activity is expected to dry down across industries, especially in the start-up sector as private investors hold on to dry powder, which rose to \$3.7 trillion in 2022.

ESG Analysis

ESG considerations are becoming increasingly important in the banking industry as consumers and investors demand that financial institutions consider the impact of their operations on the environment, society, and the governance of their business.

SVB Bank works with venture capital backed start-ups, and finances companies in the technology sector. Their ESG score is the highest in the peer set, with a High-Risk rating. Fifth Third Bank has the lowest ESG score as it emphasizes a lot on ethical corporate governance and diversity.

Company	ESG
SVB Financial Group	36.6
First Republic Bank	25.4
East West Bancorp	27.3
PacWest Bancorp	27.0
PNC Financial Services	25.2
Fifth Third Bancorp	17.4
Pacific Premier Bancorp	24.9
CVB Financial	29.7

Source: Morningstar Sustainability

Environmental impact: Environmental, or climate change, has not been a persistent theme in the banking industry, although that may change. By their nature, banks generally do not have a way of having a significant adverse impact on the environment. However, advocates of climate change have argued that there are risks to the banking industry, as well as the US economy, that regulators should consider in terms of their impact on the financial stability of the banking industry. Banks are being encouraged to invest in environmentally sustainable projects and to reduce their own carbon footprint.

Social responsibility: With their wide branch networks and standing as lenders within communities in which they operate, often with branches on high profile street corners, banks do take social standards seriously and often commit large resources to local communities. Banks are expected to support and invest in projects that have positive social outcomes, such as affordable housing and community development initiatives.

Governance and ethics: Banks are expected to have strong governance practices and to adhere to ethical standards in their operations and business practices.

INDUSTRY TRENDS

The technological trends mentioned below are taking the banking industry by storm. It is changing the way the business of banking is carried out. Technological investments and investments in reliable customer support and cybersecurity, are all important expenses many large banks are investing in. on the regional banks front, since capital is limited and customers are not demanding the latest and greatest technologies, most banks from the peer set are slow with their technology adoption. Fifth Third bank is an exception, the bank is estimated to spend \$362 million annually on its technology initiatives.

Digital Transformation

Digital technologies are transforming the banking industry, making banking services more accessible and convenient for customers, and enabling banks to automate many of their processes and operations. We believe this trend is likely to continue and accelerate in the future, with the

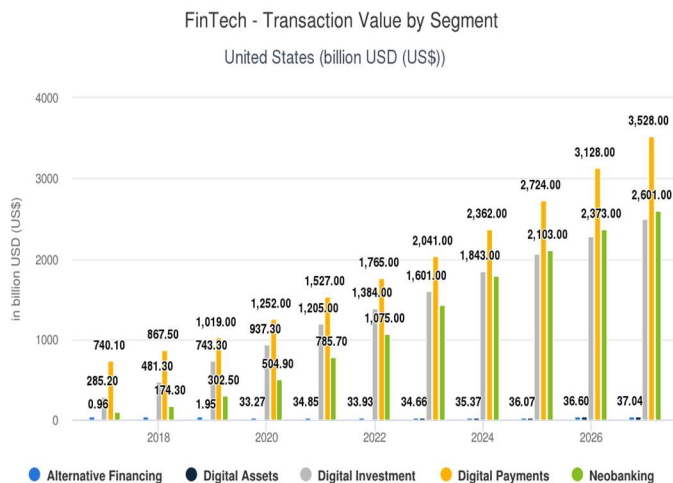
growth of mobile and online banking, and the increasing use of artificial intelligence and machine learning.

Open Banking

Open banking refers to the sharing of financial data between banks and 3rd party providers, enabling customers to have more control over their financial data and allowing them to access new financial products and services. This trend is expected to increase competition in the banking industry and provide customers with more choice and convenience. Banks can leverage open banking to enhance their products and the customer experience to create new revenue streams by partnering with 3rd party providers to offer products like financial management tools, budgeting apps and investment management services. By accessing a wide range of data, banks can gain insights into customer behavior and preferences which can lead to better product development and marketing strategies.

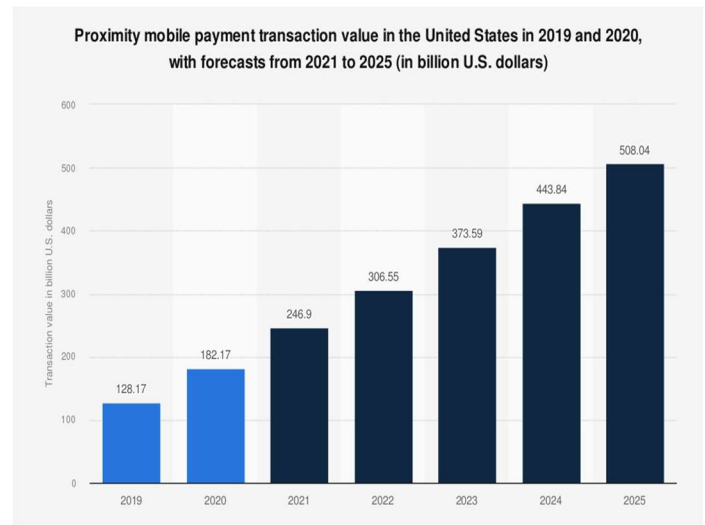
Fintech

The fintech industry has disrupted traditional financial services through faster and more cost-effective processes and technology, such as artificial intelligence and blockchain. Despite a slowdown in funding in 2022 due to rising recessionary fears, growth is expected to rebound in the future as new players enter the relatively unevolved banking industry. P2P money transfer apps, such as Venmo, Cash App, and Zelle, have seen explosive growth and could disrupt major finance companies. With declining valuations in the fintech industry, the next 12 months could be a good time for banks to acquire fintech players.



Source: Statista

As we can see in the above table, the number of users for digital banking products in the U.S. is projected to grow to 216.8 million by 2025. The table below shows the projected value of proximity mobile payments, which is expected to grow to over half a trillion dollars by 2025. Increased use of Fintech in banking means banks have to allocate significant resources towards development of technologies and products, with large banks like JP Morgan allocating well over \$10 billion towards technology annually. Digital payments and neo-banking are expected to grow the most to reach 320 million and 78 million users, respectively.



Source: Statista

Blockchain and Cryptocurrencies

Blockchain technology and cryptocurrencies are creating new opportunities for the banking industry, with the potential to revolutionize financial transactions and remittances, and to provide customers with new investment opportunities. However, the regulatory and security challenges associated with these technologies need to be addressed for the banking industry to fully embrace this trend.

Sustainability and Social Responsibility

There is growing demand from customers, investors, and regulators for banks to adopt more sustainable and socially responsible business practices. This trend is likely to drive the development of new financial products and services that support sustainable and responsible investing, and to increase the pressure on banks to demonstrate their commitment to sustainability. As we

saw earlier, ESG has become very important for banks and there is a lot of emphasis by customers and investors.

RISKS

Cybersecurity Risks

All banks face several significant cybersecurity risks that can impact their financial performance and reputation. These risks include data breaches, phishing and social engineering, ransomware attacks, malware infections, network attacks, and insider threats. To manage these risks, banks must implement a robust cybersecurity program that includes regular security training for employees, continuous monitoring of systems and data, and incident response plans. By taking these steps, regional banks can help to protect themselves and their customers from the growing threat of cyber-attacks.

Interest Rate Risk

Interest rate risk is a significant concern for regional banks, as they typically have a large portfolio of loans and investments that are sensitive to changes in interest rates. Interest rate risk arises when the value of a bank's assets and liabilities is affected by changes in interest rates. If interest rates rise more rapidly than expected, it can lead to a decline in the value of a bank's fixed-rate loans and investments, which can negatively impact its profits. On the other hand, if interest rates fall more rapidly than expected, it can increase the value of these assets, but it can also reduce the yield the bank earns on its loans.

Interest rate risk can also arise when a bank's funding sources are mismatched with its loan portfolio. For example, if a bank funds its loan portfolio with short-term deposits and makes long-term loans, it is exposed to interest rate risk because it may have to pay higher interest rates on its deposits if interest rates rise, which is what we are seeing right now. To manage interest rate risk, regional banks typically implement a range of risk management strategies, such as diversifying their loan and investment portfolios, maintaining strong capital and liquidity positions, and implementing robust internal controls and risk management processes.

Debt Ceiling Crisis

We should note that the debt ceiling, which is the limit set by the U.S. government on the amount of debt it can

legally borrow, is a crucial factor that has the potential to impact the banking sector. In January 2023, the U.S. reached the debt ceiling. If the government does not reduce its debt or increase the debt ceiling, it may need to reduce its spending, leading to lower economic activity and reduced demand for loans. This decrease in loans could result in decreased profits, or even losses, for banks.

Furthermore, if the US government is unable to repay its existing debt obligations, it could lead to a loss of confidence in the government and its ability to repay its debts. This could result in a decrease in the value of US Treasury bonds, which are widely held by banks, leading to potential losses for the banking sector. Given these potential impacts, it is important for the government to address the issue of the debt ceiling in a responsible and timely manner to minimize any adverse trickle-down effects on the banking sector and the economy.

COVID-19 Impact

The Covid-19 pandemic has presented several risks for the banking industry. While the pandemic doesn't affect the banking sector directly, any resurgence of the virus and consequent restrictions in economic activities could result in numerous risks such as loan defaults, reduced revenues, increased operating costs, along with potential interference from regulators and governments to implement various relief measures.

MARKETS AND COMPETITION

Regional banks occupy a slice of the U.S banking system, tucked between the four largest U.S banks , and the thousands of smaller community banks, thrifts, and credit unions. Regional banks typically operate in more than one state, hence the term regional, they accept FDIC-insured deposits, and offer a range of banking services.

Strengths

Regional banks occupy a strategic position in the banking industry by offering a combination of the benefits of both mega banks and small community banks/credit unions. They are subject to regulation by multiple government agencies but do not draw as much negative attention as mega banks. Regional banks are known for maintaining long-lasting commercial relationships and adopting a consumer-friendly approach to banking. Additionally, their size and ability to access capital markets allows them to

achieve cost efficiencies while still retaining control over their operations. Regional banks occupy a strategic position in the banking industry by offering a combination of the benefits of both mega banks and small community banks/credit unions. They are subject to regulation by multiple government agencies but do not draw as much negative attention as mega banks. Regional banks are known for maintaining long-lasting commercial relationships and adopting a consumer-friendly approach to banking. Additionally, their size and ability to access capital markets allows them to achieve cost efficiencies while still retaining control over their operations.

Weaknesses

The low interest rates of the past decade have posed a challenge to most banks, including regional banks. The revenue generated by lending and investing in securities has been reduced by low interest rates, which are now rising but could drop again in response to global events. Non-bank financial corporations pose a competitive threat to regional banks in certain areas such as mortgage origination and student loan financing. Banks are responding by partnering with companies like Venmo, but still have the advantage of scale and history while non-banks offer innovative ideas for serving future consumers.

Opportunities

Banks have adapted to low interest rates by diversifying their revenue streams, embracing digital channels for financial transactions, and consolidating through mergers to drive cost efficiencies.

The COVID-19 pandemic accelerated the trend towards digital channels and will likely lead to further cost savings in the industry. Technology has enabled consolidation in the industry, and banks will continue to adapt its business model to these new trends in order to stay in business. It has become imperative for banks to budget significant capital for developing Web3 applications as they feel the pressure to keep up with the competition.

The larger banks are leading the way when it comes to allocating the most amount of money towards development, but regional banks are closely monitoring the advances in the sector and are constantly evaluating opportunities. Most regional banks will go the inorganic

route and acquire the technology they need instead of trying to develop it in-house.

Threats

The banking industry is facing competition from new entrants, or "ebanks," that use digital channels to attract customers and deposits with high-interest rates and lower mortgage rates. Younger millennials who prefer electronic payments are driving this trend. Large banks are adapting to these new entrants by offering more convenient banking services and spending on marketing, product development, and technology. However, regulations, compliance, and FDIC insurance requirements create complications for ebanks, giving traditional banks an advantage for now.

Peer Comparisons

SVB Financial Group (SIVB)

SVB Financial Group is a parent company that provides banking and financial services. It operates through four distinct divisions: Global Commercial Bank, SVB Private Bank, SVB Capital, and SVB Leerink. The Global Commercial Bank division encompasses the operations of the commercial bank, private equity unit, SVB wine, SVB analytics, and debt fund investments. The SVB Private Bank division offers a variety of financial services for individual consumers. SVB Capital focuses on venture capital investments. Meanwhile, the SVB Leerink division deals with equity and convertible capital markets, mergers and acquisitions, equity research, and sales and trading for healthcare and life science companies that prioritize growth and innovation. SVB Financial Group was established in 1983 and has its headquarters located in Santa Clara, California.

SVB Financial

in USD million	2020	2021	2022
Net Interest Income	2,156	3,179	4,485
Provision for Credit Losses	219	123	420
Non-interest Income	1,725	2,620	1,578
Non-interest expenses	1,920	2,823	3,421
Total average loans	37,266	54,547	70,289
Total average assets	85,792	166,011	216,103
Total average deposits	75,016	147,947	185,761

Source: FactSet

East West Bancorp (EWBC)

East West Bancorp, Inc. is a bank holding company that provides financial services. It operates through three main segments: Consumer and Business Banking, Commercial Banking, and Other. The Consumer and Business Banking segment offers financial products and services to consumers and businesses through its branch network in the United States. The Commercial Banking segment primarily concentrates on commercial loans and deposits. The Other segment encompasses the company's treasury activities and the elimination of inter-segment transactions. East West Bancorp, Inc. was established in 1998, and its headquarters are in Pasadena, California.

in USD million	2020	2021	2022
Net Interest Income	1,377	1,531	2,045
Provision for Credit Losses	198	(29)	75
Non-interest Income	170	217	256
Non-interest expenses	654	721	815
Total average loans	37,771	41,152	47,607
Total average assets	52,261	60,947	64,112
Total average deposits	44,863	53,351	55,968

Source: FactSet

PacWest Bancorp (PACW)

PacWest Bancorp is a bank holding company that provides financial and banking services. It specializes in offering commercial banking services such as real estate financing, construction lending, commercial loans, deposit services, and treasury management to small and medium-sized businesses through Pacific Western Bank. The company was established in 1999, and its headquarters are in Beverly Hills, California.

in USD million	2020	2021	2022
Net Interest Income	1,014	1,103	1,291
Provision for Credit Losses	339	(162)	25
Non-interest Income	125	126	82
Non-interest expenses	506	583	744
Total average loans	18,735	22,741	28,408
Total average assets	29,498	40,443	41,229
Total average deposits	24,941	34,998	33,936

Source: FactSet

Pacific Premier Bancorp (PPBI)

Pacific Premier Bancorp, Inc. is a bank holding company that operates through its subsidiary, Pacific Premier Bank, providing banking services. It offers a range of deposit services, including business and consumer accounts such as checking, money market and savings accounts, cash management options, electronic banking services, and

online bill payment facilities. The company was established in 1997 and its headquarters are in Irvine, California.

in USD million	2020	2021	2022
Net Interest Income	574	662	697
Provision for Credit Losses	192	(71)	5
Non-interest Income	71	108	89
Non-interest expenses	332	369	397
Total average loans	12,968	14,098	14,481
Total average assets	19,816	21,143	21,729
Total average deposits	16,214	17,116	17,352

Source: FactSet

CVB Financial (CVBF)

CVB Financial Corp. is a bank holding company that offers relationship-based banking products and services through its subsidiary, Citizens Business Bank. The company provides financial solutions to small to medium-sized businesses, real estate investors, non-profit organizations, professionals, and individuals. Its product offerings include loans for various purposes, such as commercial businesses, commercial real estate, multi-family housing, construction, land, dairy and livestock, agribusiness, consumers, and small businesses backed by government guarantees. CVB Financial Corp. was founded by George A. Borba in 1981, and is headquartered in Ontario, California.

in USD million	2020	2021	2022
Net Interest Income	416	415	506
Provision for Credit Losses	24	(26)	11
Non-interest Income	43	47	47
Non-interest expenses	188	188	211
Total average loans	8,255	7,823	8,994
Total average assets	14,419	15,884	16,477
Total average deposits	11,737	12,976	12,836

Source: FactSet

First Republic Bank (FRC)

First Republic Bank provides private banking, business banking, real estate lending, and wealth management services, including trust and custody services. The company operates through two segments: Commercial Banking and Wealth Management. The Commercial Banking segment encompasses most of the company's operations, including real estate secured lending, retail deposit gathering, private banking services, mortgage sales and servicing, and the management of capital, liquidity, and interest rate risk. The Wealth Management segment encompasses the investment management activities of FRIM, First Republic Trust Company, FRTC

Delaware, mutual fund services offered through third-party providers, the brokerage services of FRSC, and foreign exchange services provided to clients. First Republic Bank was founded by James H. Herbert II in February 1985 and its headquarters are in San Francisco, California.

in USD million	2020	2021	2022
Net Interest Income	3,262	4,114	4,834
Provision for Credit Losses	157	59	107
Non-interest Income	653	920	1,037
Non-interest expenses	2,424	3,147	3,623
Total average loans	111,931	134,262	166,084
Total average assets	142,984	181,714	213,358
Total average deposits	114,929	156,321	176,437

Source: FactSet

PNC Financial Services (PNC)

The PNC Financial Services Group, Inc. is a holding company that provides financial services. It operates through four business segments: Retail Banking, Corporate & Institutional Banking, Asset Management Group, and BlackRock. The Retail Banking segment offers a range of financial products and services, including deposit accounts, loans, investment management, and cash management, to both consumer and small business customers. The Corporate & Institutional Banking segment provides lending, treasury management, and capital markets services to mid-sized and large corporations, governments, and not-for-profit organizations. The Asset Management Group segment offers personal wealth management and institutional asset management services. The BlackRock segment provides investment management, risk management, and technology services to both institutional and retail clients. The company was established in 1983 and is headquartered in Pittsburgh, Pennsylvania.

PNC Financial Services

in USD million	2020	2021	2022
Net Interest Income	9,946	10,647	13,014
Provision for Credit Losses	3,175	(779)	477
Non-interest Income	6,927	11,426	12,584
Non-interest expenses	10,269	12,748	12,584
Total average loans	252,633	268,696	307,699
Total average assets	449,295	523,166	550,652
Total average deposits	365,345	457,278	436,282

Source: FactSet

Fifth Third Bancorp (FITB)

Fifth Third Bancorp provides banking and financial services through its subsidiary, Fifth Third Bank. The company

operates in four segments: Commercial Banking, Branch Banking, Consumer Lending, and Wealth and Asset Management. The Commercial Banking segment offers credit intermediation, cash management, and financial services to large and medium-sized businesses. The Branch Banking segment provides deposit, loan, and lease products to individuals and small businesses. The Consumer Lending segment includes residential mortgage, home equity, automobile, and indirect lending activities. The Wealth & Asset Management segment provides investment options for individuals, companies, and non-profit organizations. Fifth Third Bancorp was established in 1975 and is headquartered in Cincinnati, Ohio.

Fifth Third Bancorp

in USD million	2020	2021	2022
Net Interest Income	4,782	4,770	5,609
Provision for Credit Losses	1,097	(377)	563
Non-interest Income	2,220	2,933	3,036
Non-interest expenses	4,129	4,681	5,079
Total average loans	106,329	110,158	119,286
Total average assets	204,680	211,116	207,452
Total average deposits	159,081	169,324	163,690

Source: FactSet

ECONOMIC OUTLOOK

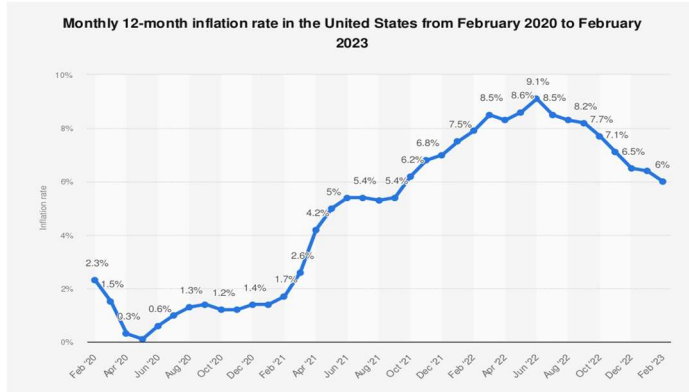
Interest Rates

Interest rates are key macroeconomic indicators affecting banks. For this reason, the banking world is highly concerned with policies of the Federal Reserve and its influence on interest rates. We need to watch both short and long-term rates, as well as the relationship between the short and long-term rates- the yield curve.

Short-term rates, generally represented by the discount rate (the rate charged by Federal Reserve banks when they extend credit to depository institutions) or by the federal funds rate (the rate charged among commercial banks for overnight lending), are subject to the Fed policy targets. Strengthening economic conditions and/or employment activity—that can generate shortages in both labor and goods, and fuel inflation—may lead the Fed to raise interest rates.

We expect rising interest rates to have a double-sided effect on regional banks. On the one hand, it will widen the interest spread and potentially bring in more interest income for the banks. On the flip side, it will slow down loan growth as people defer taking on discretionary debt till the interest rates come down. It will also reduce the

value of investments, which are typically bonds, on the balance sheet. Deposits can also be reduced as investors park their money elsewhere in search of better yields.

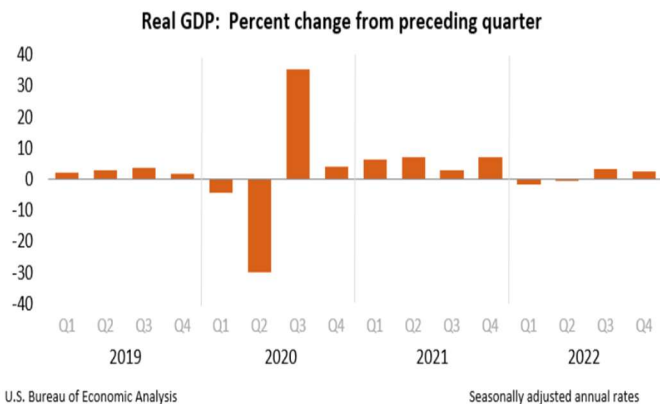


Source: Statista

Long-term rates are subject to the same economic factors that influence short-term rates, but are controlled by market forces rather than the Fed. Because market forces make them react more swiftly to daily economic developments, changes in long-term rates often precede those in short-term rates, and thus can be viewed as a leading indicator.

GDP Growth

GDP is the market value of all goods and services produced by labor and capital in the U.S. as the broadest measure of aggregate economic activity, it is an important macroeconomic indicator for banks. Growth in the economy is measured by changes in inflation-adjusted GDP, also known as the real GDP.



Source: US Bureau of Labor Statistics

When the economy is strong, businesses borrow to fund expansion. Similarly, when the job markets are favorable and consumer confidence is up, demand for consumer

credit increases. Conversely, economic slowdowns reduce credit demand, and shortfalls in corporate profits and personal income can hurt credit quality. The Henry Fund analysts believe the GDP growth will reduce to 0.33% in the short term. This belief is based on the broader consensus in the market, which believes the US economy could be in a recession sometime in the next 12 months.

Inflation

Inflation can have both positive and negative impacts on the banking industry. The positives include, (a) higher interest rates; as the central bank raises interest rates to curb inflation, banks can charge higher interest rates on loans, leading to higher profits. And (b) increased demand for credit: as the cost of goods and services rises, people and businesses may need to take out loans to cover the increased costs, providing more business opportunities for banks.

	2022		2023	
	Oct.	Nov.	Dec.	Jan.
Percent change from preceding month				
Personal income:				
Current dollars	0.9	0.4	0.3	0.6
Disposable personal income:				
Current dollars	1.1	0.6	0.4	2.0
Chained (2012) dollars	0.7	0.4	0.2	1.5
Personal consumption expenditures (PCE):				
Current dollars	0.7	-0.2	0.0	2.0
Chained (2012) dollars	0.3	-0.4	-0.2	1.5
Price indexes:				
PCE	0.4	0.2	0.2	0.6
PCE, excluding food and energy	0.3	0.2	0.4	0.5
Price indexes:	Percent change from month one year ago			
PCE	6.1	5.7	5.3	5.3
PCE, excluding food and energy	5.1	4.8	4.6	4.7

Source: US Bureau of Labor Statistics

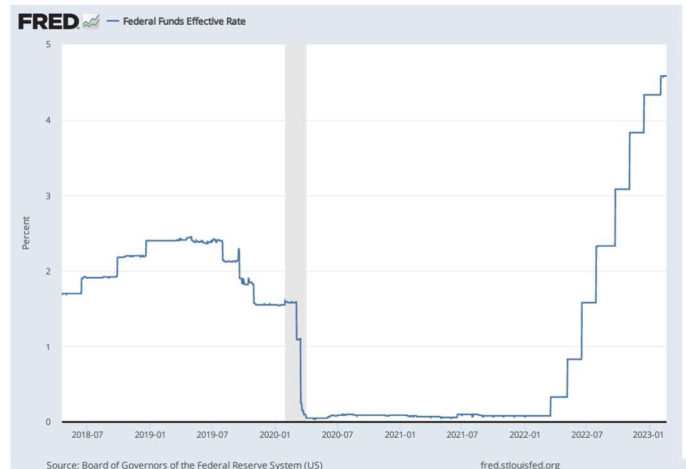
The negative impacts include, (a) decreased purchasing power of money: as inflation erodes the value of money, it reduces the purchasing power of consumers and makes it difficult for them to repay loans. This can increase default rates and decrease profitability of banks. And (b) increased costs for banks: banks also face higher costs for their own operations as the prices of goods and services rise.

Yield Curve

The yield curve is a graph that plots the yields of similar quality bonds with maturities that range from the shortest to the longest available. This, it illustrates the structure of interest rates across the economy. When short-term rates are lower than long-term rates, which is the typical pattern, the result is a positive yield curve. When short-

term rates are higher than long-term rates, the yield curve is negative or inverted, which is what we are experiencing right now.

In general, an upward sloping yield curve is favorable for banks and thrifts because it implies positive yield spreads. The flatter the yield curve, the narrower the spread that the bank can earn on its core lending operations. An inverted yield curve is problematic, because a bank could find that its cost of funds is higher than the rate it earns on the money it lends.



Source: FRED

In summary, GDP growth rate, inflation, yield curve, and interest rates are important factors that can impact the banking business and influence the profitability and stability of banks.

INDUSTRY OUTLOOK

Tailwinds

- Increase in interest rates leading to higher net interest income led by better interest spreads, bringing in higher free cash flows for the banks. As we saw, rising interest rates can have significant implications for the balance sheet of banks. The positives are that they earn higher NIMs.
- Increase in aggregate household debt levels backed by a robust labor market despite broader economic concerns. This presents an opportunity for banks to lock in loans at higher interest rates. With the Fed's outlook of raising the interest rates to 5.0-5.25% and not bringing them down anytime soon, consumers

looking to make big ticket purchases with debt financing will have to do so at the current interest levels. This will lead to a healthy interest income stream for banks, till the loans are refinanced at lower rates in the future.

- The banking industry is undergoing a technological transformation, with investments in Artificial Intelligence (AI), Fintech, open banking, and cryptocurrencies. This presents opportunities as well as threats for all banking entities.

Headwinds

- Prolonged inversion of yield curve can adversely affect profitability as it makes borrowing expensive and lending cheaper, eating into the profits of the bank. If the yield curve stays inverted for a long time, banks will be lending at a lower interest rate than they will be borrowing for, effectively not earning a spread on its core operations.
- Tighter monetary policies make borrowing expensive for households and businesses. This could discourage entities from taking out loans, slowing down growth of the banks' loan portfolios. This coupled with the decline in new deposits and customers taking out money in search of better investment opportunities could lead to banks being stranded for cash.
- New trends in the banking sector could disrupt the traditional business model of banks. This could force the banks' hand into technologies and products they do not fully understand. It would become imperative for all banks to invest heavily to survive which is a challenge as the industry is heavily regulated and isn't used to moving quickly. For regional banks specifically, growth by acquisitions and partnerships has become necessary as they will not be able to keep up with the technology spending of the big 4 banks in the industry.

Regional banks in the United States have both prospects and risks. On the one hand, they have the advantage of being more familiar with local markets and customer needs, which allows them to provide more personalized services. They also tend to have a more conservative approach to lending, which can make them less vulnerable to sudden economic downturns. However, regional banks may struggle to compete with larger national banks when

it comes to resources, technology, and brand recognition. They may also face challenges in expanding beyond their local markets, which could limit their growth potential. Nonetheless, regional banks still have some advantages over large national banks, such as more flexible lending policies, quicker decision-making processes, and better customer service. Ultimately, whether a regional bank succeeds or fails will depend on its ability to balance risk and reward, adapt to changing market conditions, and differentiate itself from the competition.

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