# KeyCorp (KEY)

Recommendation: **Sell**

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## Portfolio Manager Summary:

*KeyCorp is one of the nation's largest bank-based financial services companies with ~$170.3B AUM. KeyCorp is the parent company of KeyBank National Association, which where most of its banking services flow, is divided between its consumer and commercial banking segments. We purchased KeyCorp in 2015 on rationale that never came to fruition. Nonetheless, KEY has ridden the bull market and we have seen 110.8% increase in our position. Given the lack of foundational support for our holding, fallacy in the interest rate argument as a mechanism for growth, and relative standing of the equity, we recommend we liquidate our position to more optimally direct the capital and avoid the decline the equity will likely experience.*

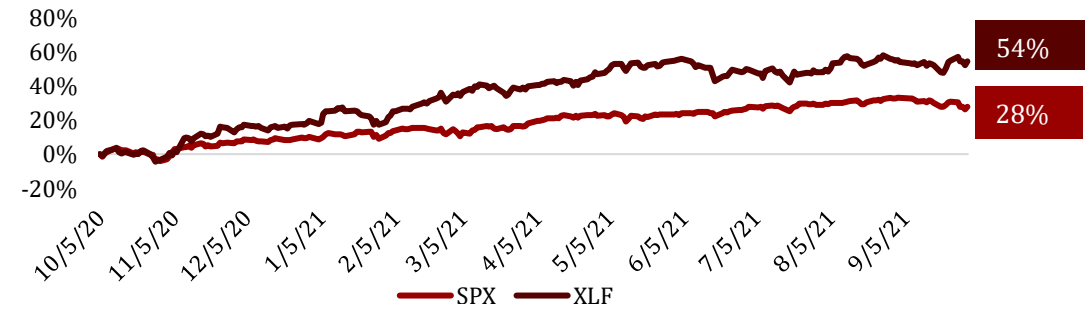
### Important Metrics

**Price: $22.41**
**Price Target: $17.21**
**Entry Price: $10.63**
**Unrealized Gains: 110.8%**
**Dividend Yield: 3.31%**
**Market Cap: $21.4 B**
**P/E: 9.63x**
**P/B: 1.34x**
**ROE: 14.2%**

## Industry Overview

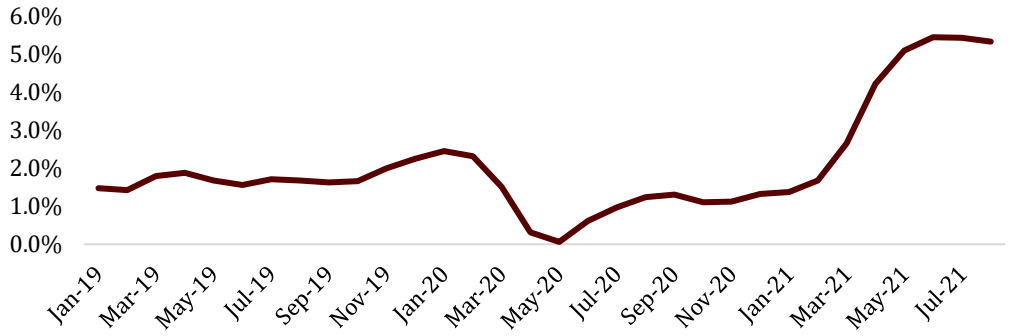
The financial sector has seen a relative boom compared to an already strong wider market throughout the pandemic, with the XLF outperforming the S&P 500 by 26%. This performance can be attributed to an outlier activity in Global M&A - which in the first three quarters of 2021 reach a cumulative $4.3T of total activity, surpassing the total $3.6B in activity that occurred in 2020 – and a raging real estate market that more than surpassed the COVID-induced lag and sent home prices soaring. Both these activities have been facilitated by the low-interest environment which has incentivized borrowing and spending among people and businesses. Further, a surplus of government stimulus gave many institutions a free source of cash to invest in new activities. The cumulation of all these constituents of the economic environment created a landscape for the financial sector to grow into.

**Figure 1: XLF vs. SPX**



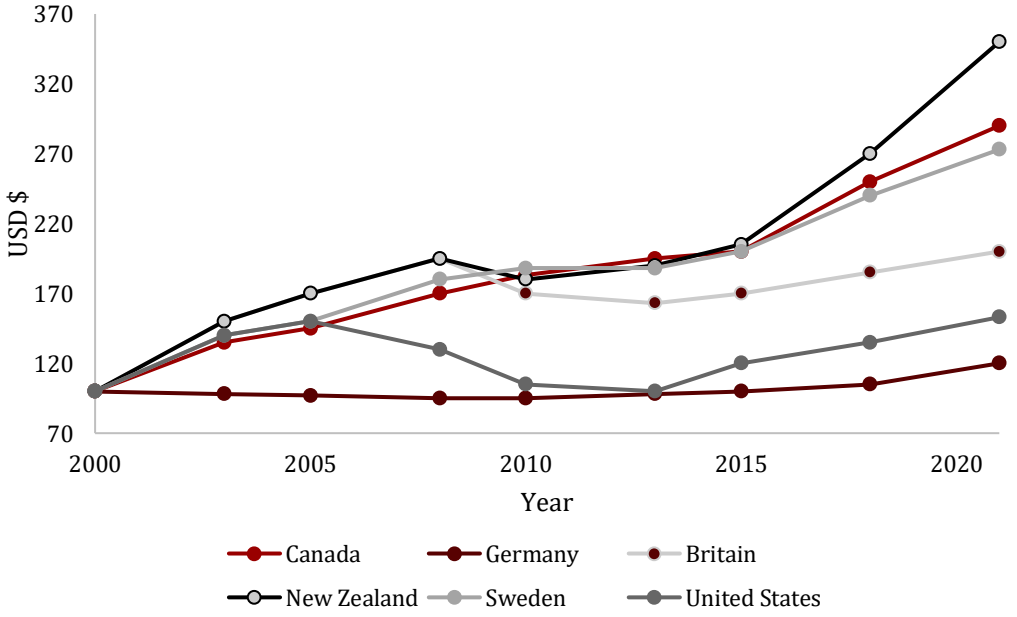

These increases can be attributable to a government stimulus flooding the economy with cash to combat damage instantiated by COVID-19. These stimulus programs were initially created to support businesses impacted by COVID-19. The most notable acts in this wave of stimulus were the CARES Act ($2.3T), Paycheck Protection Program (PPP) ($484B), Relief Package 4 ($900B), and the American Rescue Plan ($1.9T). These programs provided support for the economic impact caused by COVID and aided in an accelerated bull market. All this stimulus has led to a historic amount of money in the system. The new money in the system has led to fears of inflation, which have been supported by the following. In July, the CPI rose 5.4% from the previous year. This inflation was expected, as expressed by sentiments from the Fed, but the question remains, how good a controlling grasp does the FED have on inflation? Recently there have been promising signs that inflation may be slowing, as August YoY inflation was marked at 5.3%, a slight dip from the July numbers, and monthly price gains settled to 0.3% between July and August, down from 0.5% in the prior transitory period. At the end of the day, these declines are still small though as the monthly dips only represent a 1.8% counterbalance, respective to the YoY increase. We anticipate this increase in consumer prices to stay, as it is a result of an extraneous increase in cash in the economy and a reversion of these increases to the mean will only happen with an increase in prices. The extent to which the market fully reacts and prices this in is still to be determined, but outlier inflation is bad for business, whether is it priced accurately or not.

**Figure 2: CPI**




Related to the increase in consumer prices, we have seen a red-hot housing market come out of the pandemic. Real house prices and the house-price-to-income have seen outlier increases in 2021. This is primarily due to two reasons. First, the lasting lifestyle shifts induced by the pandemic have led many to switch their living environments. This includes factors such as remote work, transitionary job market, an influx in "pandemic-babies", and other societal shifts. Second, during the height of the pandemic, mortgages slowed because of a holistic stagnation in the world and lack in consumer confidence in purchasing a home. In 2021, we saw a compensation for that lag – and then some. This increase in housing activity makes sense given the larger economic environment. Historically, low interest rates combined with the implementation of a cultural reset have led to a reactionary effect in the market. Further, the Fed has guided interest rate hikes in the next two years that will inductively influence the housing market as a whole. Additionally, the housing market is a reflection of a broader loan environment. The combination of low interest rates and development being deemed an "essential service" during the pandemic led to activities financed by loans to carry on and there to be added market catalysts to propagate this activity. We will dive into this trend's effect on KeyCorp and what it means for the company now in thesis 2.

**Figure 3: Real House Prices Q1 2000 = 100**




**Industry Risk Factors**

**Overaction to Rate Increases:** An increase in interest rates is all but inevitable at this point so it cannot be deemed a risk, but the impact of this coming increase could pose unforeseen consequences. The world has been normalized to this low interest rate environment. This is in-part the fault of the fed guiding for near-zero rate for 'four to five years' in November 2020 (and now reversing that sentiment) and due to the industry taking the Fed at their word. Nonetheless, the formation of new operations and projects around this assumption of low rates could lead to an overreaction even with the slightest rate hike. Further, a hint at this in a different market is the Evergreen turmoil that we recently witnessed.

**Commodity Spikes:** With the world still far from fully vaccinated and the Coronavirus demonstrating its ability to overcome even the very best vaccines, international supply chains will remain at risk for some time. Additionally, we saw the impact supply chains can have on the commodity markets with the lumber spikes of early 2021

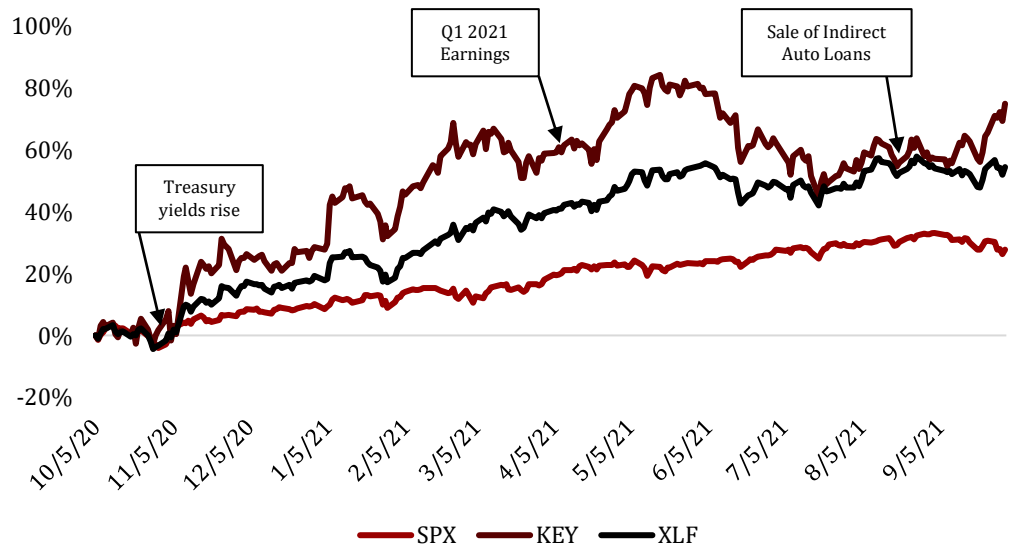
**CET1 Ratios:** According to the FED 2020 Stress Test, the Common Equity Tier 1 ratio is expected to dip to 9.6% before rising to over 10.2% in the coming 8 quarters. The CET1 ratio is expected to rise because of loan losses, especially from lending categories. The 3 biggest losses are credit cards, commercial loans, and commercial real estate, all of which KEY is invested in. This would effect the whole industry by increasing the minimum capital requirements and decreasing revenue potential.

**Figure 4: Home-Price-to-income ratio, long-run average = 100**


## Company Overview

KeyCorp operates as a holding company for KeyBank National Association providing commercial banking, investment management, consumer finance, investment banking, and more. KeyCorp is divided into two business segments: Consumer Bank and Commercial Bank. KEY maintains 1,073 full-service retail banking branches and 1,386 ATMs in 15 states. Fee-based income drove revenue due to economic improvement as noninterest income grew 8% YoY to $750 million in 2Q2021. The IB division generated $217 million in fees due to repeat clients and the hot M&A market. KEY's acquisition of Laurel Road creates a digital bank for doctors and dentists and contributed to consumer loans being up 9% YoY in 2Q2021. Management discussed their improved balance sheet, due to their 20.9% YoY increase in deposits and consolidating 54 branches this quarter for cost savings, in their most recent earnings announcing a new $1.5 billion repurchase program. Additionally, in September, KEY sold their indirect automobile lending business to focus on consumer mortgage and while adding buying back $538 million.

**Figure 5: KEY vs. SPX vs. XLF (1Y)**

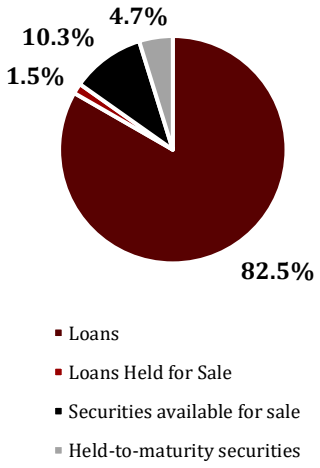



## Recent Movement

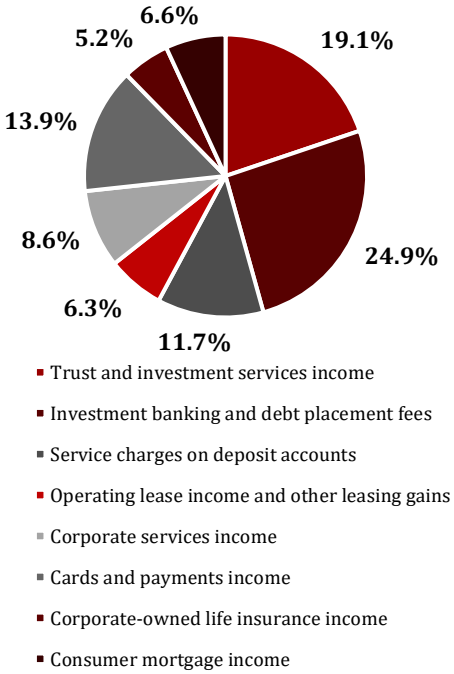
1. **Treasury Yields Rise (January 6th, 2021):** The large spending plans from the Democratic party pushed up Treasury yields from 0.94% to 1.04% since 1/5/2021. Investors' belief in a strengthening economy with rising long-term rates caused KEY to gain 9.3% on the day due to the possible hike in interest banks could charge on loans. KEY's equity value has increased ~75% since 1/6/2021 supporting our belief that the interest rate increase is mostly priced in.
2. **KeyCorp Q1 2021 Earnings (April 20th, 2021):** KEY launched Laurel Road for Doctors, as well as reporting a 19% revenue increase and strong capital position with their Common Equity Tier 1 ratio of 9.8% and a $135M shares repurchased. Their YoY growth was driven by an 18.3% increase in loans and leases because of PPP loans from COVID-19 and a 16.3% increase in average deposits due to stimulus payments; both stimulus programs are stopping soon and KEY will no longer have elevated revenue.
3. **Sale of Indirect Auto Loan Portfolio (September 10th, 2021):** KEY sold their Indirect Auto Loan Portfolio for $3.2B which fueled an accelerated buyback agreement for up to $585M. While the buyback program represents management's confidence in their business and economic environment, KEY's equity value has increased with no correlation relative to the S&P 500 and XLF.

**Figure 6: Revenue Breakdown**

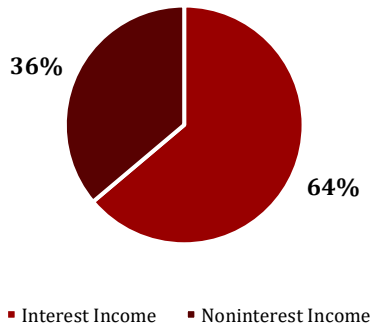
**Interest Income**




**Non-Interest Income**




**Non-Interest vs. Interest**

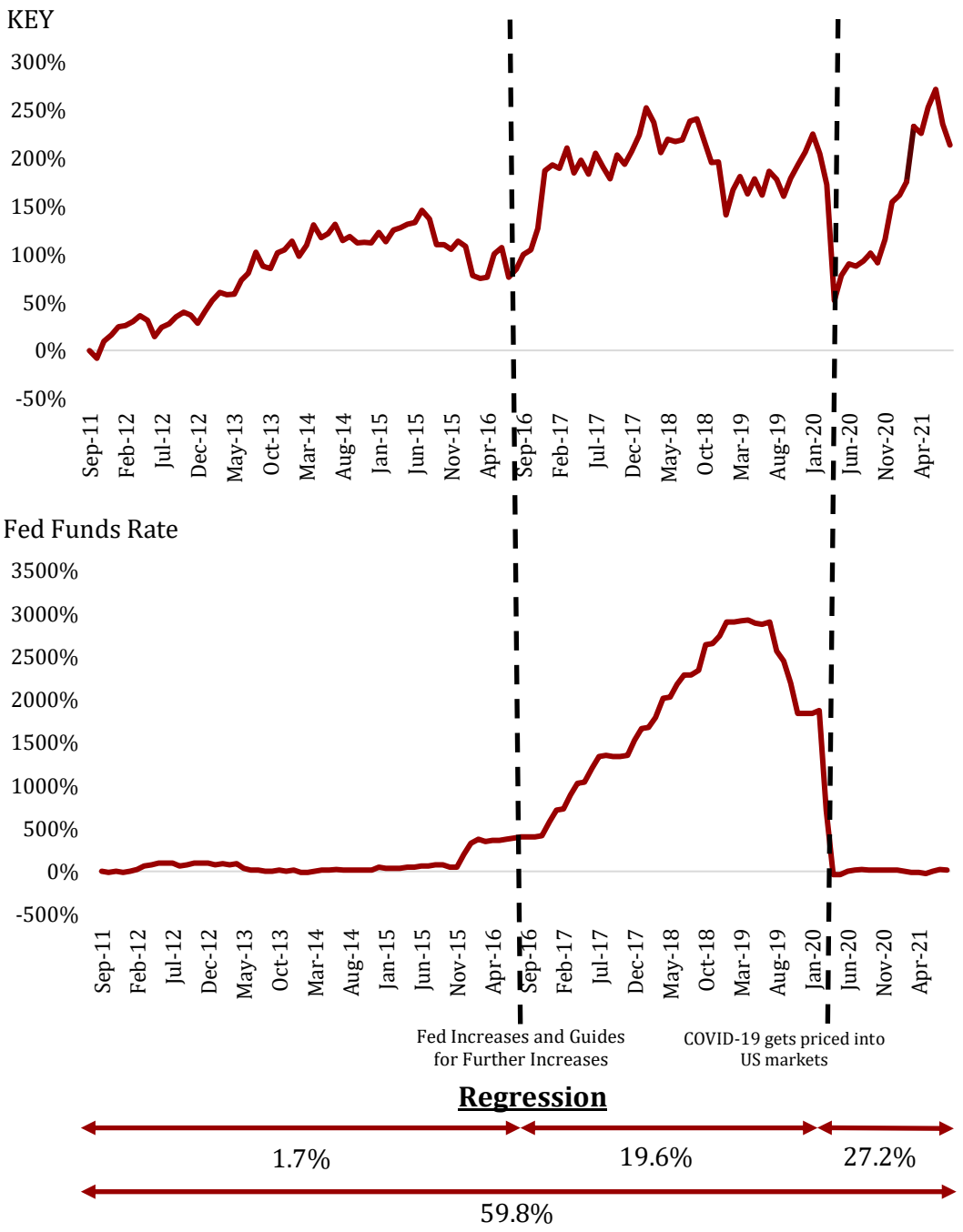


## Rationale #1: Lack of Benefit from Interest Rate Fluctuations

Financial sector equities, specifically those that have large lending programs, have long been said to be correlated with interest rate movements, which can be represented by the Fed Funds Rate. Although this is intuitively true, we believe that it is not a correct presumption to make due to the relative waiting of correlations. Our contrarian point of view is derived from two main thesis: 1) a lack of continuous correlation to interest rates and 2) the relativity of correlation.

### 1. A Lack of Continuous Correlation to Interest Rates

**Figure 6: Key & Fed Funds Rate Correlation**



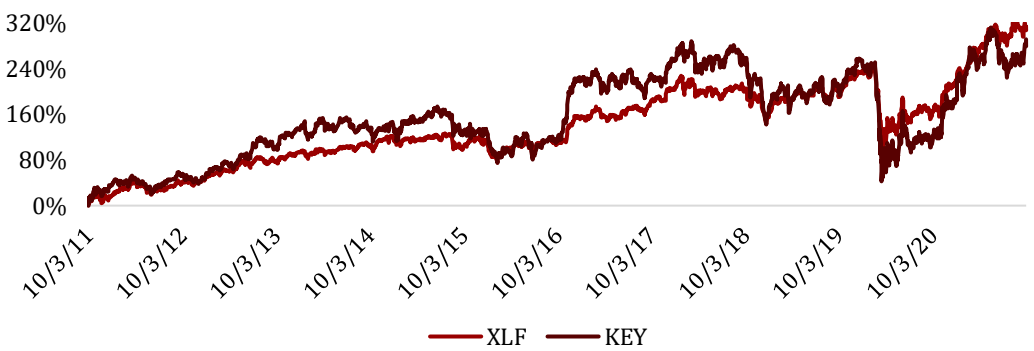

**note that the data above extends to August 2021, despite the y-axis labelling*

As can be seen from the charts in figure 6, interest rate movements and KeyCorp (a business that has been defined as being closely tied to rates) have an exclusively event-driven correlation – i.e., they are correlated for particular, individual events that occur in the markets. Statistically, KeyCorp and the Fed Funds Rate have an overall correlation of 59.8%; but, if you look at the periods surrounding particularly large events, they are far less correlated. For 5 years, up to the interest rate hikes at the beginning of the Trump presidency, the Fed Funds Rate and KeyCorp had only a 1.7% correlation. Even when factoring in Yellen's rate hikes and the COVID-19 Pandemic (two very discrete market movers), KeyCorp and the Fed Funds Rate only had a 19.6% and 27.2% correlation, respectively. This causes interest rates and KeyCorp to be more discretely correlated than they are continuously corrected. Continuous correlation is a more apt mathematical representation of how the behavior of two entities relate because it shows the market intrinsic view on their relation, rather than the market's reactionary view. Further, being discretely correlated does not give particular insight to help guide or predict the behavior of a particular equity because the events that compose the discrete correlation are large enough to imbed market effects beyond just KeyCorp and the Fed Funds Rate. For example, in the same period where KeyCorp and the Fed Funds Rate had a 19.6% correlation due to interest rate hikes, KeyCorp and the XLF had a 75.6% correlation. Although the Fed Funds rate has the oracle-like dimension of signifying what is going to happen in the future, the most impactful part of the signaling occurs concurrent to it happening, so when guidance is given its effect is already priced in. For example, if the regression is taken on the data just one month after the hikes in September 2016, KeyCorp and the Fed Funds rate have a -7.6% correlation. This inconsistency in the impact of interest rate news and movements on the markets causes an equity allocation strategy based on its prediction to have minimal long-term potential for generating alpha.

## 2. Correlation Relativity

To further demonstrate the poor approach of using interest rates to derive equity performance off, we will show the relative weakness of the interest rate correlations to KeyCorp. Logically, KeyCorp and the XLF are closely correlated. It is not a correlation that is impressive, but how much more correlated the XLF and KEY are than Key and the Fed Funds rate.

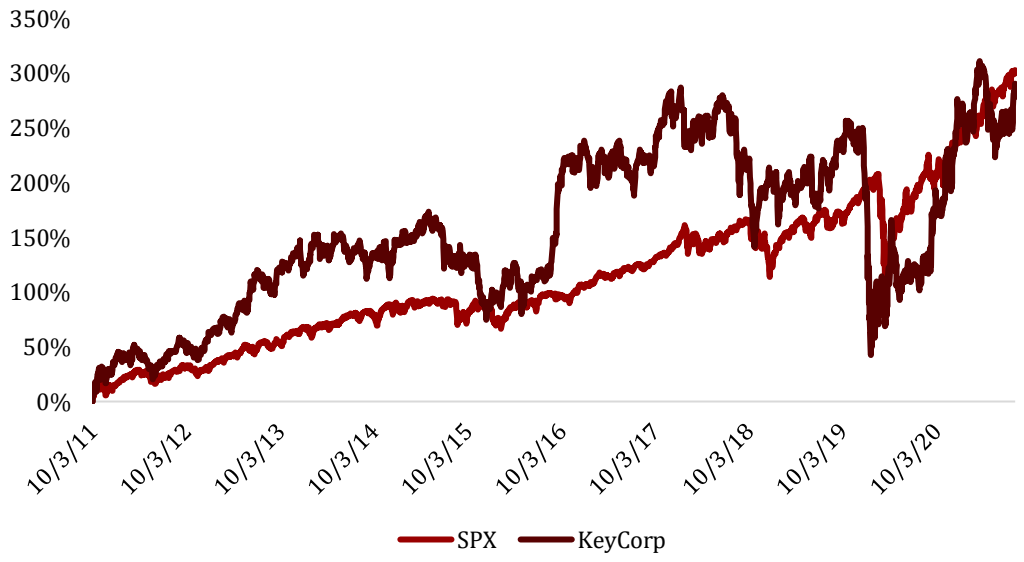
**Figure 7: KEY vs. XLF 10Y**




Even though correlating KEY to something like the XLF does not have the same fundamental lust that interest rates have, we saw that interest rates are quite poor at projecting out long-term performance. They are typically priced-in too quickly for a return, so opting for something that has a broader array of inputs may be optimal. Also, over the past decade KEY and the XLF have had a 91.3% correlation. This leads us to believe that these metrics are a better indicator of KEYs future performance than interest rates. Additionally, the 91.3% correlation is not the compilation of a set of discrete market movers, but is more intrinsically tied to the activities of KEY itself.

More so proving the inefficiency of using interest rates to guide the price of KEY, when compared to the market over the past decade, interest rate correlation only outpaces S&P500 correlation by a meager 9%.

**Figure 8: KEY vs. SPX 10Y**




The SPX and KEY have a correlation of 50.8% over the past decade compared to 59.8% compared to the Fed Funds rate. Additionally, the fact that KeyCorp is only 9% more tied to a "fundamental mover" than it is to the broader market only adds to the misconception of interest rates being a fundamental component of KeyCorp's market performance.

## The Interest Rate Fallacy

Interest rates have long been a way to tie equities to fundamental market movers. Here we found that:

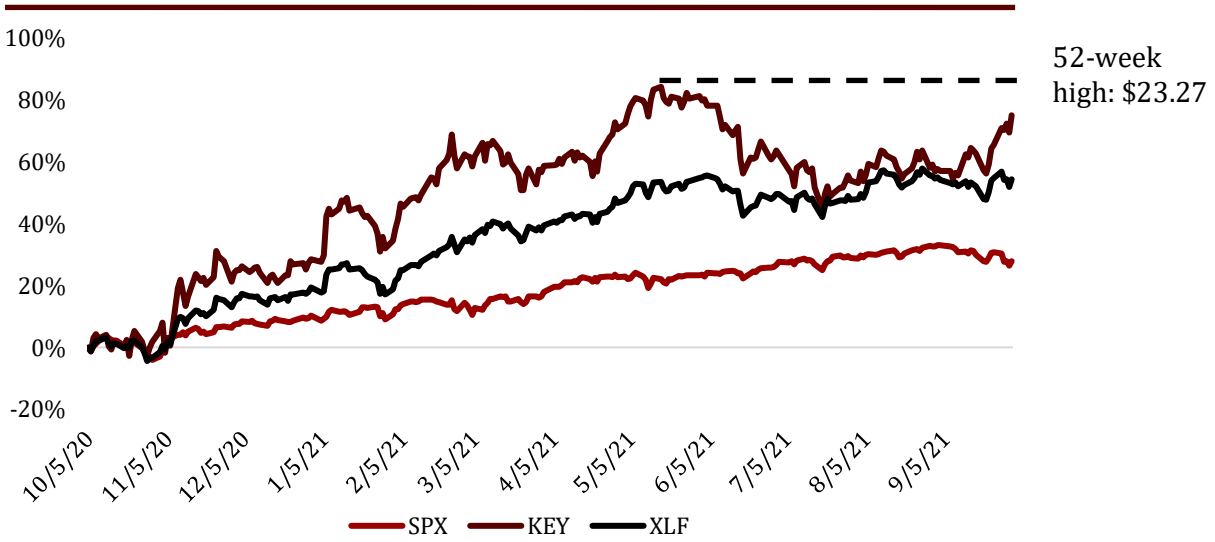
1. The impact that rates have on moving markets is sudden and are not good guidance for long term growth.
2. The correlation of interest rates to equities is relatively lacking and sector guidance offers a more accurate gauge of company equity performance than interest rates.
3. Betting on KeyCorp's performance based on interest rate signaling is pretty much equivalent to bet on the equity based on general market sentiment.

Although interest rates are projected to increase significantly over the coming 3-5 years, this increase should be a marginal contributor to KEY's performance. Even though KeyCorp does derive a majority of its income from interest rate derivatives, the movement in these rates will affect company income by a negligible amount. This is supported by the aforementioned data, but at an even more fundamental level, the interest rate derivatives that they generate income from mostly consist of commercial and industrial loans (53.7%), commercial mortgage (12.9%), and residential mortgage (7.8%) – all of which are typically fixed rate, which are not affected by interest rate spikes. An increase in interest rates would only disincentive consumers and institutions from funding new projects. This leads to our second thesis for why we should unload KeyCorp – a lower volume of future loan supply.

## Rationale #2: Favorable Standing

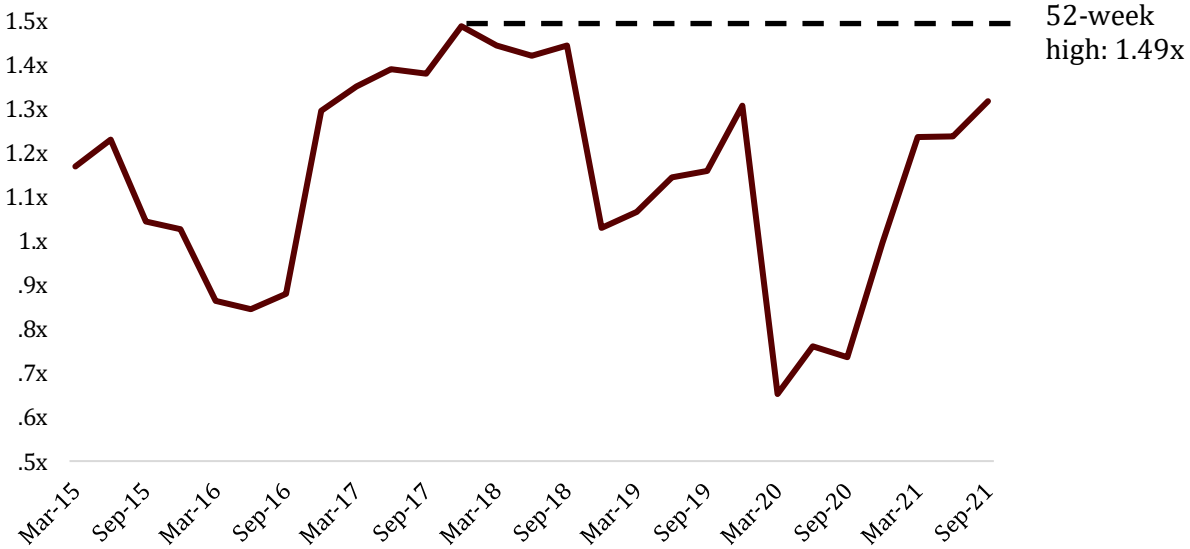
The low interest rate environment combined with a period of stagnation has led KeyCorp's business to thrive over the past 36 months. As shown on their chart below, they are currently trading at only a 4.16% differential from their 52-week high.

**Figure 9: KEY vs. SPX vs. XLF (1Y)**



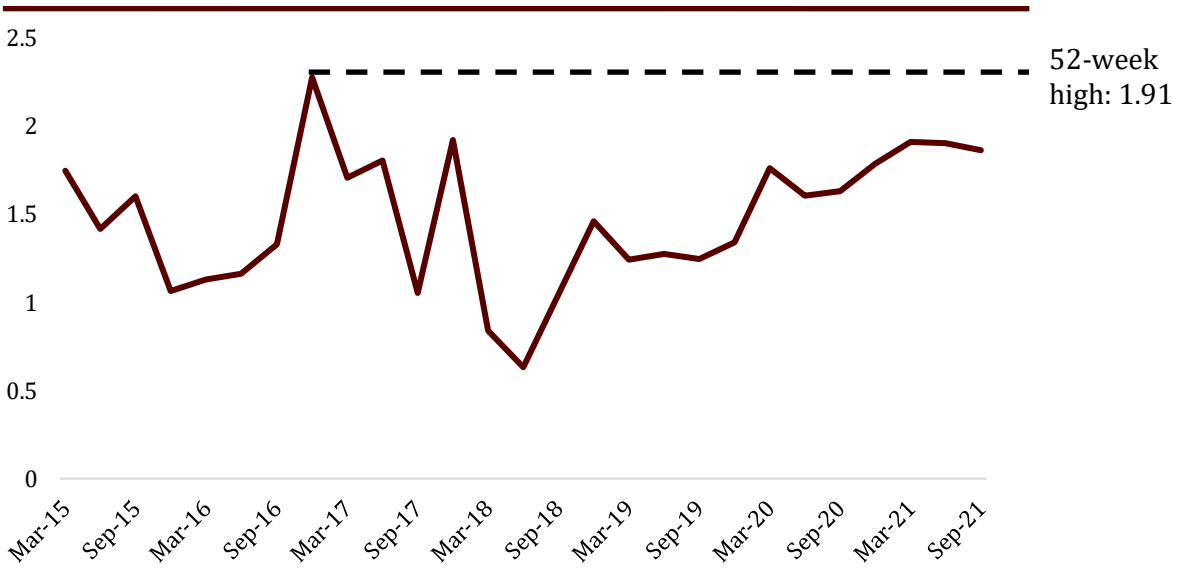

In terms of 1Y growth, KEY is trading 26% more favorably than XLF. Therefore, we anticipate mean reversal is more than likely for KEY, and more broadly, the sector. This is given the deep correlation between KEY and XLF as explored in rationale #1, market turbulence, and the fact that both are trading significantly better than the SPX. Additionally, KEY is trading at a very high valuation (1.32x P/B) compared to where it has historically sat, sitting only a 12.9% differential from its 2017 high, which was pumped up by anticipation of record-low corporate tax rates marketed by then-president Trump.

**Figure 10: KEY P/B (5Y)**




Finally, to reemphasize the characterizes of KEY, it is currently trading 80% above the market beta (1.86) and is sitting at its most disconnected position of the past 4 years. This type of behavior is unlikely to last for a long period for an equity described to be just as correlated to the broader market as interest rates.

**Figure 11: KEY Beta (5Y)**




Overall, KEY is trading in an extremely favorable position, relative to its historical standing. Further, the decorrelation from the broader markets and its sector give us reason to believe that its current positioning is not sustainable and now is the time to sell. Also, KEY is trading at near all-time highs and the outlook for the broader economy is not necessarily positive right now. Therefore, we recommend that MEF realizes the growth we have seen in the equity over the holding period, much of which is substantiated, as described in Rationale 3.

## Rationale #3: Absence of Actualized Investment Premises

The 3 original rationales pitched in 2016 are outdated and have had their value realized.

1. **Non-Interest Income Growth:** The original rationale was that non-interest income (which made up ~45% of total income at the time of the pitch) protects KEY from interest rate fluctuation. It is not a major factor of equity value growth as we see minimal correlation between interest rates and share price as previously mentioned. Rather, the share price is driven by events indicating the unreliable nature of the thesis. Moreover, non-interest income has grown at 5.1% CAGR since FY 2016 to make up 36.1% of the total revenue despite lower interest rates. Within that same time period, interest income has grown at 7.1% CAGR to make up 63.9% of total revenue. As we enter an uncertain economic environment with raising rates forecasted by the Fed, this thesis remains invalidated as interest income is expected to continue gaining share from non-interest income with increased rates.
2. **Affordable Housing Lending:** While KEY completed their National Community Benefits Plan 1 year early and delivered $18B in lending and investments, it is not a key revenue driver as mentioned in the original thesis. The $18B over the past 4 years represents only 4.84% of the $371.7B in total loans. Their affordable housing strategy has been disregarded in the past 5 earnings calls and past 2 10Ks. This rationale is more integral toward KEY's strategy for community development and corporate responsibility rather than shareholder value.

3. **First Niagara Acquisition:** In October 2016, KeyCorp acquired First Niagara Financial for $4.1B. The thesis was successful at first as the share price went up 60% in the months following the acquisition and grew their mortgage division from $2B to $8B. However, this point is outdated giving no reason to use it as rationale to hold. Through the acquisition, KeyCorp did expand their New York brick-and-mortar geographical reach. However, the digitization of banks has proved this acquisition to be inefficient. Since 2016, KEY has decreased their brick-and-mortar presence from 1,217 to 1,003 branch locations.

We see no reason to continue holding KeyCorp through the turbulent economic environment. All three original thesis have either been realized or proven invalid over time as the regional bank has ecosystem adapted. Furthermore, we have been holding the equity for 5 years and it has appreciated 109% from the $10.63 entry price.

## Risks to Thesis

1. **The Music Goes On:** The economy still has another wave above growth in it due to a full COVID extincition, a new wave of IPOs, and an inverse relationship with economic downturn in China.
2. **We are Completely Missing the Mark on Interest Rates:** An increased in rates singnificantly expands margins for KEY – this would only be the case if KEY could somehow refinance their existing contracts at the higher yield.
3. **Dividend Stocks are a Safe Haven in a Recession:** In times of economic downturn investors flock to dividend heavy stocks as a hedge against the hit high growth companies take – KEY would fall in this category given it's 3.31%.

## Comparable Companies Analysis

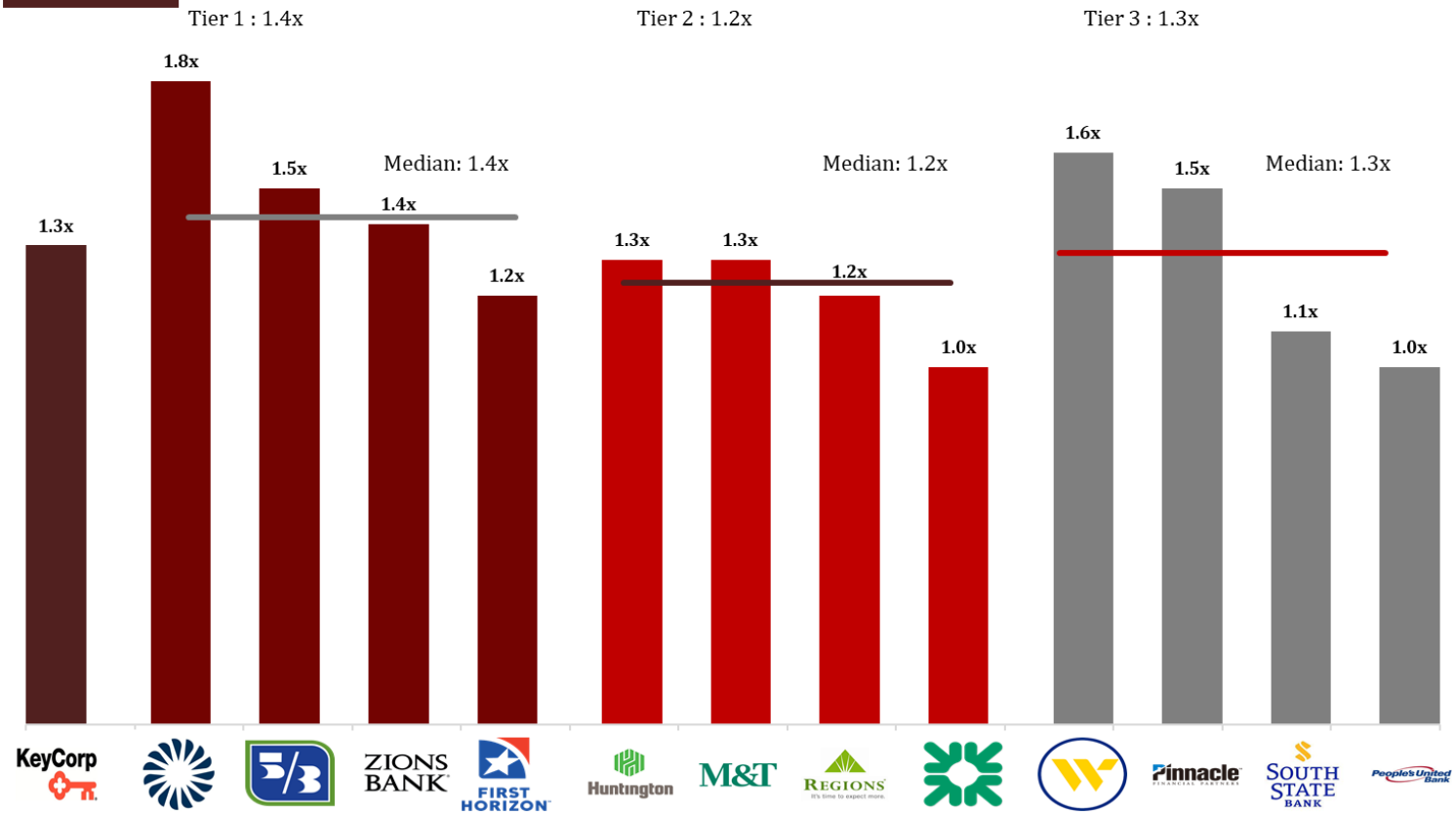
The comparable companies' analysis is broken into 3 tiers: commercial and consumer loans, market capitalization, and banks in similar region.

Tier 1 incorporates companies that operate with consumer loans, commercial loans, mortgages, and capital markets divisions similar to KEY's business segments. KEY has better liquidity than peers in this group shown by their 70.0% loan-to-deposit ratio which is higher than the 68.8% median LDR. However, the 70.0% LDR is below KEY's target of 90% LDR. Relative to the other Tier 1 companies, KEY does not control its overhead costs as effectively 60.7% efficiency ratio.

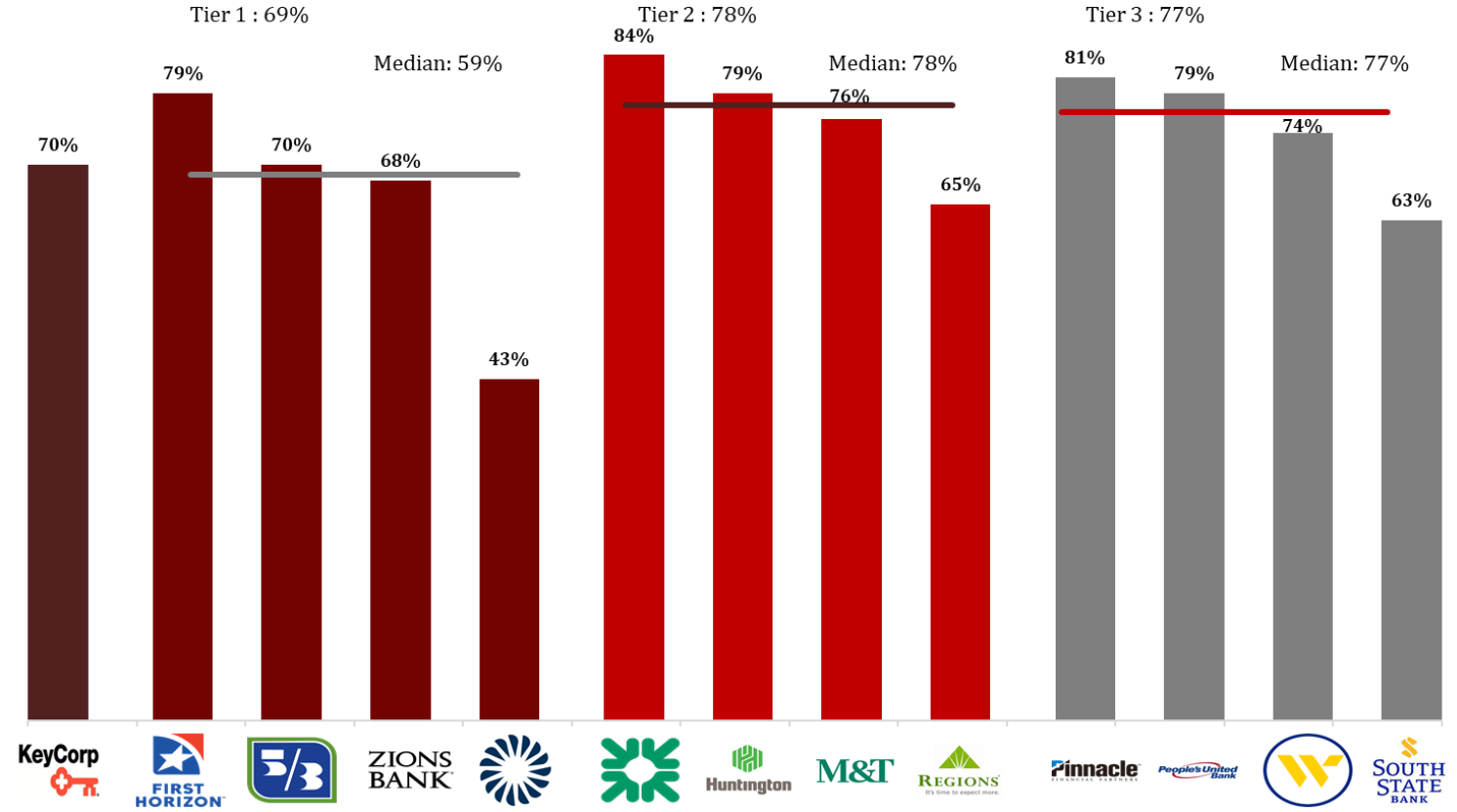
Tier 2 compares publicly traded banks that have a similar market capitalization to KEY ($21.4 billion). These companies operate with a similar business model and scale as KEY. The 3.15% median net interest margin is below KEY's 2.77% NIM indicating that they do not make as much spread on the interest returns and interest expenses as the peer group. However, KEY's credit quality is better relative to Tier 2 companies as given their 0.78 NPL ratio compared to the median 0.84, displaying KEY's effectiveness with recieving repayments on their loans.

Tier 3 compares banks that operate commercial and consumer loan businesses within KEY's geographic location to shed light on KEY's competition. Webster Financial Corporation (WBS) is based in New York and New England, SouthState Corp (SSB) is based in is the southern US states, Pinnacle Financial Partners Inc. (PNFP) is based in Tennessee, North Carolina, and South Carolina, and People's United Financial, Inc. (PBCT) is based in New England and eastern New York. KEY does not show relative value as it is trading slightly higher than the 1.32x median price to book ratio. The loan to deposit ratio is at 70% for KEY indicating they are not earning as much potential revenue relative to the group peers with a median ratio of 76.6%. However, KEY's 14.2% ROE indicates it is more efficient at generating profits compared to the peer median of 9.5%.

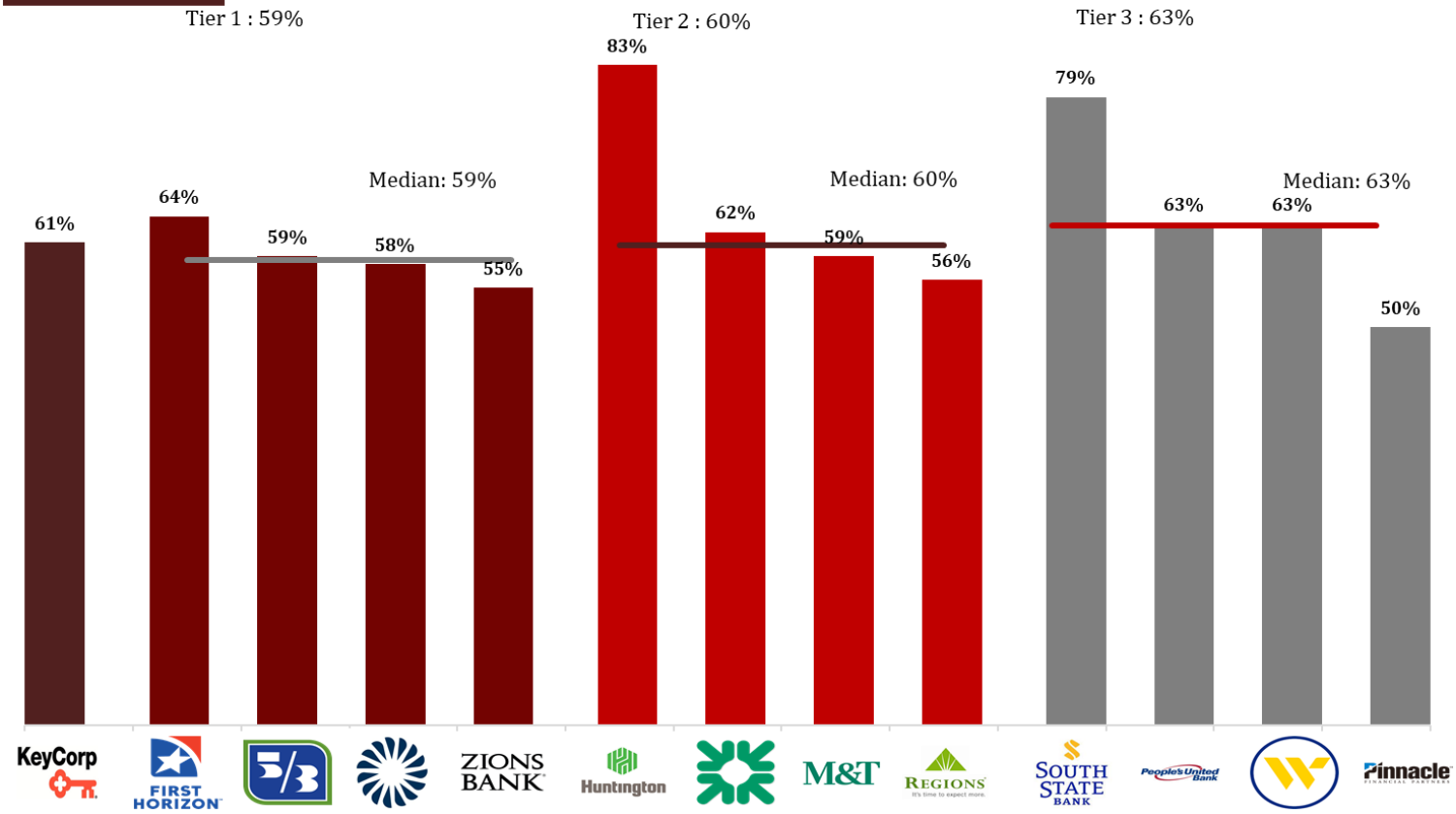
## P/B Ratio



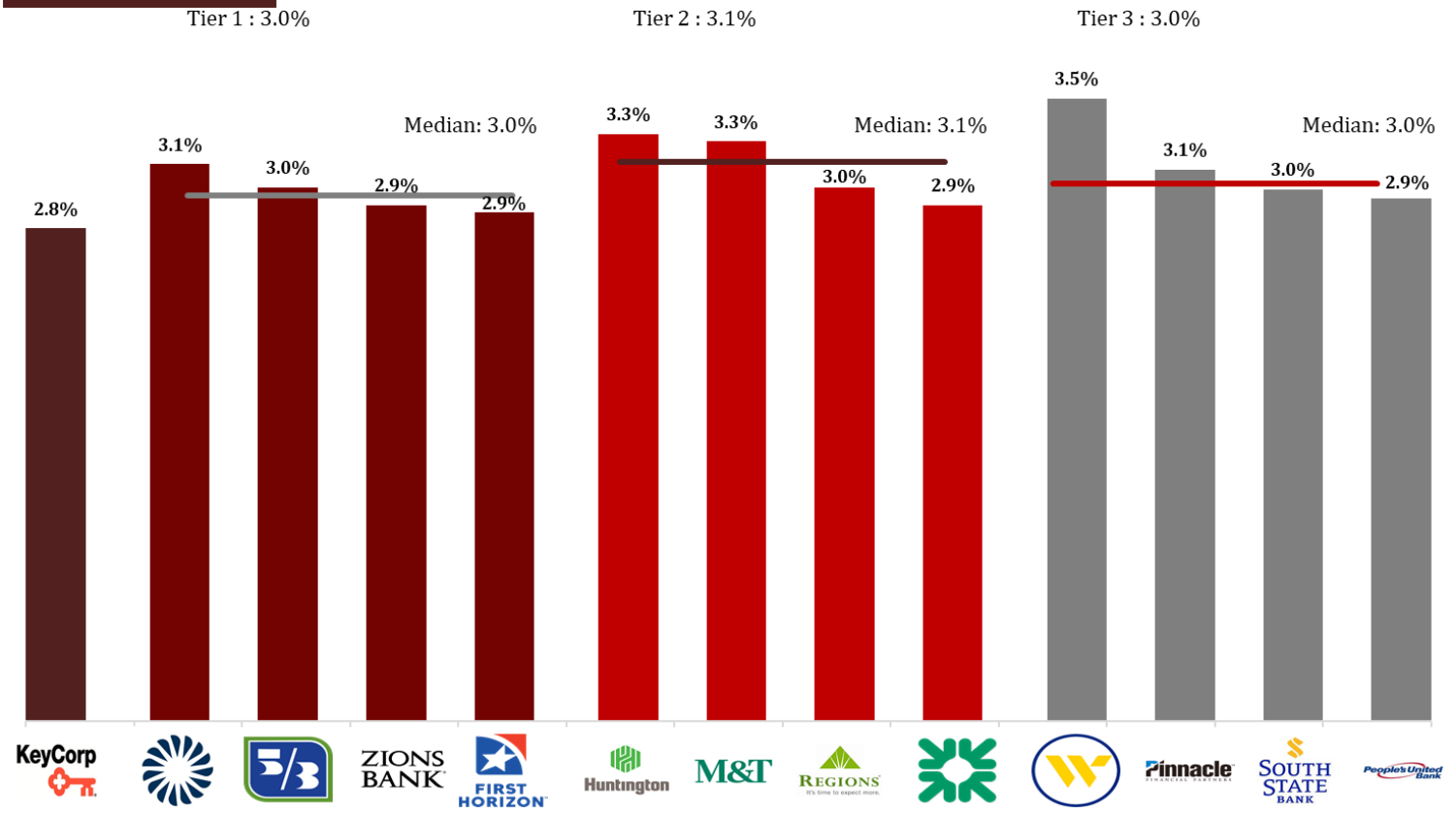

## Loan-to-Deposit Ratio



## Efficiency Ratio




## Net Interest Margin



# Model:

## Bull:

| Valuation | 2/22/2022 | 2/22/2023 | 2/22/2024 | 2/22/2025 | 2/22/2026 | 2/22/2027 |
|---|---|---|---|---|---|---|
| Net Income | $ 2,633 | $ 1,562 | $ 1,721 | $ 1,797 | $ 1,875 | $ 1,942 |
| P/E Multiple | 9.6x | 9.6x | 9.6x | 9.6x | 9.6x | 9.6x |
| Value of Equity | $ 25,353 | $ 15,038 | $ 16,575 | $ 17,308 | $ 18,052 | $ 18,699 |
| Diluted Shares Outstanding | 975 | 975 | 975 | 975 | 975 | 975 |
| Share Price | $ 26.01 | $ 15.43 | $ 17.00 | $ 17.76 | $ 18.52 | $ 19.18 |
| *Upside (downside)* | *16%* | *-31%* | *-24%* | *-21%* | *-17%* | *-14%* |
| Dividends | $ 0.90 | $ 0.53 | $ 0.59 | $ 0.61 | $ 0.64 | $ 0.66 |
| PV of Dividends | $ 0.84 | $ 0.53 | $ 0.59 | $ 0.61 | $ 0.64 | $ 0.66 |
| Sum of PV of Dividends | $ 0.84 | $ 1.37 | $ 1.96 | $ 2.57 | $ 3.21 | $ 3.03 |
| Discounted Share Price +Dividend | $ 26.85 | $ 16.80 | $ 18.96 | $ 20.32 | $ 21.72 | $ 22.21 |
| ***Disocunted Share Price Upside (Downside)*** | ***19.8%*** | ***-25.0%*** | ***-15.4%*** | ***-9.3%*** | ***-3.1%*** | ***-0.9%*** |

| Dividend Build | 11/3/2020 | 2/22/2021 | 5/4/2021 | 8/2/2021 | Average |
|---|---|---|---|---|---|
| Net Income | $ 428 | $ 582 | $ 622 | $ 729 | |
| Dividend Payout Ratio | 45.10% | 32.50% | 29.80% | 25.30% | 33.18% |
| Dividends | $ 0.19 | $ 0.19 | $ 0.19 | $ 0.19 | |

| Discount Rate | |
|---|---|
| CAPM | 18.77% |
| RFR | 0.93% |
| ERM | 10.5% |
| Beta | 1.8646 |

## Base:

| Valuation | 2/22/2022 | 2/22/2023 | 2/22/2024 | 2/22/2025 | 2/22/2026 | 2/22/2027 |
|---|---|---|---|---|---|---|
| Net Income | $ 2,633 | $ 1,495 | $ 1,606 | $ 1,645 | $ 1,704 | $ 1,742 |
| P/E Multiple | 9.6x | 9.6x | 9.6x | 9.6x | 9.6x | 9.6x |
| Value of Equity | $ 25,353 | $ 14,400 | $ 15,467 | $ 15,839 | $ 16,410 | $ 16,776 |
| Diluted Shares Outstanding | 975 | 975 | 975 | 975 | 975 | 975 |
| Share Price | $ 26.01 | $ 14.77 | $ 15.87 | $ 16.25 | $ 16.83 | $ 17.21 |
| *Upside (downside)* | *16%* | *-34%* | *-29%* | *-27%* | *-25%* | *-23%* |
| Dividends | $ 0.90 | $ 0.51 | $ 0.55 | $ 0.56 | $ 0.58 | $ 0.59 |
| PV of Dividends | $ 0.84 | $ 0.51 | $ 0.55 | $ 0.56 | $ 0.58 | $ 0.59 |
| Sum of PV of Dividends | $ 0.84 | $ 1.35 | $ 1.89 | $ 2.45 | $ 3.03 | $ 2.79 |
| Discounted Share Price +Dividend | $ 26.85 | $ 16.12 | $ 17.76 | $ 18.70 | $ 19.87 | $ 20.00 |
| ***Disocunted Share Price Upside (Downside)*** | ***19.8%*** | ***-28.1%*** | ***-20.7%*** | ***-16.5%*** | ***-11.3%*** | ***-10.8%*** |

| Dividend Build | 11/3/2020 | 2/22/2021 | 5/4/2021 | 8/2/2021 | Average |
|---|---|---|---|---|---|
| Net Income | $ 428 | $ 582 | $ 622 | $ 729 | |
| Dividend Payout Ratio | 45.10% | 32.50% | 29.80% | 25.30% | 33.18% |
| Dividends | $ 0.19 | $ 0.19 | $ 0.19 | $ 0.19 | |

| Discount Rate | |
|---|---|
| CAPM | 18.77% |
| RFR | 0.93% |
| ERM | 10.5% |
| Beta | 1.8646 |

**Bear:**

| Valuation | 2/22/2022 | 2/22/2023 | 2/22/2024 | 2/22/2025 | 2/22/2026 | 2/22/2027 |
|---|---|---|---|---|---|---|
| Net Income | $ 2,633 | $ 1,454 | $ 1,519 | $ 1,521 | $ 1,534 | $ 1,526 |
| P/E Multiple | 9.6x | 9.6x | 9.6x | 9.6x | 9.6x | 9.6x |
| Value of Equity | $ 25,353 | $ 14,002 | $ 14,632 | $ 14,647 | $ 14,770 | $ 14,698 |
| Diluted Shares Outstanding | 975 | 975 | 975 | 975 | 975 | 975 |
| Share Price | $ 26.01 | $ 14.36 | $ 15.01 | $ 15.03 | $ 15.15 | $ 15.08 |
| *Upside (downside)* | *16%* | *-36%* | *-33%* | *-33%* | *-32%* | *-33%* |
| Dividends | $ 0.90 | $ 0.49 | $ 0.52 | $ 0.52 | $ 0.52 | $ 0.52 |
| PV of Dividends | $ 0.84 | $ 0.49 | $ 0.52 | $ 0.52 | $ 0.52 | $ 0.52 |
| Sum of PV of Dividends | $ 0.84 | $ 1.33 | $ 1.85 | $ 2.37 | $ 2.89 | $ 2.57 |
| Discounted Share Price +Dividend | $ 26.85 | $ 15.70 | $ 16.86 | $ 17.39 | $ 18.04 | $ 17.65 |
| ***Disocunted Share Price Upside (Downside)*** | ***19.8%*** | ***-30.0%*** | ***-24.8%*** | ***-22.4%*** | ***-19.5%*** | ***-21.2%*** |

| Dividend Build | 11/3/2020 | 2/22/2021 | 5/4/2021 | 8/2/2021 | Average |
|---|---|---|---|---|---|
| Net Income | $ 428 | $ 582 | $ 622 | $ 729 | |
| Dividend Payout Ratio | 45.10% | 32.50% | 29.80% | 25.30% | 33.18% |
| Dividends | $ 0.19 | $ 0.19 | $ 0.19 | $ 0.19 | |

| Discount Rate | |
|---|---|
| CAPM | 18.77% |
| RFR | 0.93% |
| ERM | 10.5% |
| Beta | 1.8646 |

## Model Commentary

Raising rates, as indicated in the September Fed meeting, impacted our projections in the model where we used conservative estimates. Given the earnings in 2020 taking in the Covid economic impact, we decided to forecast the full year 2021 revenue. We took the first 2 quarters of data and multiplied by about 2 to gain a more realistic fiscal year revenue to base our projections off of. An economic boom was not forecasted in the model; instead we believe economic stagnation is a more likely scenario. Stagnation would impact this segment where either the COVID-deirved business dries up and deals become competitive or business remains normal. The deposit segment will naturally revert to the mean as the economy recovers after the increase in deposits was due to stimulus and citizens saving money through uncertain times. The cards and payments segments is tough to specify because of the uptick in spending that COVID has brought. Eventually it will slow down, especially with any sign of economic downturn. The investment services segment is tied directly to the market where we are on the bearish side. Interest income is not projected in all segments for 2022, nor through 2027, because loans make up a large percentage of the interest income and it is difficult to accuarately project.

# Appendix

| KeyCorp ($ in millions, except per share data) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Company | Ticker | Equity Value | Div. Yield | BV of Equity | Rev. | Rev 2021E | Rev 2022E | Net Income | NI % | EPS |
| **KeyCorp** | **KEY** | **21365.3** | **3.31%** | **$16,041** | **$7,028** | **$7,025** | **$6,958** | **$2,254** | **32.1%** | **2.32** |
| Tier I: Commercial and Consumer Loans | | | | | | | | | | |
| Zion Bancorp | ZION | $10,316 | 2.39% | $7,593 | $2,931 | **$2,854** | **$2,788** | $1,122 | 38.3% | 6.81 |
| First Horizon | FHN | 9,157 | 3.60% | 7,750 | 3,257 | 3,070 | 2,942 | 1,061 | 32.6% | 1.90 |
| Cullen/Frost Bankers | CFR | 7,775 | 2.46% | 4,220 | 1,343 | 1,432 | 1,417 | 412 | 30.7% | 6.45 |
| Fifth Third Bancorp | FITB | 30,157 | 2.75% | 20,810 | 7,735 | 7,872 | 7,940 | 2,617 | 33.8% | 3.63 |
| **Mean** | | **$14,351** | **2.80%** | **$10,093** | **$3,816** | **$3,807** | **$3,772** | **$1,303** | **33.9%** | **4.70** |
| **Median** | | **$9,737** | **2.61%** | **$7,672** | **$3,094** | **$2,962** | **$2,865** | **$1,091** | **33.2%** | **5.04** |
| Tier 2: Market Capitalization | | | | | | | | | | |
| Citizens First Financial Group | CFG | $20,567 | 3.23% | $21,149 | $6,766 | **$6,581** | **$7,126** | $1,988 | 29.4% | 4.64 |
| Regions Financial Group | RF | 20,752 | 3.13% | 17,252 | 6,519 | 6,356 | 6,460 | 2,512 | 38.5% | 2.59 |
| M&T Bank Corporation | MTB | 19,662 | 2.88% | 15,470 | 5,947 | 6,083 | 7,146 | 1,665 | 28.0% | 12.95 |
| Huntington Bancshares | HBAN | 23,418 | 3.78% | 17,660 | 5,130 | 6,074 | 6,864 | 999 | 19.5% | 0.97 |
| **Mean** | | **$21,100** | **3.26%** | **$17,883** | **$6,091** | **$6,273** | **$6,899** | **$1,791** | **28.9%** | **5.29** |
| **Median** | | **$20,659** | **3.18%** | **$17,456** | **$6,233** | **$6,219** | **$6,995** | **$1,826** | **28.7%** | **3.62** |
| Tier 3: Banks in Similar Region | | | | | | | | | | |
| Webster Financial | WBS | $5,080 | 2.85% | $3,180 | $1,182 | $1,429 | $2,286 | 374 | 31.6% | 4.15 |
| SouthState Corporation | SSB | 5,411 | 2.54% | 4,758 | 1,455 | 1,378 | 1,503 | 476 | 32.7% | 6.68 |
| Pinnacle Financial Partners | PNFP | 7,313 | 0.75% | 4,876 | 1,249 | 1,315 | 1,358 | 476 | 38.1% | 6.31 |
| People's United Financial | PBCT | 7,630 | 4.09% | 7,506 | 1,938 | 1,948 | 1,923 | 631 | 32.5% | 1.49 |
| **Mean** | | **$6,359** | **2.56%** | **$5,080** | **$1,456** | **$1,517** | **$1,767** | **$489** | **33.7%** | **4.66** |
| **Median** | | **$6,362** | **2.70%** | **$4,817** | **$1,352** | **$1,403** | **$1,713** | **$476** | **32.6%** | **5.23** |

| KeyCorp ($ in millions, except per share data) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Company | Ticker | Beta | Total Capital Ratio | Net Int. Margin | BV per Share | ROE | ROA | P/E | P/B | Efficiency Ratio |
| **KeyCorp** | **KEY** | **1.31** | **13.20%** | **2.77%** | **16.70** | **14.23%** | **1.34%** | **9.63x** | **1.34x** | **60.7%** |
| Tier I: Commercial and Consumer Loans | | | | | | | | | | |
| Zion Bancorp | ZION | 1.05 | 14.20% | 3.13% | 46.80 | 15.08% | 1.27% | 9.35x | 1.36x | 55.5% |
| First Horizon | FHN | 1.26 | 13.14% | 2.89% | 14.11 | 20.34% | 1.93% | 8.75x | 1.18x | 63.5% |
| Cullen/Frost Bankers | CFR | 1.15 | 16.17% | 3.02% | 66.31 | 10.21% | 0.10% | 18.94x | 1.84x | 58.0% |
| Fifth Third Bancorp | FITB | 1.29 | 14.60% | 2.86% | 29.57 | 11.97% | 1.27% | 12.04x | 1.48x | 59.1% |
| **Mean** | | **1.19** | **14.53%** | **2.98%** | **39.20** | **14.40%** | **1.14%** | **12.27x** | **1.47x** | **59.0%** |
| **Median** | | **1.21** | **14.40%** | **2.96%** | **38.19** | **13.53%** | **1.27%** | **10.70x** | **1.42x** | **58.5%** |
| Tier 2: Market Capitalization | | | | | | | | | | |
| Citizens First Financial Group | CFG | 1.31 | 13.50% | 2.93% | 49.64 | 9.22% | 1.11% | 10.40x | 0.97x | 61.5% |
| Regions Financial Group | RF | 1.26 | 13.90% | 3.26% | 18.07 | 14.70% | 1.72% | 8.38x | 1.20x | 56.3% |
| M&T Bank Corporation | MTB | 1.11 | 14.13% | 3.26% | 120.22 | 11.09% | 1.21% | 11.80x | 1.27x | 59.3% |
| Huntington Bancshares | HBAN | 1.13 | 14.15% | 3.03% | 11.96 | 7.07% | 0.08% | 16.35x | 1.33x | 83.2% |
| **Mean** | | **1.20** | **13.92%** | **3.12%** | **49.97** | **10.52%** | **1.03%** | **11.73x** | **1.19x** | **65.1%** |
| **Median** | | **1.20** | **14.02%** | **3.15%** | **33.86** | **10.16%** | **1.16%** | **11.10x** | **1.24x** | **60.4%** |
| Tier 3: Banks in Similar Region | | | | | | | | | | |
| Webster Financial | WBS | 1.31 | 13.70% | 3.05% | 35.1 | 10.37% | 1.00% | 13.52x | 1.60x | 63.2% |
| South State Corporation | SSB | 1.05 | 14.12% | 3.48% | 67.6 | 9.24% | 1.09% | 11.56x | 1.14x | 79.3% |
| Pinnacle Financial | PNFP | 1.15 | 14.50% | 2.99% | 64.08 | 9.69% | 1.39% | 15.24x | 1.50x | 50.1% |
| People's United Financial | PBCT | 1.08 | 13.10% | 2.94% | 17.77 | 3.94% | 0.05% | 11.99x | 1.00x | 62.5% |
| **Mean** | | **1.15** | **13.86%** | **3.12%** | **46.14** | **8.31%** | **0.88%** | **13.08x** | **1.31x** | **63.8%** |
| **Median** | | **1.12** | **13.91%** | **3.02%** | **49.59** | **9.47%** | **1.05%** | **12.76x** | **1.32x** | **62.9%** |

| KeyCorp<br>($ in millions, except per share data) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Company | Ticker | Total Deposits | Total Liability | Deposit/Liability | Total Loans | Loan/Deposits | NPL | NPL Ratio | Total Assets | Earning Assets |
| **KeyCorp** | **KEY** | **$146,072** | **$152,355** | **95.9%** | **$102,267** | **70.0%** | **785** | **0.78** | **$181,115** | **$147,886** |
| Tier I: Commercial and Consumer Loans | | | | | | | | | | |
| Zion Bancorp | ZION | $76,105 | $68,441 | 111.2% | $51,464 | 67.6% | 367 | 0.69 | $87,208 | $71,158 |
| First Horizon | FHN | 73,280 | 75902 | 96.5% | 57,664 | 78.7% | 406 | 0.69 | 87,908 | 76,995 |
| Cullen/Frost Bankers | CFR | 38,734 | 38,098 | 101.7% | 16,596 | 42.8% | 61 | | 46,698 | 35,248 |
| Fifth Third Bancorp | FITB | 162,283 | 181,569 | 89.4% | 113,463 | 69.9% | 834 | 0.73 | 205,390 | 172,688 |
| **Mean** | | **$87,601** | **$91,003** | **99.7%** | **$59,797** | **64.8%** | **417** | **0.70** | **$106,801** | **$89,022** |
| **Median** | | **$74,693** | **$72,172** | **99.1%** | **$54,564** | **68.8%** | **387** | **0.69** | **$87,558** | **$74,077** |
| Tier 2: Market Capitalization | | | | | | | | | | |
| Citizens First Financial Group | CFG | $150,636 | $160,676 | 93.8% | $126,197 | 83.8% | 1019 | 0.83 | $185,104 | $159,275 |
| Regions Financial Group | RF | 131,484 | 120,707 | 108.9% | 85,268 | 64.9% | 745 | 0.85 | 155,610 | 122,652 |
| M&T Bank Corporation | MTB | 128,269 | 126,413 | 101.5% | 97,113 | 75.7% | 1893 | 1.92 | 150,623 | 122,869 |
| Huntington Bancshares | HBAN | 142,805 | 110,045 | 129.8% | 113,296 | 79.3% | 532 | 0.65 | 175,172 | 108,443 |
| **Mean** | | **$138,298** | **$129,460** | **108.5%** | **$105,469** | **75.9%** | **1047** | **1.06** | **$166,627** | **$128,310** |
| **Median** | | **$137,145** | **$123,560** | **105.2%** | **$105,205** | **77.5%** | **882** | **0.84** | **$165,391** | **$122,761** |
| Tier 3: Banks in Similar Region | | | | | | | | | | |
| Webster Financial | WBS | $28,847 | $29,356 | 98.3% | $21,479 | 74.5% | | | $33,754 | $30,255 |
| SouthState Corporation | SSB | 33,242 | 30,694 | 108.3% | 21,025 | 63.2% | | | 40,376 | 33,853 |
| Pinnacle Financial Partners | PNFP | 28,218 | 30,028 | 94.0% | 22,981 | 81.4% | | | 35,412 | 28,661 |
| People's United Financial | PBCT | 52,581 | 55,489 | 94.8% | 41,371 | 78.7% | 329 | | 63,341 | 53,651 |
| **Mean** | | **$35,722** | **$36,392** | **98.8%** | **$26,714** | **74.5%** | **329** | | **$43,221** | **$36,605** |
| **Median** | | **$31,045** | **$30,361** | **96.5%** | **$22,230** | **76.6%** | **329** | | **$37,894** | **$32,054** |