

# **Risk Management for Financial Institutions**

Term Paper: Jasper Chang 2020

## **Citizens Bank**



# **Citizens Bank®**

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## Introduction

Citizens Bank, headquartered in Providence, Rhode Island, ranked 24th in size among all US banking institutions, was established in 1892. Between 1988 and 2014, Citizens Bank was an owned subsidiary of the Royal Bank of Scotland Group, which sold the last portions of its shares in 2015. It is the 14th largest retail bank company in the US, focusing on two business aspects: Consumer and Commercial Banking.

As of 2020, it has a total of \$176.7 billion in assets, across a total of approximately 2800 ATMs and 1000 branches in 11 states. Its focus, like its name, revolves around the “well-being of our customers and the communities”<sup>1</sup>, because it’s “your bank”. Acquisitions in the past are included but not limited to GreatBanc, Charter One Financial, UST Corporation, etc.



Following the Financial Crisis, Citizens Bank underwent a series of changes in achieving a stronger business profile by cultivating a performance driven culture, increasing infrastructure investment, diversifying business mix and optimizing physical branches by directing finances to where they would be the most effective in garnering returns.

## History

It has had its fair share of issues and investigations, going through numerous losses throughout the past two decades. This includes a loss of \$929 million and a writing off of \$2 billion in bad loans through the 2008 Financial Crisis, for failure to disclose information about SEC investigations, due to their supposed involvement with the subprime securities that led to the housing market crash. Then in 2015, it was fined nearly \$35 million for failing to credit customers the full amount of their deposits and mismanaging these funds elsewhere. It also encountered additional losses in the Paul Manafort investigation during Trump’s election in 2016.

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This paper will be focused on identifying and analyzing risk factors of the Citizens Bank; most importantly, it will be looking into profitability indicators and possible trends/changes that may happen in the future. Comparisons to its peers will be done towards other institutions such as US Bancorp (USB), Fifth Third Bancorp (FITB) and M&T Bank (MTB).

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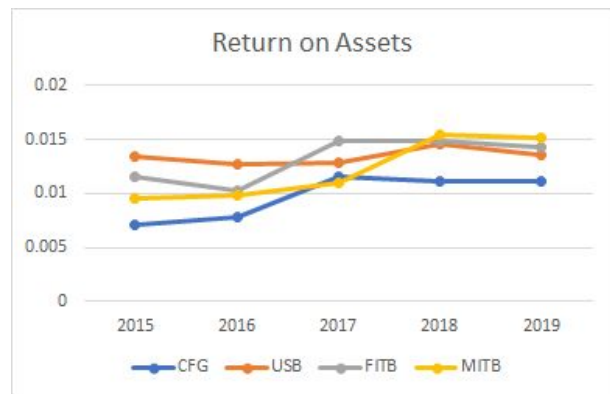
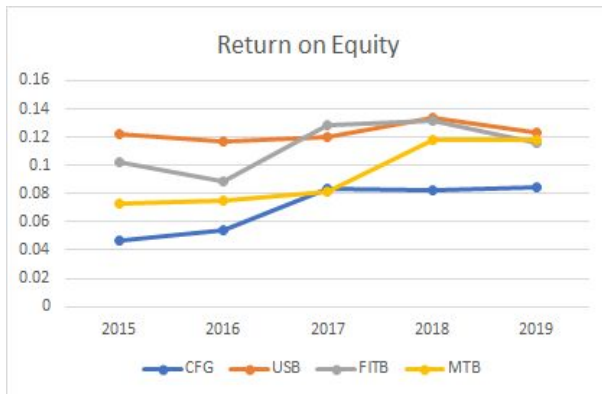
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[https://www.citizensbank.com/made-ready/overview.aspx?WT.ac=Citizens-HP-\\_-Brand-\\_-MadeReady-LearnMore-\\_-0376-\\_-CB](https://www.citizensbank.com/made-ready/overview.aspx?WT.ac=Citizens-HP-_-Brand-_-MadeReady-LearnMore-_-0376-_-CB)

The years that will be thoroughly visited will be measured from the past 5 years, the fiscal years of 2015 to December 2019.

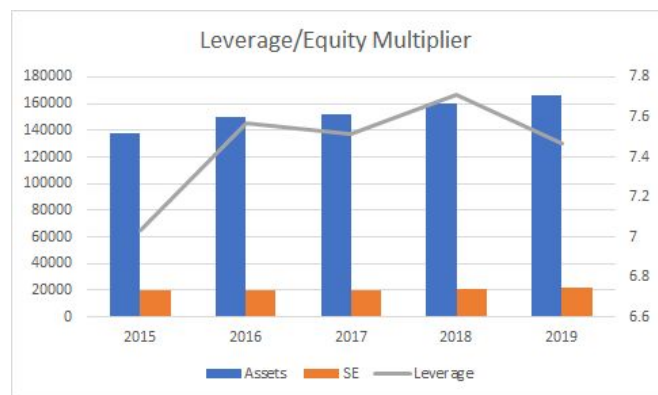
### Profitability and Efficiency

To begin, a profitability analysis will require, at the very minimum, a quick look at ROA and ROE, the Return on Assets and Return on Equity.



As shown above in the two graphs, the blue line denotes Citizens Bank’s returns (CFG) over time. In comparison to the three other institutions of its peer group, it has comparably, very low returns on equity and returns on assets. Compared to the industry average of 10% ROE, Citizens Bank has been at a mere 8% in the last fiscal year. Typically, if ROE is below 10%, it means that this institution is less favorable by the market.

Importantly, the ROE ratio, shown by the DuPont Identity, is the product of the Profit Margin X Asset Turnover X Equity Multiplier, an indication of operating, asset-use efficiencies as well as financial leverage. This has come mainly from the profit margin, although with some volatility, rising from 15% to 21% over the span of the 5 years. The asset turnover rate and the equity multiplier (as shown in the diagram) have remained relatively constant.



As for the ROA (return on assets), Citizens Bank shows again, a lackluster below average 1.11% for the past two years. Given that the ROA has increased throughout the past few years and the Asset Turnover rate has remained constant (ROA = ROS X AT), the Return on Sales (ROS) has been steadily increasing as well.

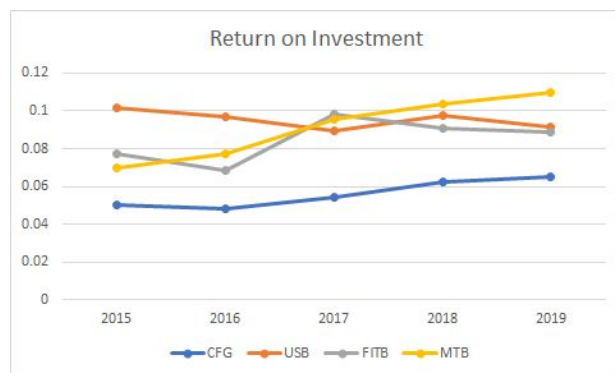
However, it is important to note that Citizens Bank, as shown, compared to the other peers, has the most stable growth overall. Although it faced many losses and issues throughout the previous years, it shows positive and organic growth in these aspects.



In terms of the net interest margin, Citizens Bank also shows good progress, increasing from a sub-par margin, to over 3% starting from 2016 onwards. The industry average is around 3%, and this indicates that Citizens Bank is increasing in profitability. Rather than having negative values that indicate investment inefficiency, Citizens Bank appears to show life over the long run.

In comparison to all US Banks<sup>2</sup>, data indicates that Citizens Bank NIM has generally been lower than the average, except Q4 of 2019. Rather than the average of 3.1%, Citizens Bank finished the fiscal year with 3.2%. This is due to the management team of Citizens Bank moderating asset sensitivity to mitigate effects of interest cuts. Along with hedging the IRR, given systematic yield curve deteriorations, Citizens Bank was able to produce better-than-industry stability.

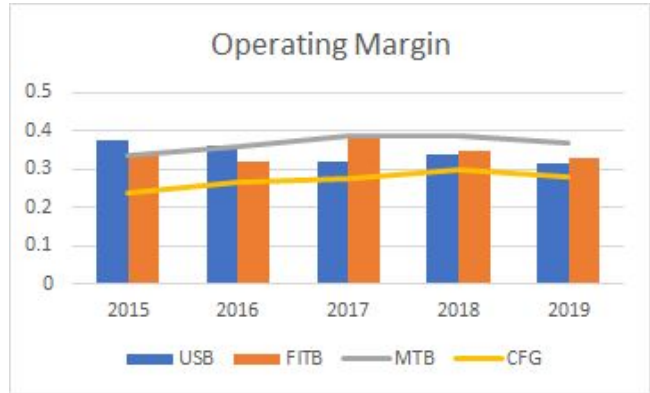
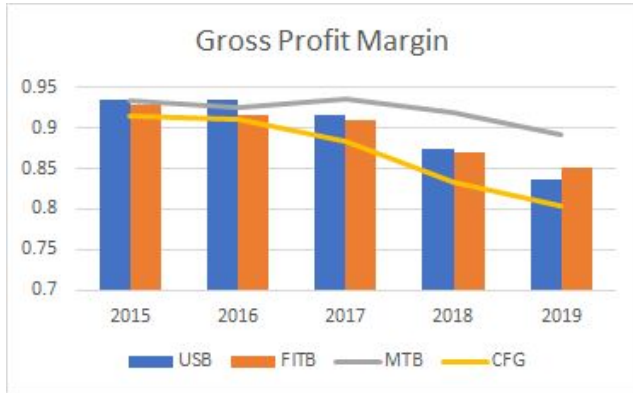
Importantly, this indicates that the net interest income is comparably, a higher ratio to the outgoing interest it pays holders of CDs and savings accounts. More consumers in Citizens Bank are requesting for loans, than saving. As a whole, this is in accordance with Citizens Bank being more “catered to the people” as it means the Bank retains a large portion of noninterest income, which also helps explain the lower ROA. Average revenue growth, being above its peers, sustaining a strong trajectory in net interest income.



As for the return on investment (ROI), Citizens Bank, again, has a below average percentage. It shows slow but steady growth, as opposed to other institutions like US Bancorp or the Fifth Third Bancorp. This is important because given its previous history and involvement in reputation-harming events, it’s slowly establishing investor confidence through its slowly stabilizing profitability. As long as this trend continues, Citizens Bank may emerge

as one of the stronger and steadier banks among its peer group. This information is furthered by the data shown below (see Gross Margin and Operating Margin).

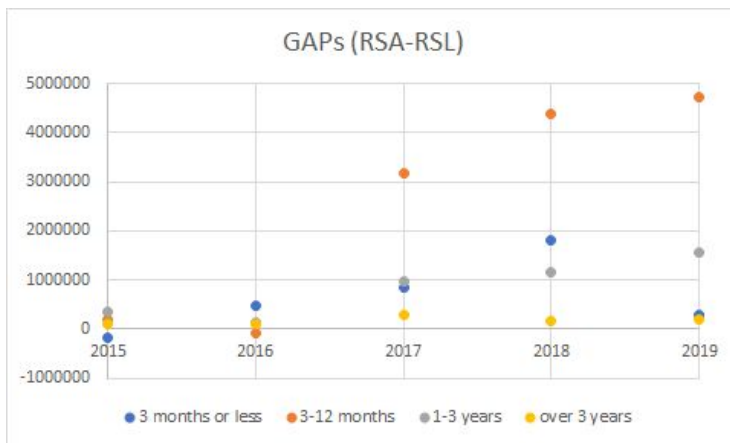
<sup>2</sup> <https://fred.stlouisfed.org/series/USNIM>



From above, it is shown that Citizens Bank has been aligned with its peers for the gross profit margin in the years 2015 and 2016. Onwards, it has decreased at a higher rate than others, but its operating margin has comparably increased more. The operating margin is the gross margin, but subtracting operational expenses and indirect costs. The gap between gross profits and operating profits is low, meaning a consistent degree of performance and stability, showing better cost-benefits.

In 2019, the gap between CFG, USB and FITB is incredibly low, meaning that efficiency wise, Citizens Bank has an advantage. Looking into efficiency ratios of expenses over revenue, Citizens Bank also retains higher than industry averages of 58.4%. All in all, although historical returns have all been suboptimal and they still continue to be under industry standard, strategic planning and optimization have been contributing to continual growth.

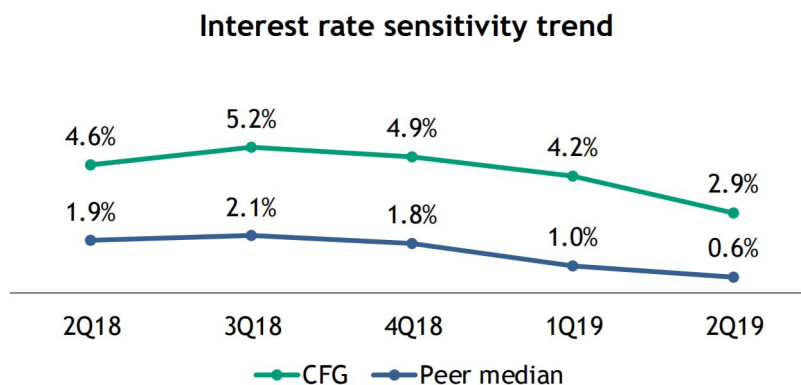
### Interest Rate Risk Exposures



From the GAP calculations, it can be seen that Citizens Bank has done a good job with managing interest rate risk. As mentioned above with their strategy of moderating asset sensitivity, they have not suffered under the new interest rate cuts. The diagram shows the gaps for various time frames, with 3 months or less, 3-12 months, 1-3 years, and over 3 year periods.

Importantly, the gaps for the most part, over the past 4 years have all remained positive, meaning that RSA > RSL. Interest rate sensitive assets are exceeding the liabilities, and therefore, as rates rise, bank profits and revenues will most likely rise as well. In 2019, the change in NIM was measured to be -4 bps, as opposed to the peer average of -8 bps, the third best performing NIM as a result of interest rate changes. This is a good sign, because Citizens

Bank's bottom line is still undergoing extensive development and improvement. This would minimize the strain from interest rate sensitive liabilities, allowing growth in value to be unaffected by undesirable interest rate movements.



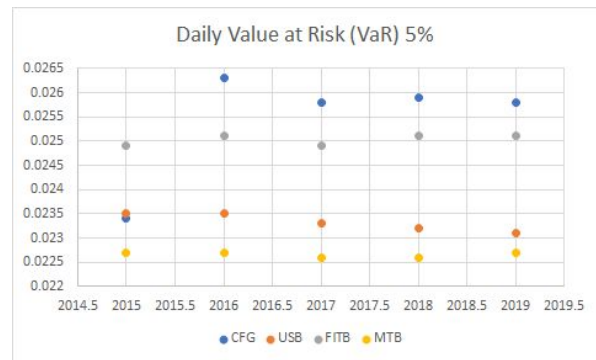
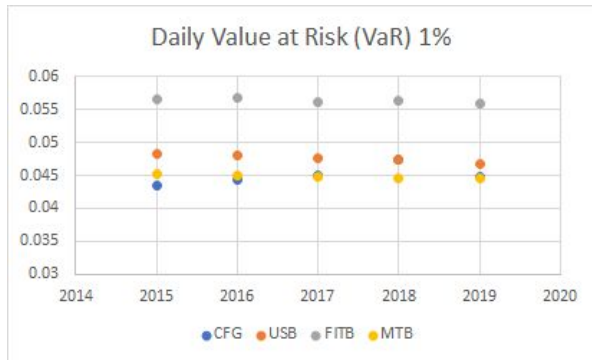
As shown in the interest rate sensitivity trend, Citizens Bank has had a relatively large sensitivity in comparison to its peers. However, the amount of decrease in the past quarters has been greatly larger than those of others. With a 1.7% decrease, its hedging strategies and interest rate swap contracts have proven to be effective in the company emphasized improvement mindset.

This table, below, measures the sensitivity of net interest income. Asset sensitivity in these cases are tied to long-term exposures to interest rate risk and values have decreased over the past fiscal year, a clear indicator of positive change.

Basis points	Estimated % Change in Net Interest Income over 12 Months	
	December 31,	
	2019	2018
<b>Instantaneous Change in Interest Rates</b>		
+200	6.9 %	9.5 %
+100	3.6	4.8
-100	(3.8)	(4.5)
<b>Gradual Change in Interest Rates</b>		
+200	3.2 %	4.9 %
+100	1.5	2.5
-100	(1.9)	(1.1)

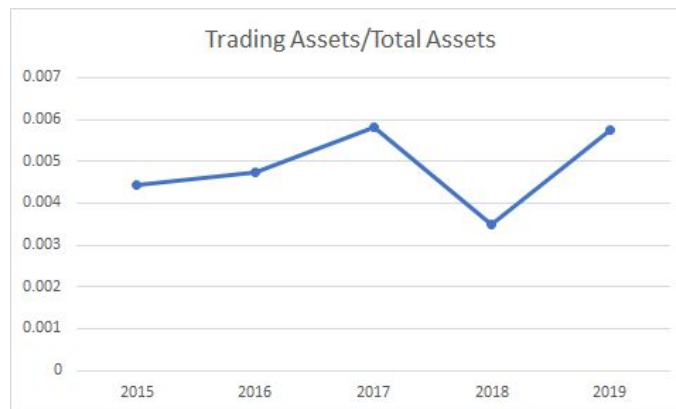
### Market Risk

Market risk for Citizens Bank is used with the measurement VaR (value at risk), presented at a 99% confidence level, which is a one day holding period. Throughout the period of five years, the market risk regulatory capital has increased from \$27 million, peaking in 2018 and decreasing to \$42 million dollars by the end of 2019. However, while adding specific risks that weren't modeled, the total market risk regulatory capital of 2019 was a \$56 million dollars.



In percentages, the daily VaR of 1% and 5% are shown to be lower than its peers for the 1% probabilities, but higher for the 5% probabilities. Note that this 1% refers to a 99% confidence VaR and the 5% refers to a 95% confidence VaR across the span of one day.

This means that given a 0.01 probability for no trading in the span of 1 day, Citizens Bank is likely to lose a very small percentage of their value. However, if the probability increases to 0.05, they will lose more value, respective to its peers. In terms of trend, the increase in VaR throughout the period is an observation found among its peers as well, as market uncertainty has risen greatly in the past few years. Important though, is Citizens Bank's immediate adaptation to minimizing market risks.



Another crude indication of its market risk position is the Trading Assets to Total Assets ratio. The percentage of trading assets held by Citizens Bank has constantly remained at around 0.5%, a small position even compared to the peer median. This is because these banks of these sizes don't usually compete on trading to large extents like JP Morgan or Bank of America. The slight increase in trading assets, though, is important to note, as it implies that there is a focus on efficient growth and better allocation of resources. Especially in terms of long term growth, this is a key point to keep in mind. All in all, market risk is one that almost all banking institutions have to deal with, but isn't one that Citizens Bank has to worry about too much.

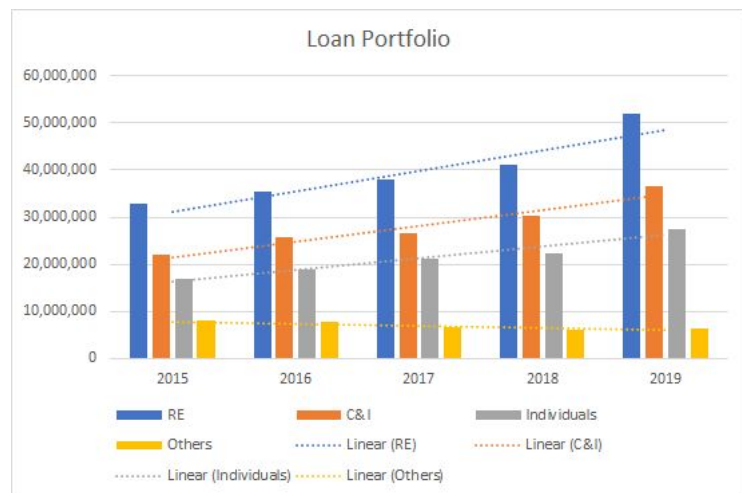


## Sovereign Risk

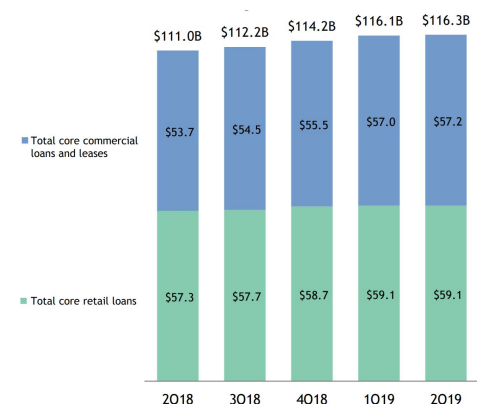
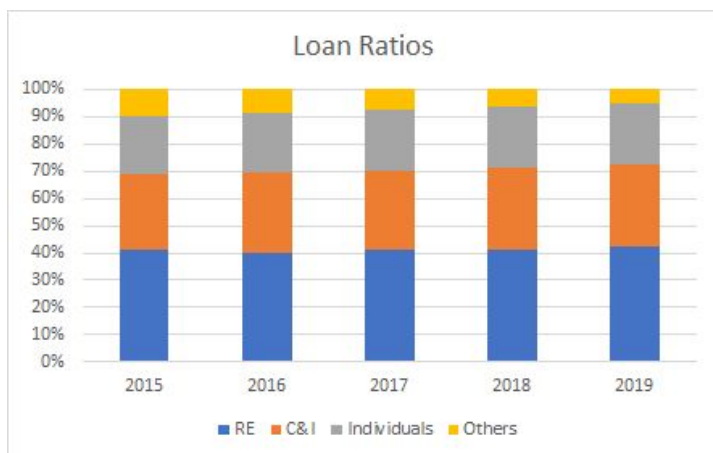
As primarily a regional bank in the New England area with branches in 11 states, it remains situated mainly within national borders and therefore minimizing sovereign risk. It's involvement in trading also remains fairly minimal as mentioned above (see Market Risk). In terms of specific numerics, 2018 saw 0.33% of its total deposits held in foreign offices increase to 0.38% in 2019. Citizens Bank also does not underwrite any credit to customers abroad and loans in foreign offices remains to be zero. The 0.05% increase of deposits held in foreign offices is incredibly minimal to its total deposit delta, which increased 35% from 2018 to 2019. To reiterate, Citizens Bank is almost completely unaffected by sovereign risks.

## Credit Risk

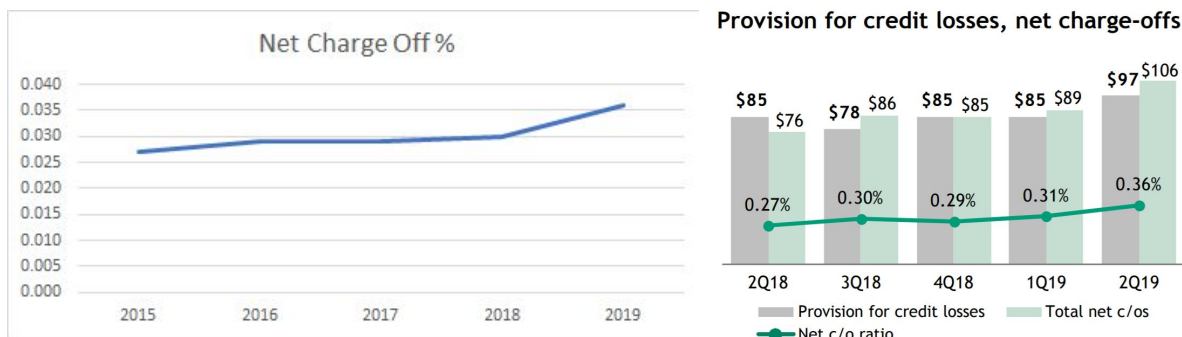
As per the data seen, the loan portfolio has been gradually increasing in the past few years, notably in the real estate and corporate/industrial aspects. The total core commercial loans and leases have been on a steady growth, mainly reflecting the strategy of Citizens Bank to focus on geographic/industrial vertical expansion.



This was all done to increase efficiency and optimize loan growth. Total core loan yields also remain stable, through the impact of lower rates. In comparison to other peers such as US Bancorp and Fifth Third Bancorp, industry-wide loans have all increased because of rate cuts (the latter by 6% total). Interestingly, a large portion of this growth, across these peers and Citizens Bank included, are focused largely in real estate commercial loans.

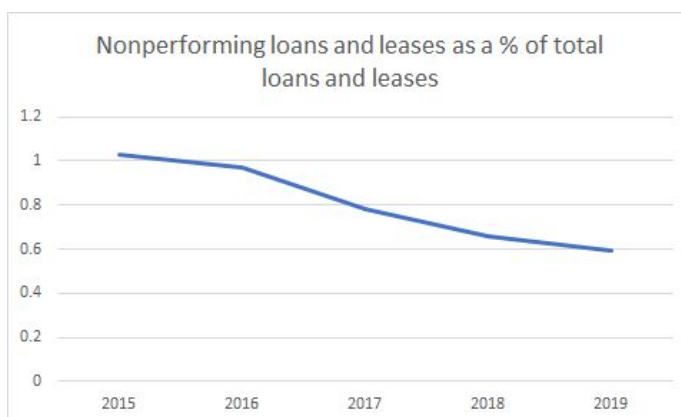


Looking into Net Charge Offs to Loans, it is noticeable that there is a slight upward trend.



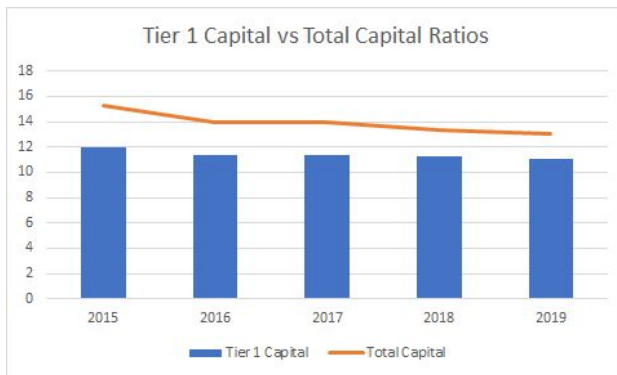
Within these increases, \$9 million was from commercial and \$8 million was from retail. Overall credit quality is increasing despite these figures, because net charge off percentages are low compared to peers. Credit provision and allowances to loan coverage ratios have both decreased slightly but remain very stable. All in all, these credit risks are well managed despite gross loan increases and expansion. This shows strategic planning in bank expansion, especially as it continues to improve from previous difficulties.

Another measurement of credit risk can be measured in the ratio of nonperforming loans to the net loans/leases. From its NPL ratio of 1.03 in 2015, it has steadily decreased to 0.59, showing that it can control its credit risk much better. At 1.03, it meant a bad quality of loan portfolios and high-risk lending, but this rapid improvement over the next 4 years signals well towards future developments and credit risk tolerance.



### Capital Adequacy

Capital risk or capital adequacy refers to the risk the firm has in regards to the capital it has and requires to support its financial/business activities, as long as the systematic risks associated with general business operations during expected economic ups and downs of a normal spectrum.

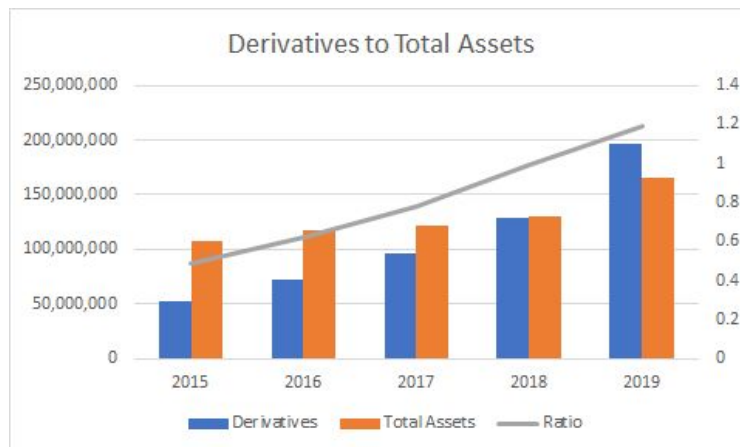


From the diagram, it can be seen that the Tier 1 Capital Ratio has been constantly decreasing among the five year period. The Tier 1 Capital Ratio, or the ratio between Tier 1 Capital and risk weighted assets, indicates that in accordance to the business plan, Citizens Bank has been optimizing their capital structure by increasing proportions of preferred stock in Tier 1 Capital. Every quarter, specifically 3rd Quarter 2019, there's been a planned

share repurchase program, as continued from before. The 2018 Capital Plan through its actions in 2nd Quarter 2019, returned a total of \$268 million dollars<sup>3</sup> back to shareholders. Frequent issuing of preferred stocks and capital have also created a reputation of dividend confidence among investors, inspiring confidence.

The Tier 1 Capital Ratio also ensures that the institution retains enough low-risk assets. Still remaining above Basel III requirements but following the trends of its peers, Citizens Bank is poised to survive any and all economic downturns. Capital levels, in comparison to regional peers, also remains on the higher end.

### Off Balance Sheet Risks



The value of the derivatives here is a nominal value and therefore ratios between derivatives to total assets will very possibly be over 100%, as shown by the graph. For OBS risks, Citizens Bank has a relatively small percentage compared to the industry average. Because derivatives

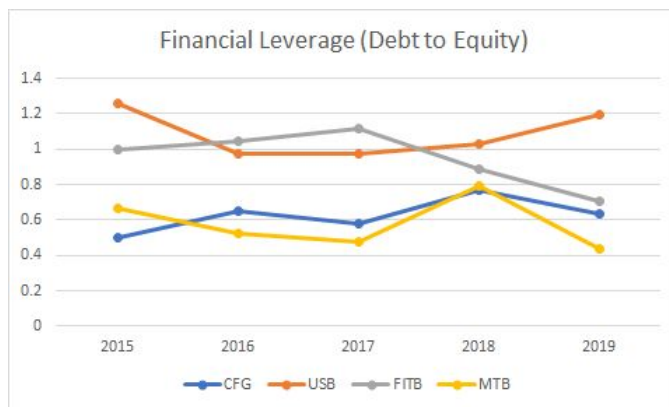
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<https://investor.citizensbank.com/~//media/Files/C/CitizensBank-IR/reports-and-presentations/financials/2019/2q19-earnings-presentation.pdf>

are used to hedge against various risks, it makes sense that these are greater than total assets. However, the reason why the ratio is comparably smaller than the thousand percents of the industry average is because of its minimal involvement in trading and less loans as its peers/larger banks. Also, the industry average is skewed to a large degree because the largest banks of the US have incredibly large percentages, often totalling nearly 4000% of total assets. And hence, it is less exposed to OBS risks, mainly because of its size and involvement, having a smaller balance sheet size. It is important that there are some OBS risks because it signifies strategic decisions made by banking management to reduce other risk exposures.

## Liquidity Risk Exposures

“We define liquidity risk as the risk that an entity will be unable to meet its payment obligations in a timely manner, at a reasonable cost. Liquidity risk can arise due to contingent liquidity risk and/or funding liquidity risk.” This is the definition provided by Citizens Bank in its 10K reports. Contingent liquidity risk refers to liquidizing assets while funding liquidity risk refers to the abilities to raise funds from depositors.



From the financial leverage ratio, of debt to equity, Citizens Bank is shown to have a below average leverage ratio, but higher than MTB (M&T Bank). These figures, however, are all considered low, meaning that any growth sustained has been done without overfinancing with debt. This is especially indicative for Citizens Bank as it has been growing nonstop for the past years. Seeing that the

financial leverage is fairly low means that this growth will likely be sustainable and organic. The ratios though, among these peers, have only a range of 0.756, which indicates that their strategies in control liabilities are relatively similar.



The consolidated year end loan to deposit ratio is around 94%, meaning that total deposits are greater than total loans. In terms of liquidity risk, this means there is close to none because deposits are easily to liquidate. While low LDRs may indicate low levels of profitability, this isn't the case for Citizens Bank. Because overall deposits have been increasing, there has been a steady

flow of new cash flows. From Quarter 2 of 2018 to Quarter 2 of 2019, the total deposits growth totaled 7%, as opposed to the peer average of 2%. With new customers, it means more money is available to be loaned; and since the interest rate cuts in the past two years, loans have also been growing at a steady rate, leading to higher margins of profit. All in all, this means that Citizens Bank will not need to create new debt in order to fulfill liquidity requirements in the case that it happens. Again, a 94% LDR is close to ideal and a slight decrease in the next fiscal year or two would put Citizens Bank in a position to secure even more profits and raise share prices.

### **Risk Management and Future**

To sum up, Citizens Bank has had a relatively robust capital and liquidity measuring, and the main issue would be interest rate and credit risks. Especially as the amount of loans begin to increase, proper control over credit risks would be beneficial in maintaining stability within the institution. Interest rate risks in 2020 and onwards will be facing bigger challenges economically because of the Covid-19 crisis that has led to a downturn and recession. As non-essential businesses take a demand shock, banking institutions as such have been facing share price drops. Earlier in the year, it hit a quarterly performance of -50.49%, concerning but shouldn't hinder its growth in the short term.

It is important to realize that Citizens Financial has been on a recovery pathway since its drops in popularity and consumer/investor confidence back in the 2000s. It has initiated many series of plans and improvements to drive growth and lower risks, leading to consistency in company performance. Because of its pathway, it has lower book values than its peers. The price-earnings ratio of Citizens Bank is the second lowest in its peer group as well, clearly displaying itself as an undervalued asset. In comparison to its banking competitors, its improvement has been drastically more streamlined and effective. The strategic changes that have been implemented so far have been instrumental in lowering gaps to peers and maintaining positive changes/improvements. It will need to continue to improve its yields to better compete.

In terms of risk management, aforementioned, the focus should be mainly on credit risks. Of course, profitability should still be closely monitored, so the ROE and ROA should continue to be looked at to ensure management efficiency. Credit risks would directly correlate to loan and deposit growths, which should be hedged by derivatives. Given the interest rate cuts, buying futures contracts would be a good option. Overall, the direction that Citizens Bank has been taking towards improvement have been the right ones and risks have been minimized to their respective levels. Importantly, for interest risks, the top end should be utilized properly to guarantee a stable NIM. This can be done with smoothing and matching strategies. Overall, the undervalued share price means that Citizens Bank (CFG), paired with its remarkable path of turning around and consistency, continues growing organically, will be one of the leaders in its peer group.

## Citations

1. *FDIC website* (<https://www.fdic.gov>): used for all the tables and the reported data (unless differently specified).
2. *Macrotrends.net* for data on Peer Groups (some banks were not found under FDIC)
3. *10K reports* from 2015 to 2019 for miscellaneous information especially regarding risk measurements and capital ratios  
([https://last10k.com/sec-filings/cfg/0000759944-20-000030.htm#link\\_fullReport](https://last10k.com/sec-filings/cfg/0000759944-20-000030.htm#link_fullReport))
4. *Old papers* uploaded on NYU Classes
5. *Investopedia* (<https://www.investopedia.com/>) for various explanations on ratios and different concepts that were used and analyzed in this paper;
6. *Citizens Bank* subpage (<investor.citizensbank.com>) for past-released powerpoints on business strategy, due to not being able to access the main website due to geological constraints.
7. *Forbes.com* for some information on peer banking measures (such as <https://www.forbes.com/sites/greatspeculations/2018/06/27/a-breakdown-of-the-loan-portfolio-s-of-the-largest-u-s-banks-2/#55b2bd35126b>)
8. *Y-Charts* for institution released data, stats and financials, for all banking institutions that were examined in this paper (some values were not quantified in the report, only using explanations that stated the relationship between Citizens Bank and said Bankcorp)  
([https://ycharts.com/companies/CFG/key\\_stats](https://ycharts.com/companies/CFG/key_stats))