

## Community Bank Financial Management Strategy

- NIM Optimization vs. Bank Efficiency
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This particular analysis was undertaken in an effort to statistically confirm or deny observations and ideas that developed during my tenure as a senior bank officer responsible for financial reporting and analysis at a Colorado bank back in the 1990s. During this time period I developed budgeting analysis spreadsheets that forecast our P&L for each operating year. As I analyzed the numbers I came to the conclusion that the most important factor in our success was making the right long term decisions and investments that would lead to the bank operating on an efficient basis year in and year out. Hence the hypothesis is that managing the bank's expenses relative to income was a more important factor in a bank's success (being efficient) than optimizing their net interest margin.

In order to test this theory 15 high performing community banks and 15 low performing community banks based upon 2015's reported financial results were randomly selected. The two groups of banks' financial performance was broken down based upon key financial ratio criteria. The banks selected ended up ranging from having total assets of \$626 million down to total assets of \$49 million. Only community banks with less than 1 billion in assets were eligible to be selected as this is the group of banks we specialize in working with, I did exclude the smallest peer groups of banks with assets under \$50 million. High performing community banks were defined as banks having a return on assets (ROA) that put them in the top quartile of their respective peer group, low performing banks were likewise banks that ended up in the bottom quartile of their group. Each of these banks results were primarily evaluated with regard to the net interest margin and bank efficiency ratio, although we also tracked the bank's other non-interest income and loan to deposits levels too in the event these factors might play a key factor in their results. So our objective, which I believe the analysis has more than achieved, is to seek a contrast between the two groups.

### High Performing Group

The first group analyzed here (see exhibit #1) is the 15 top quartile performing banks in terms of their ROA ratio. I compiled the banks NIM % and bank efficiency ratio for each of the 15 banks selected and determined what percentile this ratio fell into based upon the bank's peer group, e.g., so an excellent ratio relative to its peers would put the bank into the 90<sup>th</sup> percentile group. Noticeable is 14 out of the 15 top banks selected had bank efficiency ratios above average, most were way better than average. While most of the banks also had Net Interest Margins above average, 4 out of the 15 managed to be a top quartile bank in spite of having Net Interest Margins below average. The average Net Interest Margin for this group of banks was 3.96% tax equivalent rate based upon average

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<sup>1</sup> With regard to our definition of high and low performing banks some upper and lower limits were added so as not to include unusual banks with special circumstances. Any bank that had a ROA more than 2 times the 75th percentiles ratio were excluded under the assumption that their results were likely distorted by one time gains or other unusual factors. With the low performing group banks that were losing money were likewise excluded as they most likely had issues and were not operating under normal circumstances. I just wanted to evaluate banks operating normally.



assets, which is better than the average for the low performing bank group but does not explain the bank groups overall success very well. The low performing groups' average NIM was 38 basis points lower at an average of 3.58%.

While analyzing the detailed results and ratios of both the high and the low performing banks (30 in all) each banks Non-Interest Income and Loans to Deposits ratios were also documented to make sure that performance in these areas was not a distinguishing reason for the banks overall success or subpar results. The average non-interest income levels and loans to deposit ratios between the high performing banks and the low performing banks were nearly identical, indicating that this was not much of a differentiating factor between the two groups. The non-interest income average ratio for high performing banks was .55 versus .51 for the low performing banks. Average loan to deposit ratios for both the high and the low performing groups were both just a little over 77%.

One final thing to keep in mind as you review the following charts is I have plotted the banks performance in just two key areas, net interest margin along the vertical Y axis and bank efficiency along the horizontal X axis based upon the bank's percentile rank. A high percentile rank, like 75%, means the banks ratio is better than 75% of its peers, or put another way in the top 25% of its peer group. When you combine the banks ranking for both on the chart you get a pretty good idea of where the bank's overall profitability is at but not perfect.

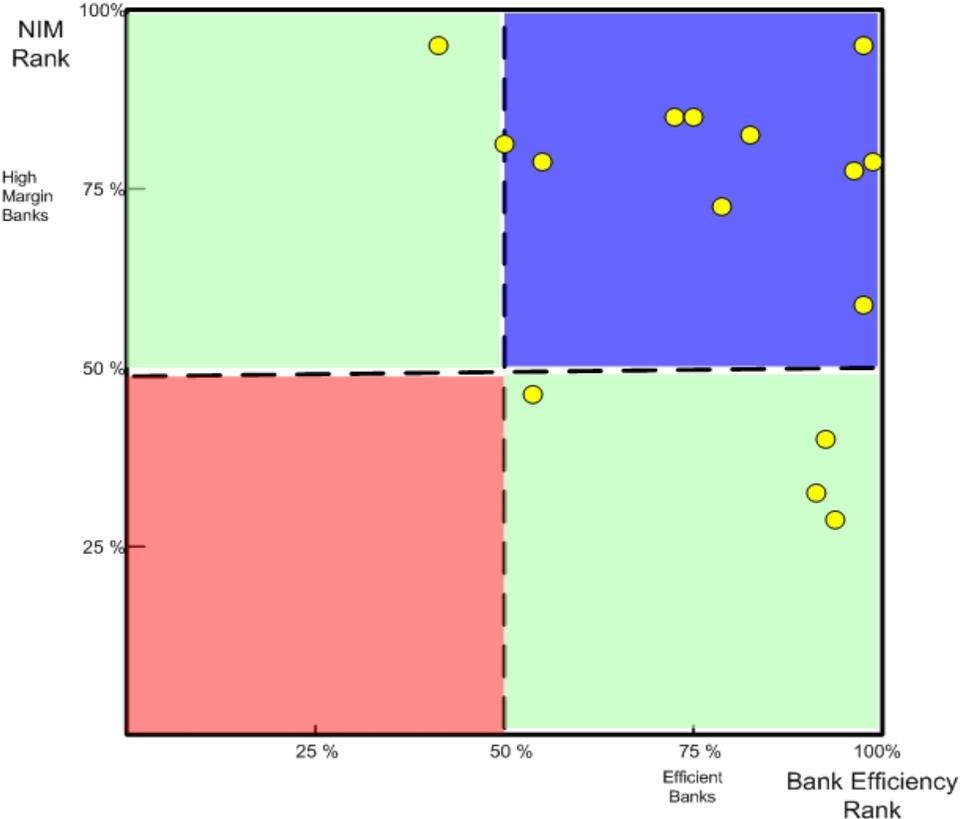


Exhibit #1 – 15 High Performing Banks Charted



As you can see in the previous chart a dominate attribute for this high performing bank group was the superior bank efficiency ratio most the banks obtained. A bank's efficiency ratio compares the banks non-interest operating expenses with the banks operating income to arrive at a key percentage. The actual bank efficiency rate averages for the peer groups included in the analysis ranged from 66% for larger banks to 75% for the smaller ones. Don't get these bank efficiency rates confused with the bank's percentile rank; a lower bank efficiency rate is superior to a higher bank efficiency rate. While not as pronounced, most of the high performing banks also had better than average net interest margins.

### Low Performing Group

Now to check out the low performing group you'll note that 13 out of the 15 low performing banks have subpar bank efficiency ratios. Even more revealing is that 7 out of the 15 low performing banks managed to obtain an above average net interest margin yet their overall results (ROA) still put them in the bottom quartile of their peer group. These banks were all still making a profit, just at a profitability level way under the average for their group and the dominate factor was they typically had operating expenses out of line with their operating income. The biggest operating expenses for a typical community bank are personnel, facilities, and data processing.

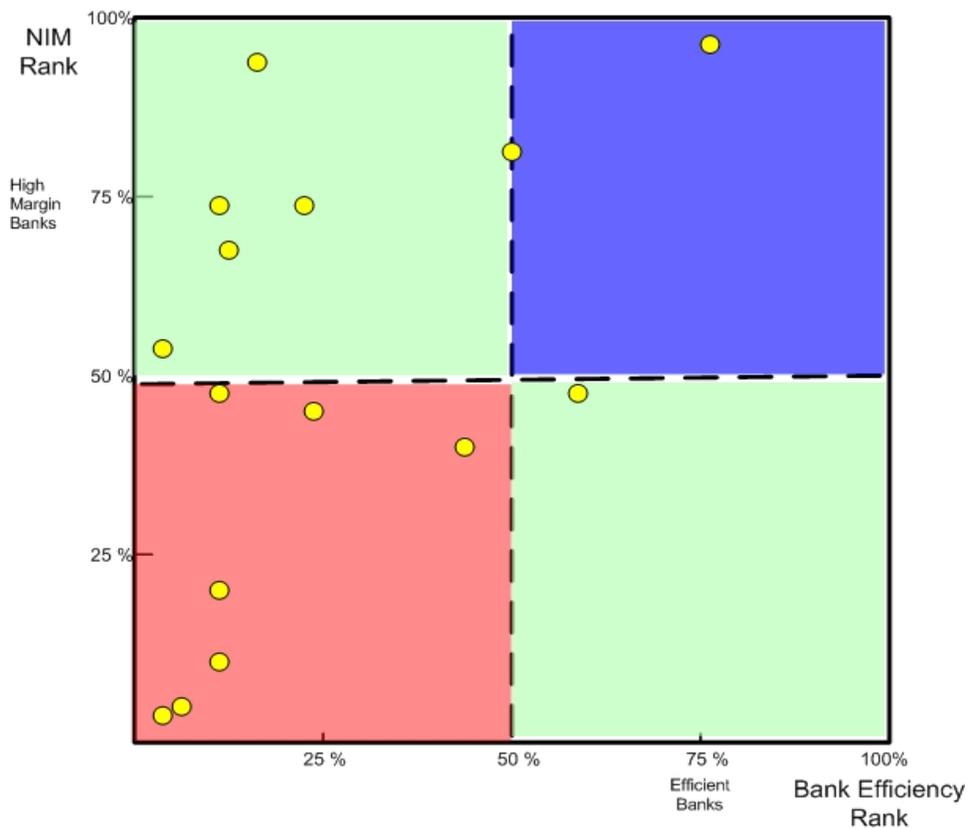


Exhibit #2 – 15 Low Performing Banks Charted



## Conclusions

The result of this relatively simple statistics project indicates that a bank's efficiency is the primary driver of a bank's performance. Applying the ratios and the averages obtained to a hypothetical 100 million dollar bank indicates that having a superior bank efficiency ratio is almost 3x's the impact of having a better than average net interest margin<sup>2</sup>. That is not to say banks should not pay attention to managing their net interest margin; just to say that managing your net interest margin and ignoring your bank efficiency is a pathway to failure. Plus you have to factor in that in order to improve a bank's net interest margin the bank may have to take on significant credit risk to grow their loan portfolio and that can come back to haunt some banks in the form of loan losses.

So it is pretty safe to conclude that successful banks (in terms of profitability) are good about making long term business decisions that keep operating expenses well in line with their operating income. I say long term because operating expenses are difficult to manage or change much in the short run as so much of it amounts to a fixed cost as opposed to a variable one, at least in the short term. My experience leads me to believe that banks with poor bank efficiency rates probably need a longer term plan, that being one in duration of 3 to 5 years, to fix this performance drag.

Another observation I have seen in many banks is management dominated by those who have risen thru the ranks in lending as opposed to operations. Strong bank operations managers in my experience are needed, lending personnel can have good operational skill sets too, but it is an unusual combination. It is not so easy as to just be cheap, banks must attract qualified employees and managers as well as offer the latest in services, e.g. mobile banking, remote deposit capture. Consequently in the real world making successful long range business decisions and better managing your expenses is not so easy as it might at first appear. A key aid in this process is the completion of at least an annual operating budget/forecast to help management see the key drivers and impact of such variables on their performance.

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<sup>2</sup> While keeping in mind that an improved net interest margin also improves your bank's efficiency ratio somewhat as it increases your operating income.

