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**PRESENTED BY**  
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# Project #2: Analyze NYSE Data

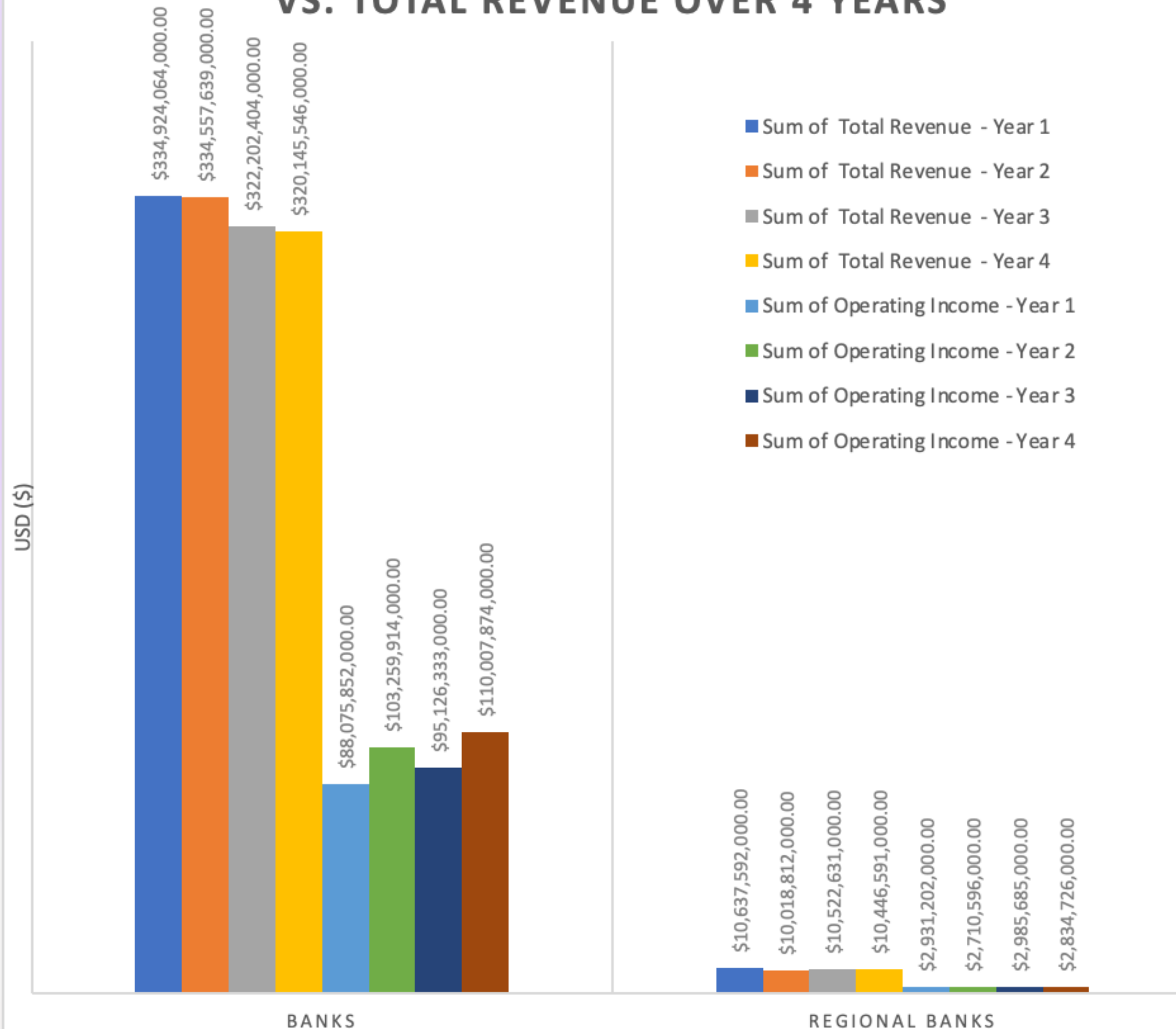


# Analysis

Are Regional Banks as profitable as National banks year over year?



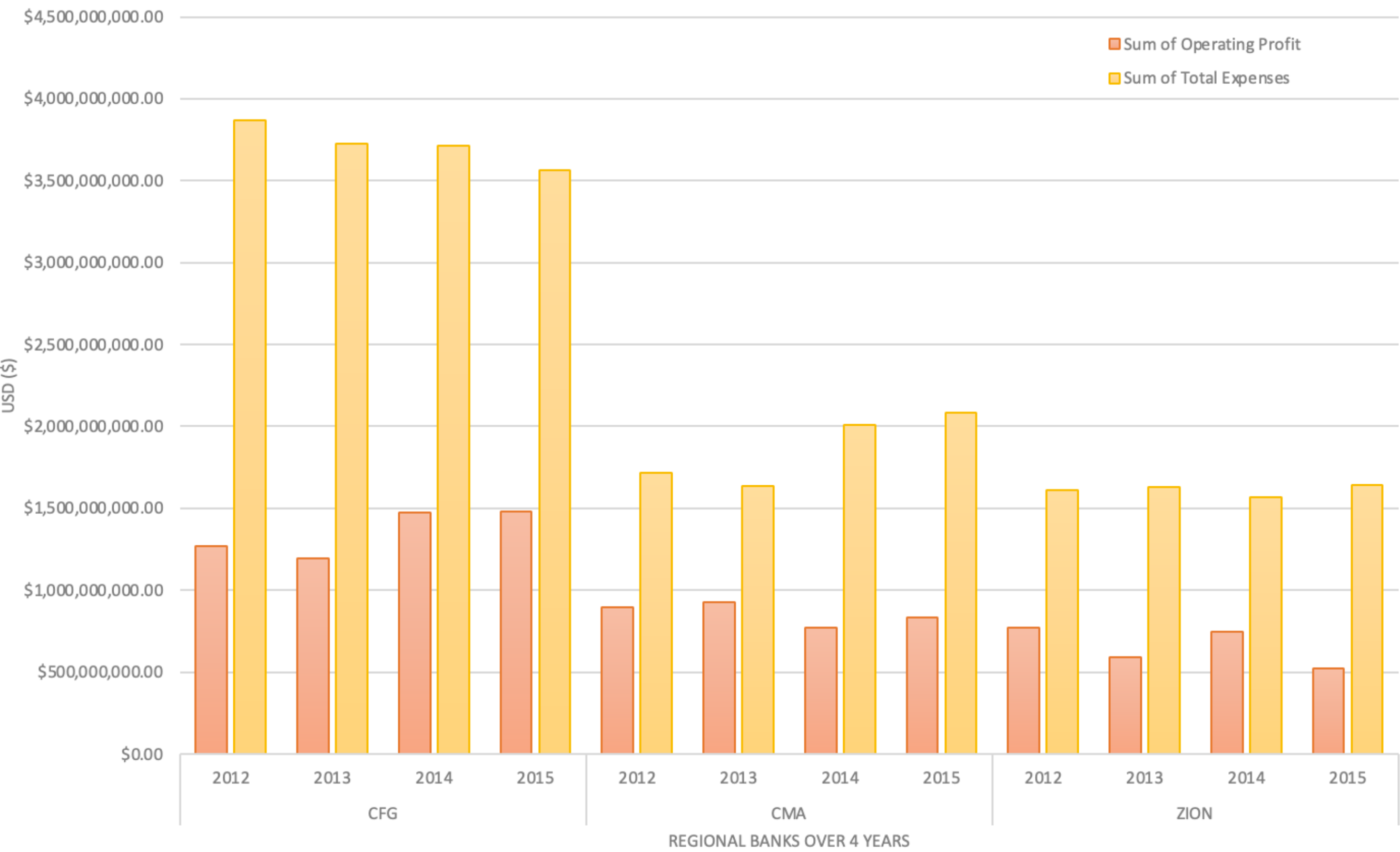
## BANKS & REGIONAL BANKS OPERATING INCOME VS. TOTAL REVENUE OVER 4 YEARS



### Profitability by Operating Income

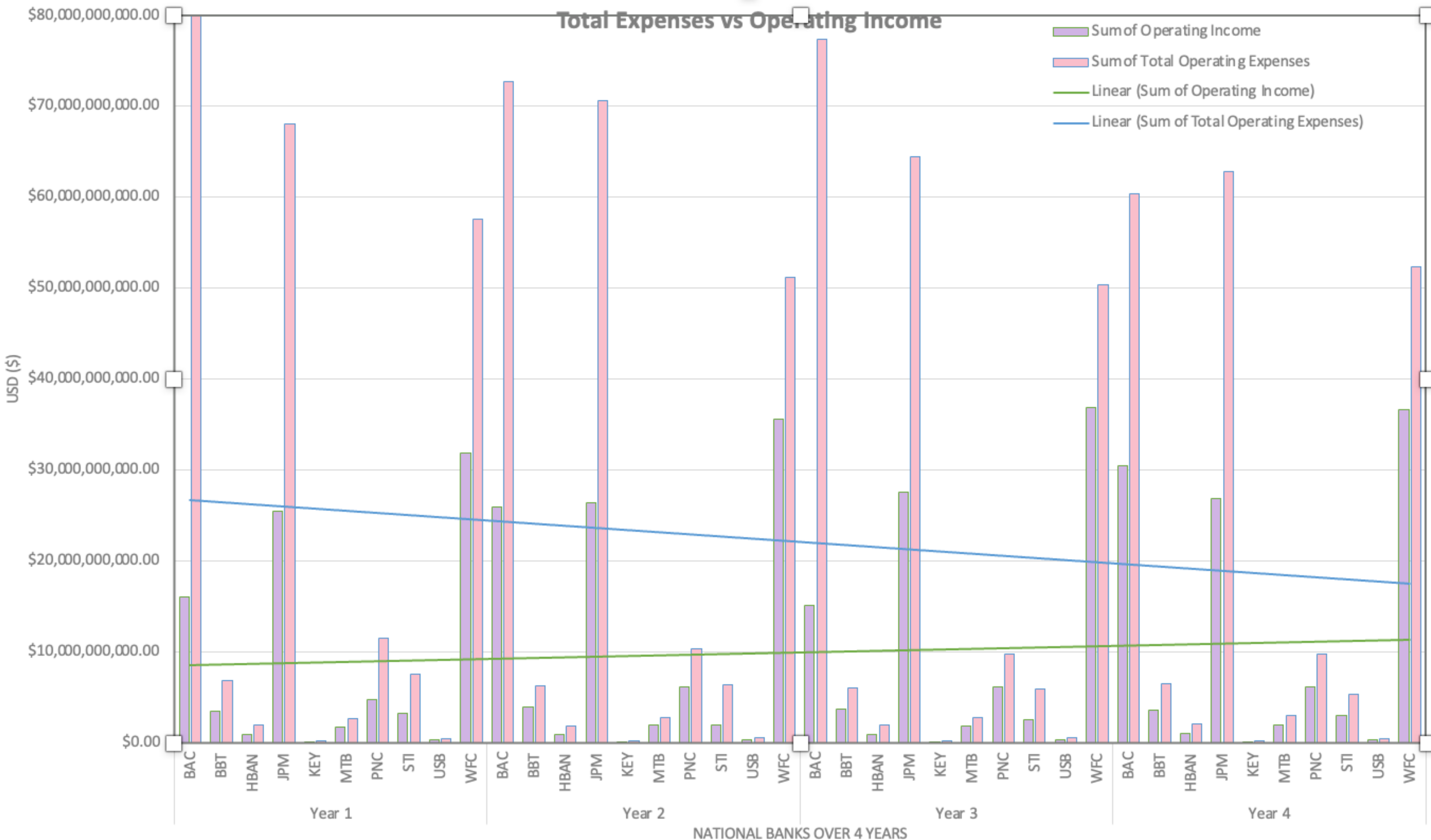
- To observe the difference between the Total Revenue made by both national banks and regional banks, I first plotted their dataset into a Clustered Bar Graph.
- There's approximately a \$1.3 Trillion Dollar difference in Total Revenue made between banks and regional banks. However when it comes to Operating Income, the difference is only roughly \$408 Billion.
- This is explained by the difference between the Operating Margin means between both regional and national banks which is \$2.77 and \$0.85, respectively.
- Banks operating income has been steadily increasing with slight variation, due to its standard deviation of \$0.18 while Regional banks operating income are consistently stagnant due to its \$0.03 standard deviation, ensuring its returns stay closer towards the mean.

Total Operating Expenses vs. Operating Income



Profitability via Fiscal Responsibility

- I then compared the operating income to the Total operating Expenses over 4 years.
- While CFG, CMA, and ZION have lower total operating expenses to national banks, they also have a lower operating profit, making them generally less profitable than national banks.
- However, profitability varies greatly, as the ratio of operating profit to total expenses ranges from 0.59 to 1.47. Suggesting that Some regional banks are more profitable than others.



## Profitability via Fiscal Responsibility (Part 2)

Next, I plotted the Total Expenses vs. Operating Income for National Banks to compare and contrast. The banks with the highest operating income are BAC, JPM, and WFC, while the banks with the lowest are KEY, USB, and HBAN. It's the same respectively for Highest and lowest total operating expenses.

- However it can be seen that the profitability of national banks has generally increased over the four years, with the exception of BAC, which saw a decrease in profitability in Year 3.