Relationship Between Community Banks and Unemployment in New York

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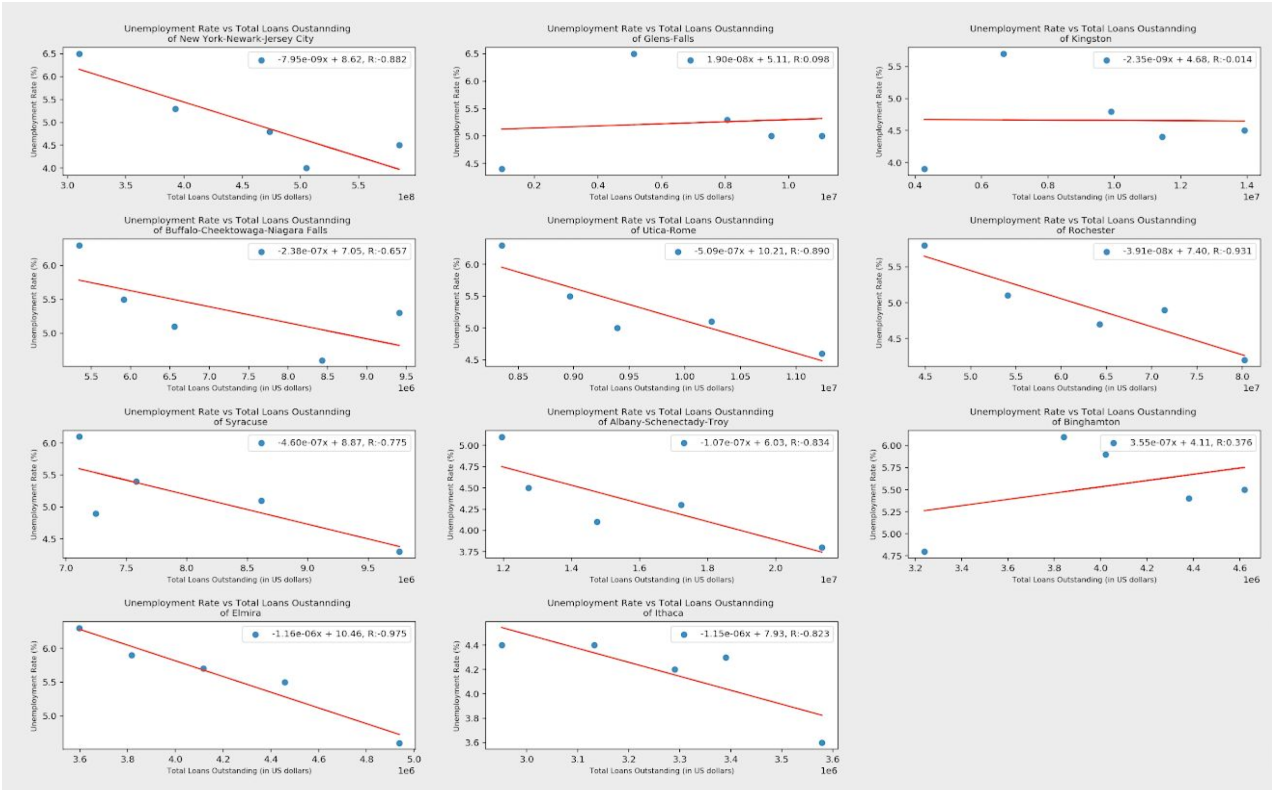
This paper explores the relationship between total loans outstanding by community banks and the unemployment rate within a region. Specifically, this paper explores the impact of New York community bank loans on their corresponding Metropolitan Statiscal Area (MSA) from 2014 to 2018, the latest date that the Bureau of Labor Statistics has unemployment figures on MSAs for. Using data from the FDIC Challenge Database, community banks in New York were assigned to the Metropolitan Statistical Area they are located in. Given that many MSAs have more than one community bank, figures were obtained by aggregating the total loans outstanding. Then, regression analysis was applied, using total loans outstanding as the dependent variable and the unemployment rate for that year as the independent variable. The reason New York was separated into MSAs was because this paper hypothesizes that the impact that community banks have are more apparent at a smaller geographic scale.

New York has 12 MSAs but since no community banks were found in 1 of them, this study focuses on the 11 MSAs with community banks. While there are issues with the reliability of the results due to a small sample size, this study finds that in the seven out of eleven MSAs, there was a strong negative correlation between unemployment and total loans outstanding, and an eighth MSA indicated a strong medium correlation (See Figure 1 for graphs). In the remaining three, there was a weak positive or negative correlation, although this result, could easily be attributed to insufficient data on unemployment.

The idea that increases in total loans outstanding is associated with decreased unemployment empirically makes sense. When banks loan more money, business activity is stimulated because businesses have more cash to work with. Since businesses are interconnected in their operations, increased business activity is likely to spill over and have a widespread effect on the economy as a whole. In this scenario, unemployment will decrease because businesses need to hire more workers so they can produce more goods and increase revenue as well as profits. Moving forward, it will be interesting to explore whether this relationship is apparent beyond New York state, as well as whether such a relationship continues to hold true in an economy impacted by COVID-19.

Figure 1



(Code available upon request)

Bureau of Labor Statistics Unemployment Data
https://www.bls.gov/lau/#data
Dataset on Community Banks
https://www.fdic.gov/analysis/academic-challenge/