Directions: Please limit the written response to 6 pages of text, plus an executive summary of up to 1 page. References and up to 6 pages of figures and tables do not count against this limit. All figures and tables should be self-contained, referenced in the text, and included at the end of the document. Text should be single spaced in Times New Roman font, 12 pt, with 1" margins on all sides of the page.

Question: What are the expected impacts of higher interest rates in the U.S. economy on the banking sector, and how should regulators respond?

Changes in interest rates can impact a bank's business operations and decision making in various ways. In their roles as lenders, depository institutions, and employers, banks often enter into contracts that specify payments in nominal rather than real terms. These payments may include employee wages, interest on deposits and loans, and fees for financial services. Moreover, higher interest rates may affect banks indirectly through their impact on stakeholders (e.g., borrowers, depositors, other debtholders) and the broader economy. Higher interest rates can spur various responses from politicians and regulators seeking to minimize any harms. While higher interest rates can affect many different aspects of the U.S. economy, the impacts may not be the same across banks, individuals, industries, or geographic areas.

Your goal is to study the effects of higher interest rates on one aspect of the banking sector and use your analysis to motivate possible recommendations for regulatory action. The quality of your analysis is more important than the specific issue that you choose to examine. The next section gives examples of areas where some experts believe that higher interest rates may impact the banking sector. This is not an exhaustive list, and you may explore any of these or put forth your own topic.

The analysis of your chosen topics should rely as much as possible on empirical evidence (e.g., graphical, statistical, and econometric analysis), but other types of evidence (e.g., interviews with industry experts) can be used as required.

Described below are available data sources that could help illustrate your arguments, but you may use other publicly available data as desired.

- The Federal Deposit Insurance Corporation (FDIC) releases (1) quarterly data on the business behavior of community, regional, and national banks through Call Reports, which are available from the Federal Financial Institutions Examination Council (FFIEC), and (2) annual data on the location of physical bank offices through the Summary of Deposits.
- The Federal Reserve Bank of Atlanta (FRB Atlanta) releases data on the monetary policy of the Federal Reserve, including a measure of the federal funds rate designed to incorporate the effects of special actions.
- The Bureau of Economic Analysis (BEA) releases annual data on basic economic activity, including employment and gross product, at various geographic levels.
- The Federal Reserve Bank of Cleveland (FRB Cleveland) produces a monthly estimate of inflation expectations for the U.S. economy, and the Bureau of Labor Statistics (BLS) produces both national and regional price indices.

Part I: Conceptual Framework

Develop a concise conceptual framework that discusses potential effects of higher interest rates on the banking sector. Use this framework to motivate hypotheses to illustrate with data, as described in the following sections. You can focus on economic, demographic, and socioeconomic outcomes, including employment, personal income, access to credit, or other measures that you deem potentially important.

The following are some examples of issues that your conceptual framework could address.

- How do interest rates impact bank profitability?
- How do interest rates affect bank safety and soundness?
- Does the effect of higher interest rates on bank depend on whether banks, borrowers, and depositors correctly anticipate the increase in interest rates?
- How do changes in interest rates affect depositor behavior, and what do those changes mean for banks, borrowers, and regulators?
- How do interest rates change the types of services or loans that borrowers seek from a bank?
- How do changes in interest rates affect a bank's existing stock of loans and deposits?
- How do banks change their loan portfolios and lending behavior as interest rates change?
- What industries are most likely to experience a change in lending behavior from banks in response to a change in interest rates? Why?
- Why might higher interest rates affect banks today differently than during historical periods with comparable interest rates?

Whether you choose any of these issues or decide to take a different path, a deep dive into a focused question (or a small set of related questions) is encouraged.

Part II: Empirical Analysis

Using the data available through the FFIEC, FDIC, FRB Atlanta, BEA, FRB Cleveland, BLS, and/or other publicly available sources, describe changes over time or differences across groups (banks, consumers, industries, geographic areas) in the outcome measures proposed in the previous section. In your analysis, it may be helpful to compare groups that are more likely to be affected by the issues you study to groups that are less likely to be affected by those issues. Depending on the structure of your analysis, you may choose to include all geographic areas and/or focus on specific areas where you may be more familiar with local regulations and the economic environment.

Part III: Interpreting the Empirical Findings

Describe and discuss how the patterns you have identified support your hypotheses. It may be helpful to address the following questions, though you are encouraged to develop and address questions that relate to your specific approach.

- What differences exist between groups for the measures you examined?
- Do these differences match up with the predictions from your conceptual framework?

- Are there geographic, industry, or bank characteristics that appear to amplify or weaken the impacts of inflation?
- Are the estimated effects of higher interest rates larger in the short run or the long run, and are these findings consistent with your conceptual framework?

It is important to assess your findings critically and understand the limitations of your analysis. In this regard, it may be helpful to address the following questions.

- What factors should be considered when determining if a data pattern is related to inflation?
- Why might your findings be related to changes in interest rates?
- Why might they not be related to interest rates, i.e., what other factors could explain the data patterns you have discovered?

Part IV: Policy Implications

The FDIC, working with other banking regulators, examines and supervises thousands of banks for safety and soundness and compliance with consumer protection laws. The FDIC also reviews and approves applications for deposit insurance, an important step in opening a new bank. Include in your write-up a consideration of the role that the FDIC has in regulating the banking sector. The following are examples of questions that your team could analyze in this part of your study:

- Should the effects that you have found concern bank regulators such as the FDIC?
- Should any of your findings be met with particular responses from the FDIC? If yes, explain your proposed course(s) of action. If not, explain why inaction is the best response.
- If the FDIC implemented your policy recommendations, what impact might that have on the banking sector? On the economy more broadly?