The dataset for this assignment (Assignment 2 Data) provides daily bid and ask prices of seven listed US companies over the year 2024, as well as the trading volume (number of shares traded) and the number of shares outstanding (in 000s).

- a. Compute the percentage bid-ask spreads of the companies and average them over time for each company.
- b. Can you explain why these companies have such different bid ask spreads? Consider readily available descriptions of the companies' line of business and data on financial characteristics such as company size, as well as market trading volume, volatility, etc. to identify underlying drivers of the bid-ask spread differences; discuss the economic reasoning behind your suggestions.
- c. Plot a graph of the companies' bid-ask spreads over time to identify time variation in spreads.
- d. Looking at the graph, identify some peaks that are common across many companies and others that seem to be specific to just one particular company (or very few). Investigate underlying explanations for at least two marked episodes of illiquidity, focusing on firm-specific or economy-wide events, as the case may be, that seem to have triggered the observed increase in spreads. Explain your findings.

Your responses are expected to focus on the data given, but you will need to draw connections with further evidence outside the data file provided to give an answer. For example, financial information from 2024 is readily available from Yahoo Finance, Bloomberg, WRDS, etc., or from the Securities and Exchange Commission website (company filings). Relevant news events can be identified online and/or using SEC filings, Factiva (Reuters, Wall Street Journal), etc. The companies included in the sample are publicly listed, and the ticker included in the data file serves as a reference for researching the company (and its relevant characteristics).

Any uniquely original analyses and insights not found in other submissions will be rewarded. Note that you should *not* perform any regression analysis; think of this assignment as, at best, an exploration that may suggest hypotheses for future testing on a larger sample!

Your answer should not exceed 2000 words and must be submitted in PDF form.