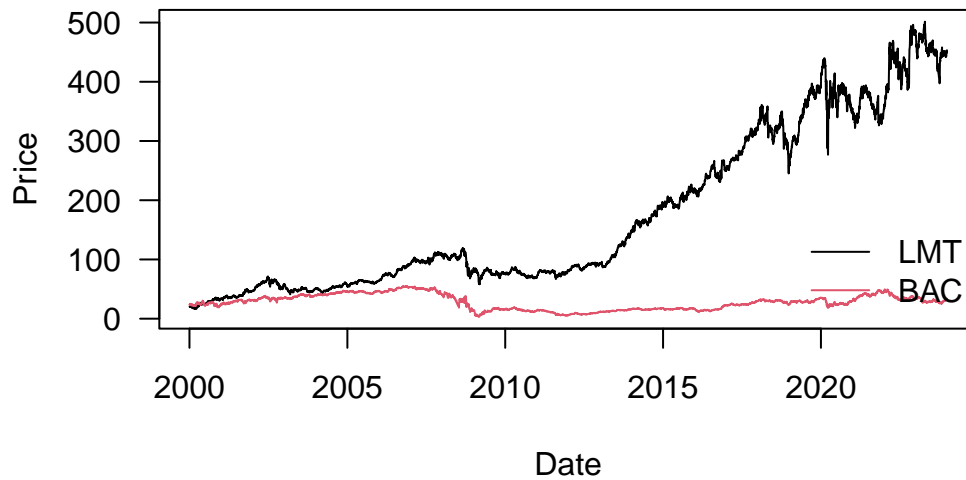


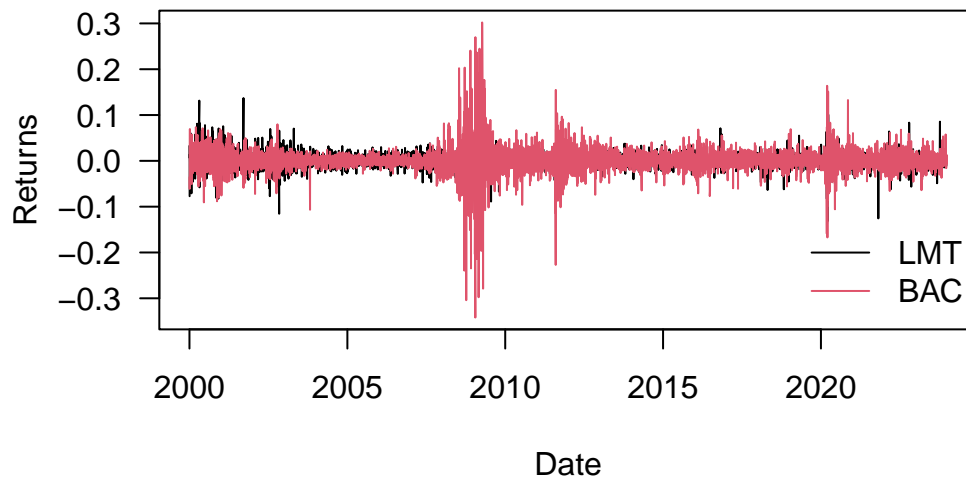
This analysis includes the daily stock prices from the 1st of January 2000 until the 31st of December 2023 of the companies Bank of America and Lockheed Martin. Bank of America is one of the major banks of the USA and Lockheed Martin is an american defense and aerospace manufacturer. The stock prices have been obtained from WRDS and they are both traded on the New York Stock Exchange.

The plots for Bank of America and Lockheed Martin

Prices of Both Stocks



Returns of Both Stocks



Relevant Sample Statistics

	Bank of America	Lockheed Martin
mean	0.0001507196	0.0006021006
standard deviation	0.02792773	0.01592764
skewness	-0.3183648	-0.081107
kurtosis	29.69114	12.09003
Jarque Bera test	X-squared = 179304, df = 2, p-value < 2.2e-16	X-squared = 20791, df = 2, p-value < 2.2e-16

Since the mean of the Bank of America daily prices is much lower than the Lockheed Martin one, we can conclude that Lockheed Martin has generally performed better. The standard deviation being higher for Bank of America reflects the fact that the financial sector is more sensitive to market movements compared to the defense/aerospace sector. The skewness is negative for both stocks, while the skewness of Bank of America is further away from zero, which shows that it is more likely to experience large losses more often than Lockheed Martin. The kurtosis for the BAC data being high and much higher than for LMT suggests a very high likelihood of the presence of fat tails.

Analysis

The major events depicted are 9-11, the Iraq War, the 2008 financial crisis and COVID 19. In 2008 and early 2020, both stocks have lower returns and their prices are decreasing in a similar fashion. Bank of America has much higher volatility than Lockheed Martin. For BAC, volatility has been the highest in 2008, in the time of the financial crisis and also very high during COVID 19. Outside these periods it has been fairly consistent. For LMT, the highest volatility was seen in 2001, when it experienced increased demand due to 9-11 and in 2003 when similarly, demand increased due to the Iraq war. Correlations: Since the BAC and LMT are in different industries, their correlation is generally low. BAC is influenced by things such as macroeconomic factors and consumer spending while LMT is influenced by geopolitical factors and government spending. Regardless, their correlation increases during times of crises such as the 2008 financial crisis and COVID 19, where the two stocks seem to be highly correlated since their return patterns synchronise. Recommendation to employer: Overall, the prices of BAC have much higher volatility and present a much higher risk of large negative returns. On the other hand, LMT is much more stable, experiencing less negative returns, and volatility and much higher average daily returns. As such, investment in Lockheed Martin is more recommended, especially for risk averse investors.