# Question Two

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[a] *Financial Econometrics, 2021*

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**Abstract**

This document contains the detailed answers for question two of the Financial Econometric exam 2021.

*Keywords:* Question2, Finance, Financial Econometrics

*JEL classification* L250, L100

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## 1. Caparing SWIX and ALSI

### *1.1. Portfolio Return*

The porfolio returns for large and mid caps are shown below. Because we are analyzing the Top 40, there are no small caps, and if there are, they make up such a small percentage of the portfolio that it makes no sense to analyze them.

The graph for Mid caps return saw very constant returns up until mid year, 2017. Afterwhich it experienced a slight increase followed by a drastic decrease. This would be an indication of an negative, al though constant investment. Investors that are looking for a high return is unlikely to experience this. The SWIX outperforms the ALSI, which is a preference for when the market is constant/slight increase. However, during negative volatility, the SWIX performs worse. It is important to remember that mid-cap companies can turn into large-cap companies, which also make them attractive to investors. However, you will need to spot the diamond in the rough.

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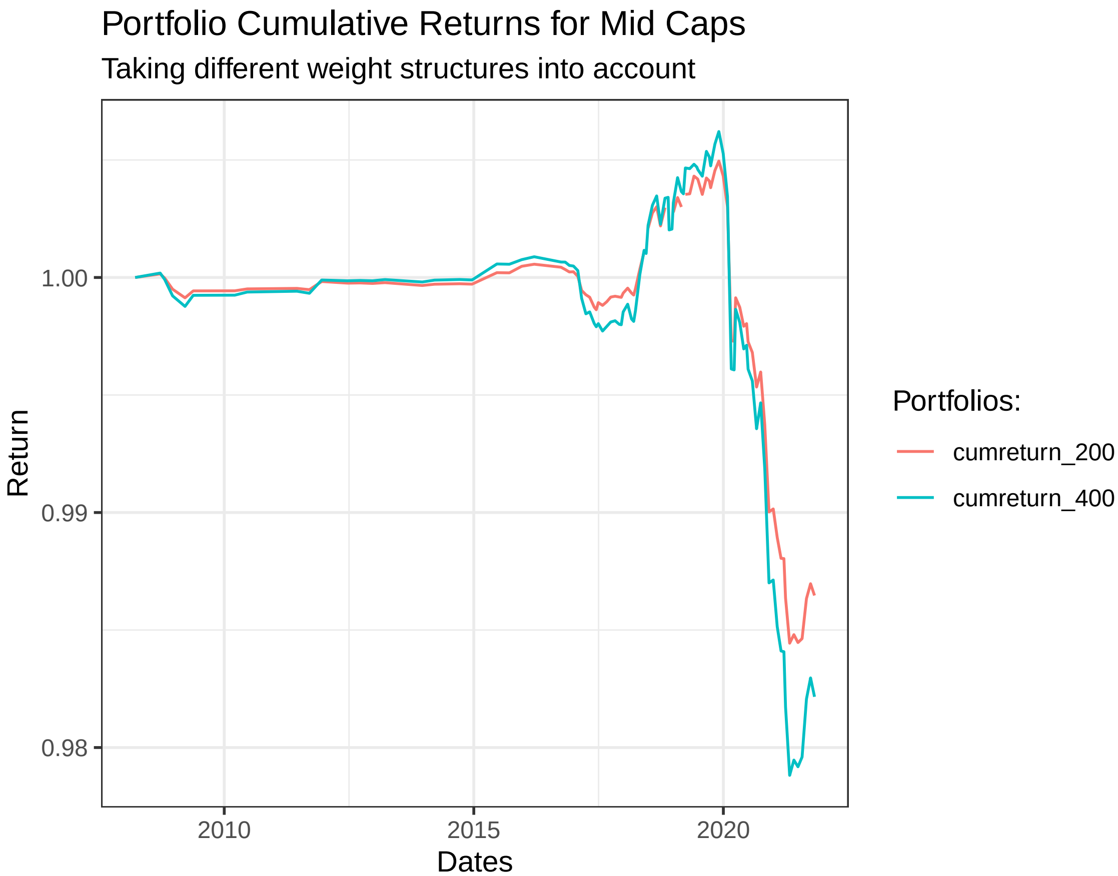
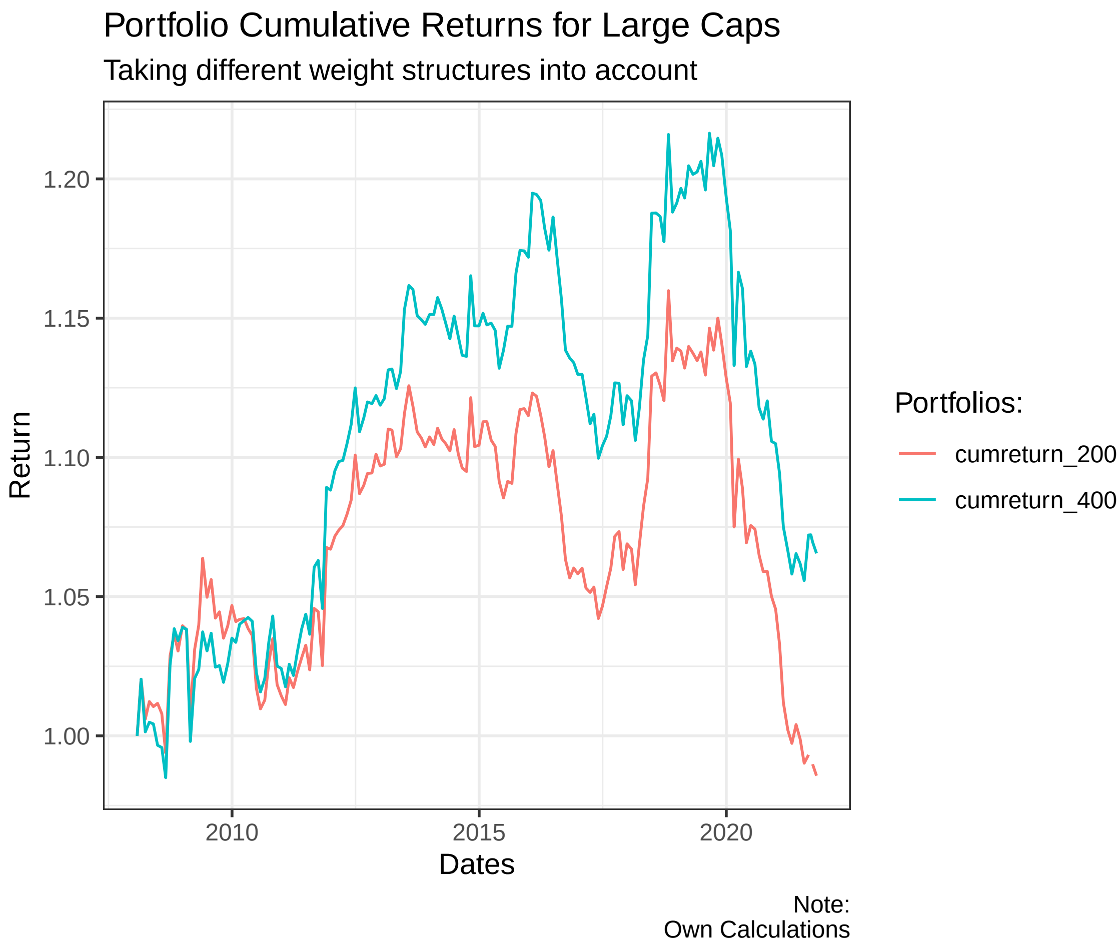



Note:
Own Calculations

The portfolio cumulative returns for Large Caps experience much more volatility then Mid Caps. Large Caps are filled with companies that are dominate in their industry, and while they are still affect by volatility, they have more of a chance to bounce back. They hold themselves well in times of recession or during any other negative event. Besides, they will usually have been functioning for decades and have good reputations. If you want to invest in a companies stocks by taking less risk, then large-cap stocks are a good option. These stocks are less volatile in comparison to mid-cap. The lower volatility makes them less risky.

As seen in th graph below, Large caps present a higher return, but also experienced a downturn with the depletion of economic events in 2020.

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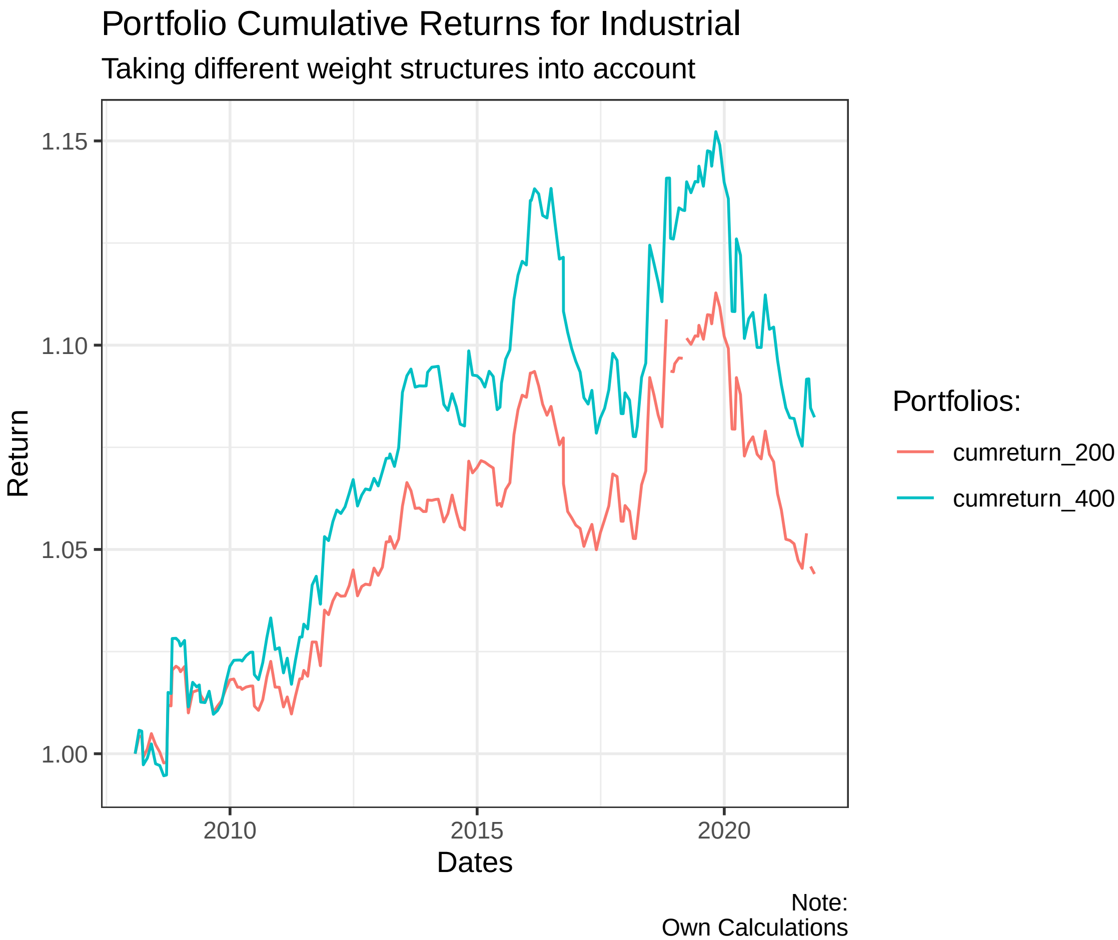
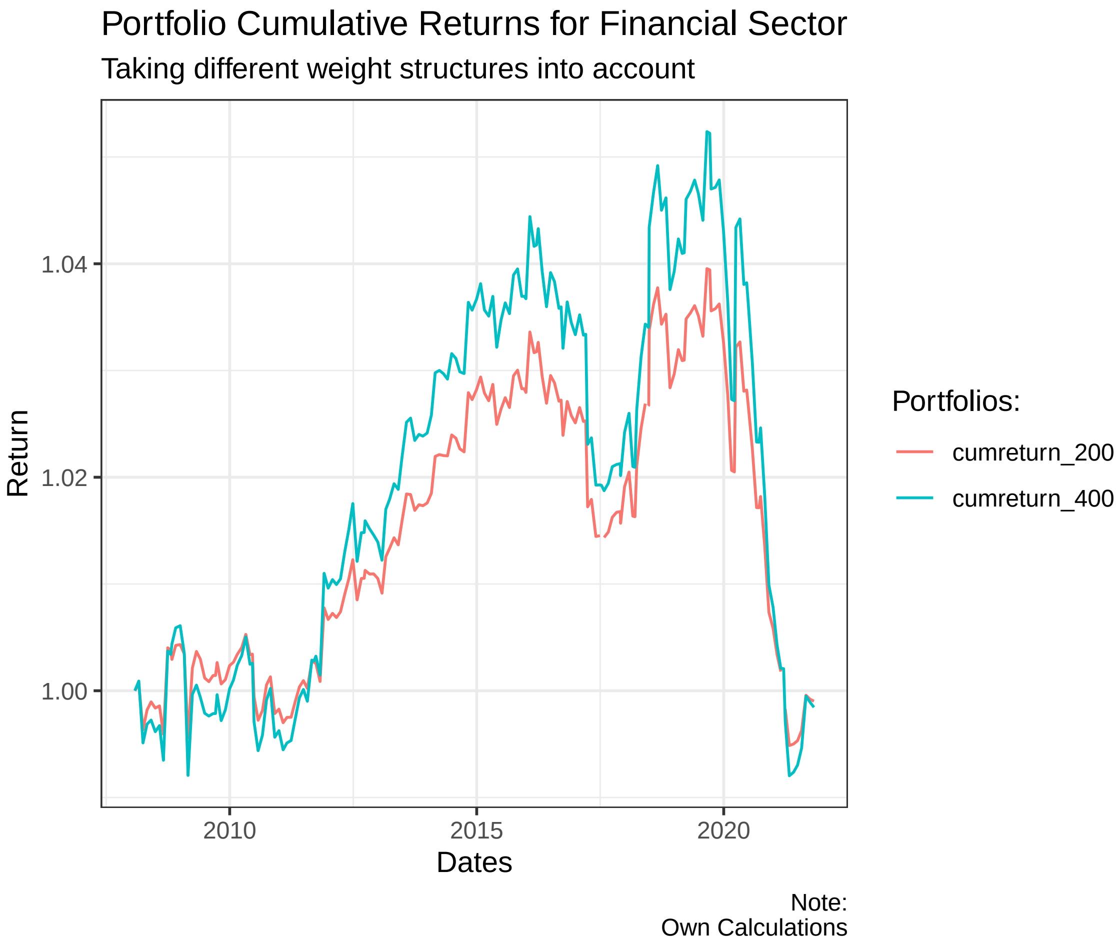
Sector Analysis

The industrial sector has preformed relatively well compared to the financial sector (discussed below). The sector has been on an increasing trend with the COVID-19 pandemic resulting in slowdown and negative growth.




The graph below for the financial structure looks very similar to that of the large-caps (which was discussed above). This indicates that many of the financial sector companies that are being analyzed are large-cap companies. This implies that even though a sharp decrease can be seen, these companies have a high probability to bounce back.

There are have been some aggressive monetary and fiscal policy responses to the COVID-19 pandemic, which would contribute towards stabilizing the market and ensuring the industry starts growing




again.
## Staritication

I use the only the index from 2008 onwards since this is the only data that is available.

*1.2. Caping*

I capped the SWIX to 6 percent and the ALSI to 10 percent (this is how I interpreted the question). I couldn.t get the cap exactly right but I think I was on the right path