

# Entrepreneurship in the wake of financial crashes?

# Does financial crisis spur entrepreneurship?

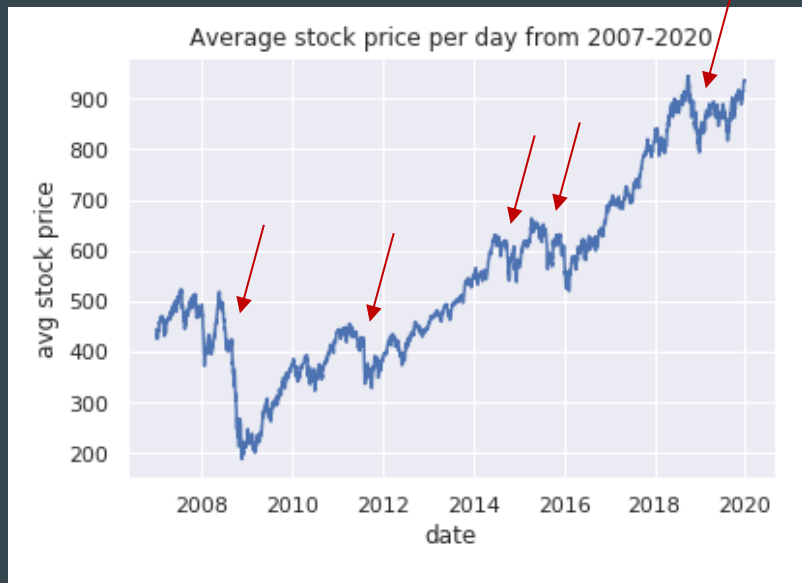
Norway experienced financial crashes in 2008, 2011, 2014/15, and in 2018.

## Hypothesis 1:

- There is a natural correlation between the financial state of a country (financial optimism) and the foundation of new companies

## Hypothesis 2:

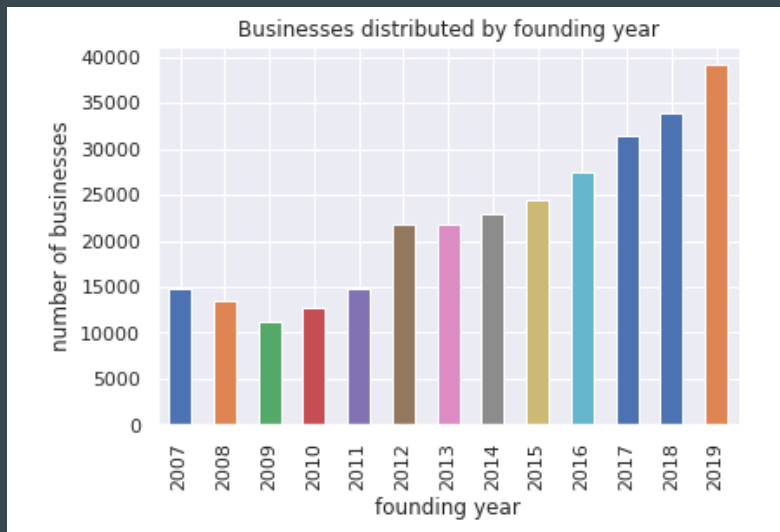
- After significant financial crashes, such as the one in 2008, there is an increase in companies founded after this



# Founding of companies and financial state as time series

Enhetsregisteret - Norwegian Registry of Businesses

- Founding date of every business/startup registered in Norway from 1995 until today



Oslo Børs Benchmark Index - Norwegian Stock Exchange

- Daily OSEBEX from 1995 until today, and comprise the most traded shares representing the financial state



# Tests show that the times series are highly correlated

## Pearson's Correlation Coefficient

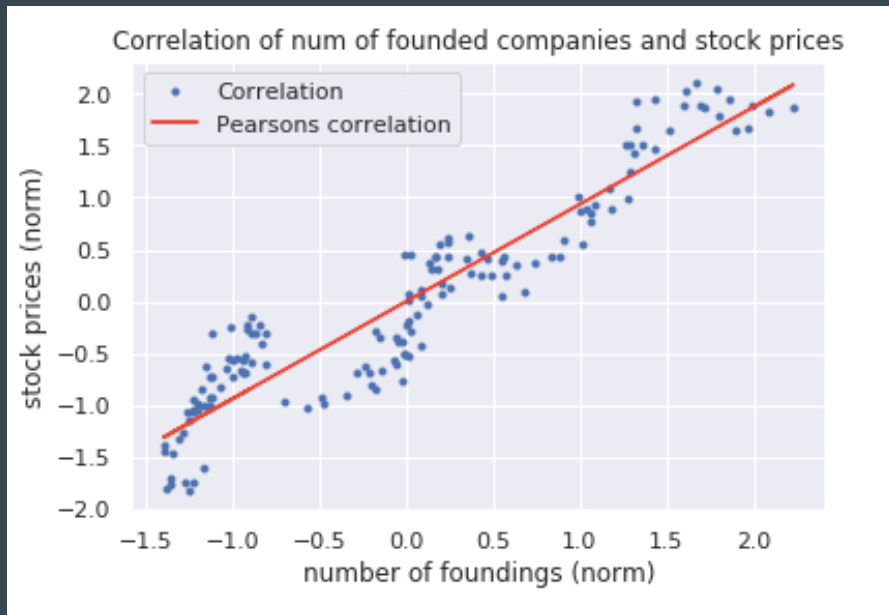
Test whether there is a linear relationship between financial optimism and number of founded companies

- Results:  $p = 0.934$   
→ probably depended

## Kwiatkowski-Phillips-Schmidt-Shin

Test whether the time series is trend stationary or not

- Results:  $p = 0.045$   
→ probably not stationary



# Entrepreneurs mainly found in good financial times

For change in stock market prices\*  $< 0$

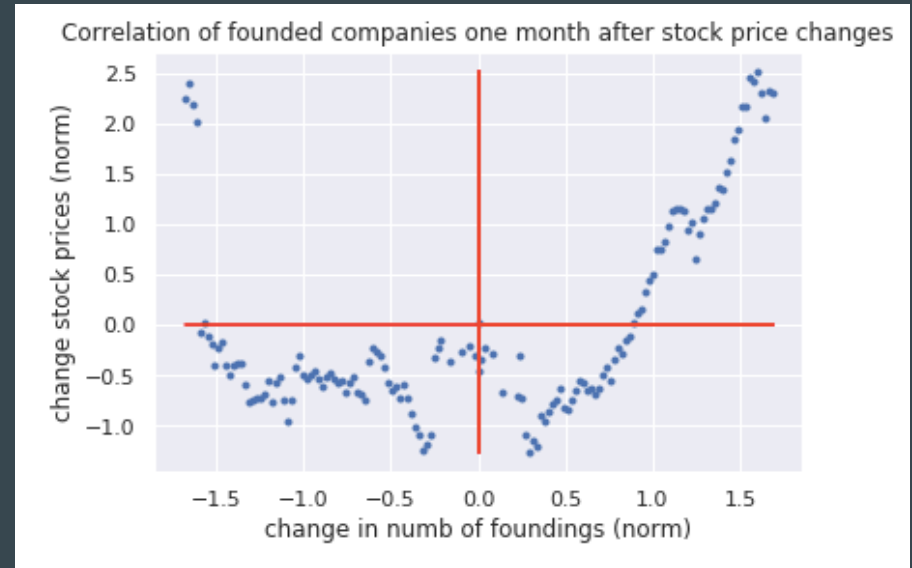
- Pearson coef:  $p = 0.04 \rightarrow$  No correlation

For change in stock market prices  $> 0$

- Pearson coef:  $p = 0.96 \rightarrow$  Highly correlated

There is a clear positive increase in number of companies founded the month after a positive change in the stock market.

As we can see from the figure, outliers exists for high increase in stock prices and for high decrease, which requires further analysis of the time series and other factors.



# Stock prices are correlated with founding of companies, but we can't say anything about casualization

- The datasets are only representing the "financial optimism" and "entrepreneurship"
- The timeseries was divided into the monthly mean (incl. convolution), which loses out on many more subtil changes in the data
- The registry of businesses only contain the businesses that are not removed from the registry. The success of the company founded is therefore embedded in the data
- Other factors such as governmental support and international exchange rates are not taken into account and can have stronger effects on the casualization

