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Norwegian Stock Market Reactions to Elections

Trump, Brexit and the Norwegian Election of 2013 and 2017

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Introduction/Motivation

Different policies can have a huge impact for companies, parties manipulate corporate tax-rates, labour cost, demand and cost of capital differently. I want in this study try to find out how four different elections around the world influence stock prices in Norway. I will choose mainly the election in Norway of 2013 where there was a new righter oriented government elected, I will use the methods applied by Wagner, Zeckhauser and Ziegler where they did a study to find out how the election of trump influenced the companies in the US in short and long-term. The election result of 2013 didn't come as a huge surprise since most of the polls showed that the right wing would have majority for at least two years prior the election. Therefore, I would not think that there will be any large shifts in the stock price in short term, nevertheless by applying the methods of Wagner et al. it will be interesting to see how companies/sectors developed during the ruling period. It will also be interesting to found out how the market react when actual politics changes get implemented. As history has showed not all policies a government promises during campaign gets acutely implemented. So according to asset pricing theory the ex-ante price of a security should reflect the probabilities of a promised policy gets live or not. And there can be some changes in the stock price after the actual implementation of the new policy and not just the expectation.

I will also look at the 2017 election in Norway to see if there was any significant development then. However, since the same government won, and the polls showed a tight race, there can be expected some adjustment for the stock price after the election. I will also here look at the long-term effect to see how different sectors/companies developing in this period.

It will also be interesting to see how the Norwegian stock market react to the election of Trump in the US. Since this election result came as a surprise for many people it will be interesting to see if there were any shocks to the stock prices and compare different companies/sectors to see who gained and who lost on this election. We know that the Norwegian stock market fluctuations correlates with the US stock market. And Trump has stated some policies that can be good and bad for the Norwegian stock marked. On the one side Trump's polices says that he will reduce taxes on companies, which tends to be good for the stock prices and since there is a correlation between the markets this can be good for Norwegian companies. On the other hand, Trump want a more protectionist approach with abolishing trade agreement and increasing tariffs on import. This should be bad news for Norwegian companies that export a lot to the US.

Brexit is also an election that surprised many and will undeniably have some sort of impact for Norway. Britain is one of the countries in Europe that Norway trades the most with. And when UK decided to leave EU the EEA-agreement that removes customs tariffs on many products between Norway and EU no longer applies for UK. This of course can have a huge impact for import and export companies in Norway. Since Brexit doesn't happen before 2019 or later and there hasn't been made a new trade deal between Norway and Britain, there exists an uncertainty in the market of what will actually happen. There will be interesting to compare which companies gained and lost on this election result.

Why is this relevant? I have not found any research on how elections influence the Norwegian stock market. Obviously, anybody can just view the index and see how that market reacted, that's why I also want to compare different sectors/companies. But also see the long-term effect on each sector/company. This research can give a better understanding of how elections in different parts of the world can influence Norway's stock market. It will hopefully also find out how fast (market efficiency) the Norwegian market reacts on big election shocks in other parts of the world and on domestic elections.

Literature Review

The study from Wagner, Zeckhauser and Ziegler 2017 tries to find out how the election on Trump affected the US companies within Russell 3000, both in the short and long-term (within 100 days in office). They found evidence that the market expected tax reduction with the new administration, especially since the Republicans had majority in Congress and the Senate. More specifically they found that high tax paying and those firms with high deferred tax liabilities gained the most. While companies with deferred tax assets from Net operating loss, high leverage, high interest expense and companies with high foreign exposure underperformed during the 100 first days. In their findings they also found that the market needed varying time to digest the election result, dependent on the above-mentioned factors. Since the authors only used data for the 100 days in office, all prices reflected expectations of changes and not actual changes since Trump hadn't implemented any tax reduction or foreign trade legislations at that time.

Hoe and Nippani 2017 did a study where they looked if there was any negative impact of Trump's path to president on the Chinese stock market returns. In their work they found no conclusive evidence of that, but they stressed the reason for that could be that the Chinese government censorship where they can block or downplay negative news, so that the public is unaware of Trump's campaign statements.

Lyengar, Lyengar and Sampat 2017 did a study on Indian stock market reaction to US presidential election in 2016 (Trump). They found no significant reaction on the stock prices in their sample since, and that the market was of semi strong-efficiency.

In a study by Füss and Bechtel 2008 they did a study of the 2002 federal election in Germany and they found that only small firms was positively linked with a right leaning government winning the election and they argued that mid to large firms had diversified their political risk and therefore saw no reaction after the election. And this support the theory of Fama 1960s of semi-strong efficiency.

Bialkowski, Gittshalk and Wisniewski 2008 did a study of 27 OEC countries and found that stock volatility can double or more during the week around a national election. And argues that this shows that investors are surprised by the election results.

Correlation between stock markets: Need to find Literature on this.

Theory

Asset pricing: According to Wagner et al 2017 the price of a stock incorporates the discounted value of what the markets believes the stock is worth in the future. The price is based on how investors view the future. Investors make probabilities for every outcome and their expected influence on the stock. For the US election there is two outcomes either Trump wins or Clinton wins. So, the price of the stock is the probability for Trump winning times the expected price when Trump wins plus the probability for Clinton winning times the value if she wins.

$$P_S = P_T * \pi_T + P_C * \pi_C$$

And after the election the change in stock price is given by (since Trump won):

$$\Delta P_S = (P_T - P_C) * (1 - \pi_T)$$

The same formula applies in the Brexit case where there is a yes or no vote, and therefore two possible outcomes.

As for Norway the case is a little different since there are more parties and therefore several possible election outcomes. But, on the other hand the differences between the parties are not as big as Trump vs Clinton and Brexit vs EU.

Market efficiency: Efficient market hypothesis EMH which was created by Eugene Fama in the 60's states that prices reflect all available information. He separates EMH into three different stages: Weak, semi-strong and strong.

Weak efficiency is when the price reflects all public available information such as previous stock prices and therefore can't any technical analysis from an investor be used to beat the market. However, a by using a fundamental analysis where you analyse other factors such as macroeconomics, overall economy, the management etc. An Investors might be able to find over and undervalued securities.

Semi-strong efficiency states that either technical or fundamental analysis can be used to beat the market, and that there is only private information (inside information) that can make an investor beat the market.

Strong form states that prices reflect all public and private information and that there is impossible to beat the market even tough an investor has inside information about the firm.

Partisan theory: Partisan Theory was devolved by Hibbs in 1975-1977 and it states that stock prices tend to rise more with a right oriented government. Lower corporate taxes and cheaper cost of labour/weaker unions are generally viewed as good for a firms (growth), at least in short-terms. On the other hand, unemployment tends to be lower in a left oriented government.

Methodology

Data: Will use OSEBX index/companies retrieved from Bloomberg. For Trump and Brexit election I will use data from the start of 2016 to present. For the Norwegian election in 9. September, I will use data from the start of 2013 to the end of 2013(perhaps even longer). And for the Norwegian election of 11. September 2017, I will use data from the start of 2017 to present.

Hypothesis 1: The immediate impact of Trump election on the Norwegian stock market was not zero.

Hypothesis 2: The immediate impact of Brexit was not zero for the Norwegian stock market.

Hypothesis 3: The change of government in 2013 was good for the Norwegian stock market both in long and short term (since right parties (lower taxes) tends to be better for firm value). Never the less the result of 2013 was kind of expected and therefore I would not expect any short-term shocks on the stock price.

Hypothesis 4: The same trend as from previous election will continue after the 2017 election.

Descriptive Figures:

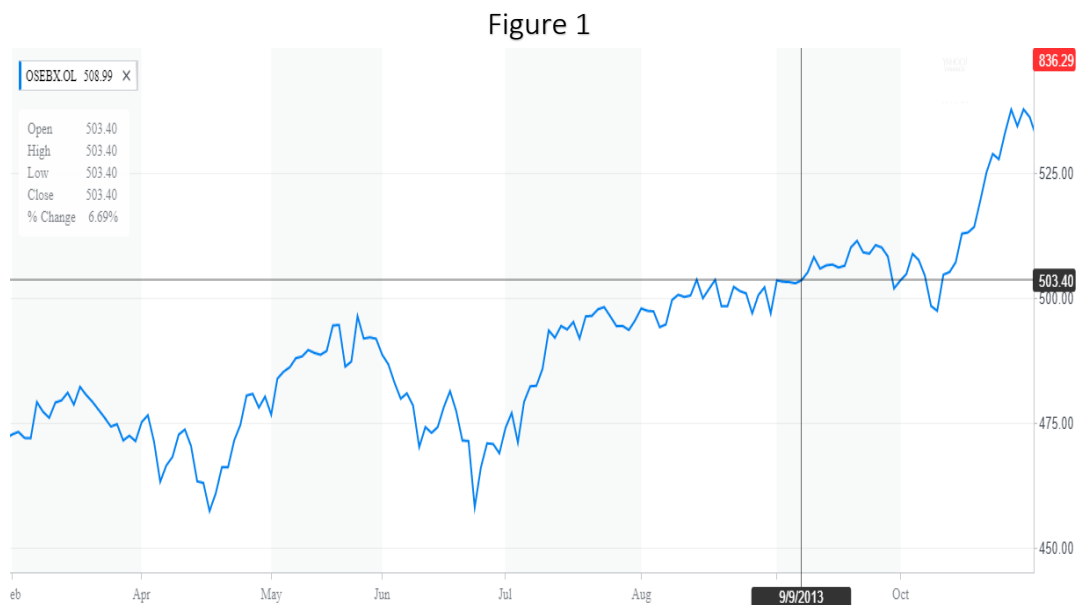


Figure 1: Shows the OSEBX of 2013, on first sight there seems not to be any huge changes in the stock price in the short term after the election 09.09.2013. Retrieved from <https://finance.yahoo.com/quote/OSEBX.OL/>

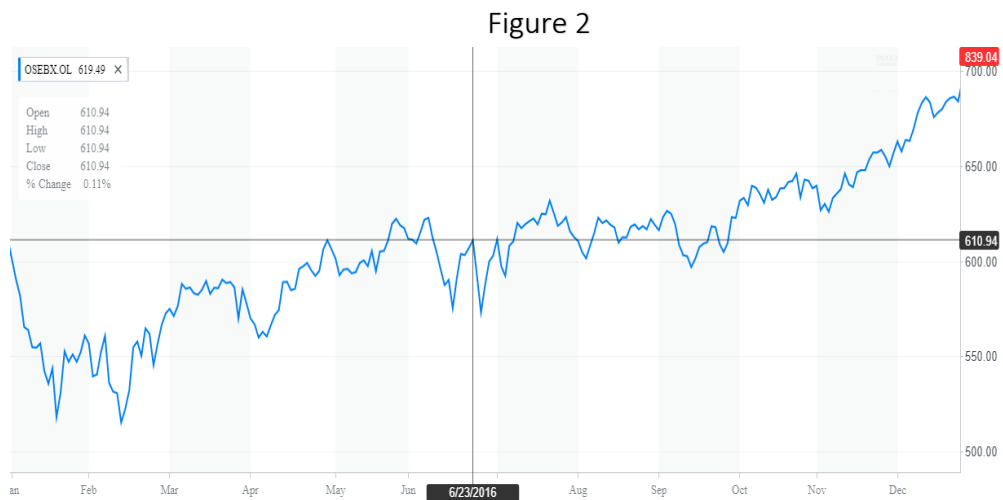


Figure 2: Show the OSEBX of 2016, an there seems to be a immediate negative response to the Brexit result in 23.09.2016, but the market rises again soon after. Retrieved from: <https://finance.yahoo.com/quote/OSEBX.OL>

Figure 3



Figure 3: Show OSEBX from June 2016 to June 2017 and there seems to be an imitate increase of the market after Trump election result at 8.11.2016 and the market increases in time. Retrieved from: <https://finance.yahoo.com/quote/OSEBX.OL/>

Figure 4

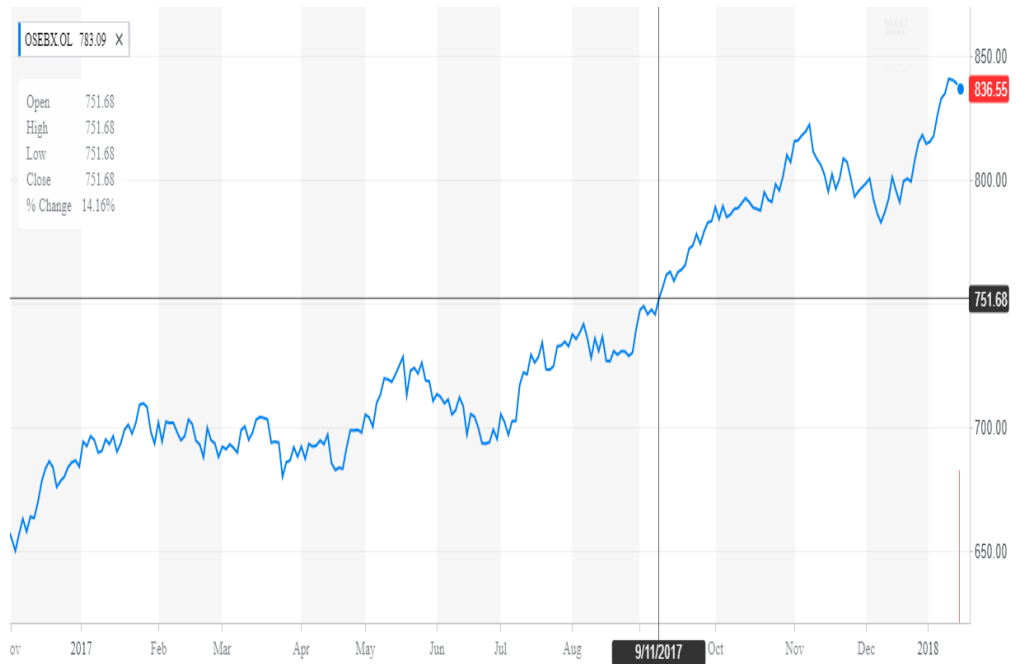


Figure 4: Show the OSEBX in 2017, the election result of 9.11.2017 in Norway seems to have a positive effect on the stock market. Retrieved from: <https://finance.yahoo.com/quote/OSEBX.OL/>

Way forward

I will need to talk with my supervisor in order to find out what exactly my research questions are going to be and its hypothesis. Because I'm not entirely sure if the research questions could be angled/changed into something better. That is also the reason why I have not completed the Literature review because I'm not entirely sure about what to include and not.

I will also need to talk to the supervisor about what methods/models I will use to answer my questions. Many of the articles listed in the literature review used different tools to answer their questions. Therefore, I will need to do more research on the strengths and weaknesses of each model and talk with the supervisor about what strategy to go for.

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