

Preliminary Thesis Report

There have been many studies, both empirical and theoretical research, that dividend announcement consists of information about a firm's future performance. A manager of a firm is assumed to have inside information about their firm's future health, and to channel this information to the market the managers use different signaling devices. According to the dividend signaling hypothesis, dividends are one of these devices used for signaling information. Both the empirical and theoretical research done on this area still yields different results, which is why it is of much interest to conduct such a study on the Norwegian stock market.

The dividend signaling hypothesis was developed by John Lintner in 1956 and has been revised since then. For his study on dividend policy, Lintner gathered information about several factors that managers had to consider when deciding the dividend payout. From the information he gathered from the managers, Lintner concluded that change in dividend would depend on past and future earnings. Earnings is the most evident measure to decide dividend and if the shareholders can expect a cut or increase in dividend, as earnings declined or increased. On the other hand, a cut in dividend would not be received as good news by the shareholders. Therefore, managers would avoid as much as they can to cut dividend (Lintner, J, 1956). As a contradiction to Lintner's study, Miller and Modigliani concluded that under perfect capital markets, the theory of dividend policy does not contain information about the future performance of a firm (Modigliani & Miller, 1961). Another hypothesis worth mentioning is the efficient market hypothesis (EMH). The EMH was developed by Eugene Fama in 1970 and states that an assets existing price will fully reflect all available information. The hypothesis argues that since the existing prices reflect all available information it is impossible to beat the market, and any attempt to outperform the market relies on pure luck. Since stock prices reflects all current information that is available according to this theory, then new information must be the reason for price changes (Fama,E.F. 1970). To conclude, dividend change announcements should be reflected immediately in stock prices, if the EMH holds.

The objective of this study is to conduct an event study of the dividend signaling hypothesis on the Norwegian capital market. This is done by using data of

Norwegian firms listed on the Oslo Stock Exchange (OSE). By running statistical tests and multiple regression models, the objective is to investigate the market reaction and the connection with future performance. According to theory, there should be a positive relationship between changes in dividend and stock price reaction. In addition, when doing research regarding market reactions to dividend change announcements, the event study is applied to test the market efficiency in the Norwegian capital market.

Previous research on this topic has mainly been done using market data from the U.S stock market which is very different from the Norwegian market. The stock market in Norway has only one exchange, the Oslo Stock Exchange, while the U.S has 17 (Tsiakas, I. 2008). With only 187 listed instruments (oslobors.no), the OSE is a relatively small exchange compared to others and because the government ownership, the Norwegian capital market is heavily regulated to protect the stockholders rights. The State Ownership Report of 2015 report that approximately 35,83% of the market value on the OSE is owned by the Norwegian government (Norwegian Ministry of Trade, Industry and Fisheries, The State Ownership Report of 2015). This makes the Norwegian market an interesting environment to test the dividend signaling hypothesis because this market will experience fewer agency problems due to its corporate ownership (Capstaff J et al., 2004). In addition, the neutral tax system in Norway which differentiates tax on income and capital income is proven to have little influence on a firm's dividend policy (La Porta et al., 2000). Because of the differences between the Norwegian capital market and the U.S capital market the empirical results for the U.S market may not be applicable for the Norwegian stock market. Due to government regulations and a high level of government ownership, this may reduce the signaling effect of a firm's dividend policy.

2. Research question and objective

The main research question of this study is:

“How the Norwegian stock market reacts to unexpected dividend announcements.”

In addition to this question, there are several subquestions that stems from the original question. For instance, how would the result and conclusion of the thesis

be affected, by systematically rearranging data according into different subsets. It also consists of an indirectly EMH test of the Norwegian capital market.

The objective of this study is to examine the relation between dividends change announcements of Norwegian firms listed at the Oslo Stock Exchange, and the subsequent stock market reactions. At the same time see if the Norwegian capital market is in line with the signaling theory.

When examining the data for abnormal returns (AR), this study will also take into account possible AR before the announcement day. Since insiders knows best, there consists a probability that insiders leaks information regarding the unexpected dividend announcements. These announcements regards only ordinary cash dividends, not extraordinary dividends. Due to the fact that when there is an increase/decrease in ordinary cash dividend, it generally means that there is a long term stable increase/decrease in expected earnings. As for extraordinary dividends it is not sustainable for long term horizons.

In order to draw conclusions the following hypothesis will be conducted:

Null hypothesis: $AAR = 0$

Alternative hypothesis: $AAR \neq 0$

Where the null hypothesis states that there is no average abnormal returns (AAR) that stems from unexpected dividend announcements. While the alternative hypothesis states that AAR is statistically significant different from zero and the null hypothesis is rejected. The latter would imply that dividend announcements convey information to the market, as the signaling theory suggests.

3. Comments

This preliminary report contains information about our thesis question that we have managed to gather in this short period. We feel that some material is missing in this report and will shortly describe our thoughts and future progress on that material under.

Literature review:

The published literature on dividend signaling from Bhattacharya (1979) to Benartzi et al. (2002) support findings of significant reactions in the stock market in the same direction as the dividend changes. In contradiction, Allen & Michaely (2003) found evidence that supports that the dividend signaling theory is deficient. They argue, “The overall accumulated evidence does not support the assertion that dividend changes convey information about future earnings”.

On the other hand, La porta et al. (2000) says that agency models are of importance to understand dividend policies around the world. One reason for this finding is the corporate ownership policy, which can reduce the use of dividends as a signaling device, especially for the U.S and U.K market. The corporate ownership structure in Norway is noticeably different from the above markets, and the motivation to use dividends as a signaling device can be stronger.

Further in our literature review we will pursue the findings of La porta et. al (2000) and try to find literature that supports and contradict these findings.

Theory:

In the theory section of our thesis, we will first start with explaining in detail the efficient market hypothesis (EMH). Further, contradiction of the EMH and the EMH and event studies. The information content of dividend will be discussed and dividend is irrelevant vs. dividend is relevant will be looked into.

Previous research will be mentioned separately in an own section.

Methodology:

This study clearly needs a quantitative approach of methodology. Which we intend to do, by applying Excel as our analysis tool. In Excel we will first analyze how market reacts to dividend announcements, that is, the returns before and after the announcements. We want to analyze the returns prior to the announcement in order to investigate potential leaks. In order for our thesis to be feasible, we need to have a good estimate-model of the stock price as if unexpected dividend were not to be announced. This is the only way to estimate abnormal returns which is essential in

our research question. As of today our thoughts on the estimation-model is to apply the CAPM, due to its simplicity and popularity.

To determine whether a dividend announcement is unexpected or not we have two possible solutions.

- First solution is the naïve model, stating that $D_{t-1} = D_t$, where D is dividend and t is time.
- Second solution is to use the expected dividend of market analysis, performed by professionals (analytics).

Further, the event study approach will be presented with sub titles as measuring normal returns, market model return, event window etc. and average abnormal returns. Test statistics and regression modeling will also be a part of methodology.

Data collection:

There will not be a problem to collect the return data as it is available both on Bloomberg and oslobors.no. However, our collection “issue” arises when finding which days unexpected dividends announcements were made public. So far in our research we have not been able to find any site or data on these days. The temporary solution to this problem is to look up announcements on the Oslo stock exchange newsweb, and then filtrate the information given. This will probably be a comprehensive process, as the newsweb isn't as informative when it comes to dividend announcements on stocks listed on the exchange.

If we don't find an electronical solution to the problem, we will contact the Oslo stock exchange and try to arrange a meeting, in order to get the necessary data for our analysis.