ABSTRACT: In the existing literature various arguments are made in favor and against CEO duality. The main criterion regarding the argument for or against CEO duality is the effect CEO duality has on firm performance. Against the idea of CEO duality, the agency theory is advanced. In favor of CEO duality, the stewardship theory is advanced. This study provides empirical evidence on the significance CEO duality has in influencing the firm performance of EU listed firms. The results conclude that the effect CEO duality has on firm performance is insignificant, which means that CEO duality does not have much influence on firm performance based on EU listed firms. Finally some suggestions are made for future research on this topic.
1. INTRODUCTION

Corporate governance is an aspect of the firm that constantly receives attention. In their study, Bhagat & Bolton (2007) establish a relationship between corporate governance and the performance of the firm. The two most important and widely researched topics are corporate boards and CEO / top management team (TMT) problems in corporate governance.

Very closely related to these issues regarding corporate governance is CEO duality. CEO duality means that the position of the Chief Executive Officer (CEO) and the chairman of the board are served by the same individual (Bhagat & Bolton, 2007., Boyd, 1995., Peng, Zhang & Li, 2007., Baliga, & Moyer,1996., Rechner, Dalton, 1991). It is the responsibility of the board of directors to make sure that the CEO is serving the interests of the shareholders in the best possible way. In that sense, the board of directors can be seen as a monitoring device that makes sure that the interests of the CEO are the same to that of the shareholders (Finkelstein & D’Aveni, 1994). Hence, the relationship between the chairman of the board and that of the CEO is essential (Tricker 1984). According to Rechner et al (1991), all public firms need to decide the leadership structure of the board. Firms will have to choose whether or not the same person fulfills the role of CEO and chairman of the board. A fundamental element of the management of a corporation is the leadership structure of the board. Finkelstein et al (1994) are also in favor of this point of view. They assert that CEO duality may be one of the most vital, disputed and non-conclusive issues in corporate governance research and practice.

CEO duality is an important issue in corporate governance because the status of the CEO and chairman may have an influence on firm performance. There are arguments in favor of CEO duality, meaning CEO duality has a positive impact on firm performance. Likewise, there are arguments against CEO duality asserting that it has a negative impact on firm performance. Finally there are also arguments that assert that CEO duality has no influence on the performance of the firm. Therefore, whether CEO duality is good or not good to firm performance is an outstanding issue. Besides that, most studies about CEO duality are conducted based on American firms. There are not many studies on European firms regarding this topic. Corporate Governance practices differ between the member states of the European Union and with it the roles of CEO and chairman are also different. Empirical Research is needed to determine if there is a relationship between CEO duality and the performance of firms. Hence, this research is about CEO duality and firm performance in EU listed companies. Therefore, the research question is:

To what extent does CEO duality influence the firm performance of EU listed firms?

However, the concept of CEO duality is based on a one-tier board. It could be argued that CEO duality is less important or nonexistent in firms with a two-tier board structure. Examples of countries in which firms have a two-tier board structure are Germany and the Netherlands. With a two-tier board structure there is a managerial board and a supervisory board. It is the task of the supervisory board (composed of members elected by shareholders and employees) to supervise the actions of the management. In this situation the CEO will be monitored regardless of the fact that this CEO also assumes the role of chairman. Nevertheless it has been asserted that supervisory boards in some countries have been ineffective in the task of monitoring the management (Enríques & Volpin, 2007 & Theisen, 1998). Hence even in this situation the topic of CEO duality may have relevance. Moreover, for Netherlands and Germany, the managerial board will be the main object in this paper.

The purpose of this empirical research is to find out whether CEO duality has influence on firm performance regarding firms within the European Union. For the sample the EU listed firms in the top 200 positions of the Global Fortune 500 where chosen. The structure of the paper is as follows. The next section presents the literature review which mainly elaborates on other authors’ arguments about the relationship between CEO duality and firm performance. In this section the two basic theories underpinning this topic, which are agency theory and stewardship theory, is introduced as well. The methodology is presented in the third section. How the study is conducted and how the data is collected is shown in this section. The fourth section describes the data analysis and presents the result of the test and hypotheses. Finally, the paper ends with discussion and conclusion.

2. LITERATURE REVIEW

2.1 Arguments For and Against CEO Duality

2.1.1 Arguments in favor of CEO duality

One argument in favor of CEO duality is that there will be additional costs when the roles of CEO and chairman are separated. Brickley, Coles & Jarrell (1997) assert that monitoring costs arise when the CEO and chairman are separated. The benefits of monitoring can be more than the costs in many cases. However the awareness that the CEO is being monitored is often sufficient to create the desired incentives. In this case more monitoring will not add much to the desired behavior of the CEO and the additional costs will not yield additional benefits (Zajac & Westphal, 1994). Also, the separation of CEO and chairman means that there will be information sharing costs (when the CEO and chairman are the same person no information needs to be shared compared to when the CEO and chairman are two different persons) between the CEO and the chairman and also incentive costs that are associated with a succession process in which CEOs are promised the chairman title. An example of incentive costs are potential costs, for instance when CEO compensation is linked to firm wealth this may cause the CEO to avoid risks, in some cases this can be a cost (Zajac & Westphal, 1994). These costs may diminish the benefits associated with the advantages of monitoring a separate CEO and chairman. Comparing the performance of firms that separate CEO and
chairman duties with those firms that combine them; Brickley et al (1997) document that firms combining the duties perform no worse than those that do not combine them. In their article, Brickley et al (1997) conclude that the costs of separating the CEO and the chairman outweigh the benefits. In addition to lower costs, CEO duality can also benefit firm performance because a single leader can give a clear direction and can be more responsive to changes. Also, one person assuming the role of both CEO and chairman will have more extensive knowledge of the organization and will also be more committed (Boyd, 1995). Likewise, Pfeffer and Salancik (1978) argue that strategic decisions can be implemented more effectively when leaders have greater discretion. This also makes it easier to overcome organizational inertia. This greater discretion can be achieved by CEO duality because it provides a broader power base and locus of control. CEO duality will also weaken the relative powers of other interest groups. This usually implies the shareholders, who have less control of the CEO when he or she is also the chairman. Pfeffer et al (1978) also assert that a single leader will increase responsiveness to changes and will also make the leader more accountable. It may be overlooked that with CEO duality with the influence of the CEO may challenge the ability of the board to effectively monitor the CEO (Mallette and Fowler, 1992).

2.1.2 Arguments against CEO duality
In contrast to the arguments listed above there are also authors that claim that CEO duality has a negative impact on firm performance. In their study, Goyal & Park (2002) conclude that CEO turnover to firm performance is significantly lower in the case of CEO duality. They attribute this conclusion to the fact that it is more difficult for the board to remove CEO’s that are also the chairman. In the case of failure, it is extremely difficult for the board to remove the top management team (Jensen, 1993). In light of these drawbacks, arguments can be made in favor of separating the CEO and the chairman. The function of the chairman is to make decisions regarding hiring, firing and the compensation for the CEO. If the CEO is also the chairman it will be difficult for that person to ignore his or her personal interests. Jensen (1993) argues that the board will be more effective with an independent chairman. In this case the chairman will have no conflicts of interest. Rechner et al (1991) provided empirical support making the case for the separation of the CEO and chairman. In their study they use accounting based performance measures that reveal that firms with a separation of CEO and chairman outperform firms with CEO duality. Pi and Timme (1993) also conclude that the separation of CEO and chairman is more effective. Their results suggest that, after controlling for other variables such as firm size, costs and returns on assets are higher when the CEO and chairman positions are separated. In contrast to Brickley et al (1997), Fama and Jensen (1983) assert that the separation of CEO and chairman can reduce costs (instead of CEO duality). Another argument for the separation of CEO and chairman is that the interests of the shareholders who are better protected when the two functions are separated (Williamson, 1985). It is still possible for the CEO to act in the interests of the shareholders in the case of CEO duality when the interests of the CEO happen to coincide with that of the shareholders or that there is a compensation mechanism in place for the CEO (Williamson, 1985). The conflict of interests that are involved with CEO duality can be a case for the separation of the CEO and chairman. Since the function of the board is to monitor the performance of the top management, the separation of CEO and chairman may be desirable in order to maintain checks and balances. (Rechner et al, 1991)
Finally, there are also studies that have been done that conclude that there is no significant relationship between the CEO duality status and firm performance. Baliga et al (1996) conclude that changes in CEO duality have no significant impact and that there are other corporate governance mechanisms that have a larger influence on firm performance.

2.2 Hypotheses Development
The two theories underpinning this topic will be studied and tested in this paper, which are the agency theory and the stewardship theory.

2.2.1 Agency theory
The Board of directors is considered as the main monitoring device to protect shareholder interests (Donaldson & Davis, 1991). The purpose of the board is to monitor and control the top management team and the CEO (Peng et al, 2007). However, there are some researchers who think that boards cannot always govern the CEO in an effective way when the chairman and the CEO are the same individual (Donaldson et al, 1991). In order to conduct a more effective way of supervision and monitoring of the CEO, agency theory argues that it is necessary to separate the chairman of the board and the CEO positions (Peng et al, 2007). The underlying argument for the agency theory is that the separation of the roles of CEO and chairman are necessary in order to protect the interests of the shareholders. The assumption of the theory is that the separation of the CEO and the chairman keeps managerial opportunism under control because the chairman of the board is independent of the CEO. The chairman of the board can use incentives to align the interests of the CEO with those of the shareholders (Donaldson et al, 1991). Agency theory also expresses that CEO duality is negatively related to firm performance (Peng et al, 2007). Fama & Jensen (1983) also hold the same opinion that CEO duality does not separate the ‘decision management’ and the ‘decision control’, the board therefore cannot monitor and control CEO in an effective way (p314). Morck, Shleifer and Vishny (1989) argue that if the CEO is also holding the position of the chairman of the board, the CEO may conquer a wider control of the firm. In this case the decision control of the board will be reduced, which leads to a less effective organization of the firm. Besides the explicit arguments provided by agency theory, there is also an implicit assumption brought up by agency theory. The implicit assumption on which the agency theory rests is that CEO’s tend to be opportunistic and will take any chance to improve their own position at the expense of the shareholders (Boyd, 1995). From this assumption must
follow that the interests of the shareholders will be diminished in favor of the CEO and the top management (Donaldson et al 1991). In accordance with this assumption, Pratt & Zechhauser (1985) hold that in the modern corporation managers behave more according to their own financial benefit than to maximizing shareholder returns. Once the same person holds the CEO and the chairman of the board position together, he or she could use his or her power as a board chair to choose the directors he or she prefers which are usually the people who are in favor of him or her and less likely to challenge his or her decisions (Peng et al, 2007). This leads to the threat of lacking independence and alertness of the board. Therefore, the board cannot monitor the top management team effectively or protect shareholders’ interest, which leads to the agency problems or agency loss. Thus, agency theory would propose that a combination of CEO and chairman positions would weaken board control, and negatively affect firm performance. From the point of view of the agency theory, the shareholders are the owners of the firm and the managers are the agents that act as delegates on the behalf of the shareholders. This means that shareholders do not have direct control of the organization (Jensen & Meckling, 1979). This leads to the phenomenon of agency loss, which occurs when the management directly controls the organization but does not completely act in the interests of the shareholders. This may lead to poorer performance. In order to reduce agency loss, the CEO can assume the task of decision management while the board focuses on decision control. The CEO is responsible for implementing strategic decisions, but the board will be ultimately responsible by ratifying and monitoring the decisions that the CEO makes (Boyd, 1995). An important aspect of the agency theory is the advantage of the separation of the CEO and the chairman. This separation can control agency costs because the separation of ownership and control can improve firm performance (Fosberg & Nelson, 1999). Supporters of the agency theory also assert that avoiding CEO duality can prevent CEO entrenchment, meaning it is difficult to fire a CEO who does not perform in a satisfactory way (Finkelstein et al, 1994). Based on the literature above, the first hypothesis is formulated as:

$H1a$: CEO duality has negative influence on the firm performance.

2.2.2 Stewardship theory

Donaldson (1990) described an alternative to the implicit assumption of the agency theory that managers tend to be opportunistic. Managers may very well not base all of their actions on the maximization of income. It is very possible that managers also have other motivations such as a sense of achievement, altruism or responsibility. From this criticism another assumption arises that the manager wants to be a good steward for the firm (Donaldson et al, 1991). The theory that takes this assumption into account is called the stewardship theory and this theory may offer an alternative explanation regarding the relationship between CEO duality and firm performance. The theory voices a view of a positive managerial attitude and motivation which is alternative to agency theory (Donaldson et al., 1991). Not like agency theory, stewardship theory proposes that CEO duality has the merit of a powerful, clear leadership structure reflected in a unity command of the firm (Donaldson et al, 1991). With this kind of leadership structure, the decisions could be made in a better and faster way and, in result, lead to a better performance than those who separate the two positions. Donaldson et al (1991) also find the empirical evidence in their study which reveals that returns on equity to shareholders are increased if the positions of the CEO and the chairman are combined. Their study also supports the stewardship theory by stating that the unity of command of CEO duality has benefits for shareholders and can increase shareholder returns. In the assumption of agency theory, the CEO is regarded as an opportunist. However, stewardship theory argues that the CEO is not an opportunist who shirks the responsibility. In contrast he or she is a person who is motivated for his or her job and wants to be a good steward for the firm (Donaldson et al, 1991). Due to this assumption, stewardship theory focuses on the creation of empowering structures which enhances effectiveness and productiveness by the combination of the roles of the chairman and the CEO. CEO duality will therefore result in higher returns to shareholders compared to the separation of the CEO and the chairman. CEO duality creates a clear leadership structure and makes decisions more effective. Under the assumption that the CEO will do what is best for the firm, stewardship theory argues that CEO duality is positively related to firm performance (Finkelstein et al, 1994).

Based on the literatures above, the first hypothesis is formulated as:

$H1b$: CEO duality has positive influence on the firm performance.

The figure below simply describes the relationship between CEO duality and firm performance according to the explanations of the two theories.
3. METHODOLOGY AND DATA

3.1 Model
In the analysis of the relationship between CEO duality and firm performance, the below regression equation will be used to test the main hypotheses. The model is presented as follows:

\[ Y_i = \beta_0 + \beta_1 CEO_i + \beta_2 PRPF_i + \beta_3 SIZ_i + \beta_4 AGE_i + \epsilon_i \]

in which, \( Y \) is firm performance of company \( i \), \( \beta_1, \beta_2, \beta_3, \) and \( \beta_4 \) are the parameters for the explanatory variables. CEO stands for CEO duality; PRPF relates to the prior firm performance; SIZ represents the size of the firm; AGE is the age of the firm. Among all these explanatory variables, CEO duality is the independent variable and the remaining three are control variables. \( \beta_{0i} \) is the constant number of the formula and \( \epsilon_i \) is the standard error. Braun & Sharma (2007) formulate a similar equation.

3.2 Variables and Measurement

3.2.1 Independent variable and measurement
For the empirical evidence on the influence of CEO duality on firm performance quantitative research needs to be done. First a sample of firms needs to be selected and of these firms it needs to be established whether or not the firm has CEO duality. Also, a clear indicator for firm performance needs to be established. In this study the independent variable is CEO duality. Meaning whether the function of CEO and chairman is held by the same person or not. CEO duality is a binary variable for the purpose of analysis. If CEO duality is identified for one company (CEO and the chairman of the board are the same person), a dummy variable is coded as “1”. If the functions of CEO and the chairman of the board are separated, then a dummy variable is coded as “0”.

3.2.2 Dependent variable and measurement
The dependent variable is firm performance. Since firm performance is not as straightforward as other variables, there are several indicators that are used to test firm performance. For example, Finkelstein et al (1994) use return on asset (ROA) to measure firm performance. Boyd (1995) uses return on investment (ROI) as an indicator for firm performance. However in this paper, profit margin will be used to measure the firm performance. According to Rechner et al (1991), the profit margin is also an effective way to measure the firm performance. Because of most data for this paper is acquired from “CNN Money”, which is the world's largest business website. To keep the data consistent, other data should also be obtained from this website as much as possible (more context about data collection will be explained in the other section later). Unfortunately the website does not provide the ROI, ROE or other data for measuring firm performance. Therefore, because the availability the data, profit margin is chosen as the indicator for firm performance. The profit margin serves to measure the profitability of a firm. It is calculated by dividing net profits with revenues.

3.2.3 Control variables and measurement
It is not possible that CEO duality will be the only variable that influences firm performance. Other factors will influence firm performance as well. For this purpose the following control variables have been selected: the prior firm performance of the company, the size of the company and the age of the company. Peng, et al (2007) brings up that the poor performance of prior years may trigger corporate change within the organizations. Therefore, prior performance needs to be a control variable in this study. As for firm performance, previous year’s profit margin is used. Firm size also has influence on firm strategy, which will cause difference in firm performance. (Braun et al, 2007). Therefore firm size also needs to be controlled. Based on the literature, firm size is measured as the logarithm of total assets of the firm. Peng et al (2007) also indicate that firm age has influence on firm performance hence firm age is the third control variable. Firm age cannot be observed directly from the company websites or annual reports, only the date of the company founding can be acquired. Therefore, company age is measured as 2014 minus the founding year.

3.2.4 Data collection
The sample consists of EU listed firms on the top 200 spots of the Global Fortune 500 in the year 2013. Most scholars choose the list of the Fortune 500 as the sample for the CEO duality topic (Peng et al, 2007). The sample contains 62 EU listed companies which have been selected from Austria, Denmark, France, Germany, Italy, Luxembourg, the
Netherlands, Norway, Spain and the United Kingdom. Due to the incompleteness of the data, five companies have been removed from the sample. The reason for the incompleteness of the data is the unavailability of one control variable, which is prior firm performance. As mentioned before, prior firm performance is measured as the profit margin in 2012 of the top 200 EU listed firms of the Fortune Global 500. However, there are 5 companies that are not on the Fortune Global 500 list of 2012. This led to the incompleteness of the data. Hence there are 57 companies that will be used as sample of this study.

In order to establish the status of CEO duality the annual reports of the firms have been consulted. Because of unclear or missing information on the annual reports, the corporate websites have also been checked. The age (founding year) of the firm has been found on the corporate websites of the firms. Some firms used to be a part of a government, for these firms the age has been determined by the year in which the firm has been privatized. This is because as a part of the government there is no profit and loss for the organization in the same sense as with a private firm. Besides, the organizations did not operate in a competitive market. Based on the literature, the size of the company is calculated as the logarithm of total assets. The assets of the company have been collected from the list of CNN Money Fortune Global 500. Finally the profit margins of both 2013 and 2012 have been calculated by dividing net profit with revenue. The net profit and revenue numbers have been retrieved from the CNN Money Fortune Global 500 as well. All the data and information collected in this paper have been collected manually. There are two reasons why manual data collection has been chosen instead of the use of the ORBIS database. Firstly, the status of CEO duality could not be found on ORBIS. Secondly, in this case manual data collection is more efficient compared to the use of the ORBIS database. The main reason is that the Fortune Global 500 companies (our sample) cannot be automatically sorted in ORBIS. Selecting each firm one by one is very time consuming. Also, the CNN Money Fortune Global 500 includes not only the list of the firms but also most of the data that was needed in this research.

4. DATA ANALYSIS AND RESULTS

4.1 Statistical Results

The sample size in the paper is 56. Out of this sample of companies, 55 percent has CEO duality and the remaining 45 percent has a separation of the function of CEO and chairman. Table 1 illustrates the descriptive statistics for all variables. For each variable, table 1 describes the lowest value (minimum) the highest value (maximum), the mean value and the standard deviation. The correlation of the variables is described in table 2. It can be observed that all the independent variables are negatively related to each other. The dependent variable profit margin 2013 (firm performance) has a positive relation with CEO duality, previous firm performance and firm size.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEO duality</td>
<td>.00</td>
<td>1.00</td>
<td>.55</td>
<td>.30</td>
<td>56</td>
</tr>
<tr>
<td>profit margin 2012</td>
<td>-.22</td>
<td>.13</td>
<td>.04</td>
<td>.05</td>
<td>56</td>
</tr>
<tr>
<td>logarithm of total assets</td>
<td>1.60</td>
<td>3.43</td>
<td>2.37</td>
<td>.54</td>
<td>56</td>
</tr>
<tr>
<td>Company age (years)</td>
<td>19.00</td>
<td>541.00</td>
<td>134.86</td>
<td>90.91</td>
<td>56</td>
</tr>
<tr>
<td>profit margin 2013</td>
<td>-.10</td>
<td>.13</td>
<td>.02</td>
<td>.05</td>
<td>56</td>
</tr>
</tbody>
</table>
Table 2. Correlations of variables

<table>
<thead>
<tr>
<th></th>
<th>CEO duality</th>
<th>profit margin 2012</th>
<th>logarithm of total assets</th>
<th>Company age (years)</th>
<th>profit margin 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEO duality</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>profit margin 2012</td>
<td>.08</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>logarithm of total assets</td>
<td>-.25</td>
<td>-.02</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Company age (years)</td>
<td>-.24</td>
<td>-.46**</td>
<td>-.01</td>
<td>1</td>
<td>-.14</td>
</tr>
<tr>
<td>profit margin 2013</td>
<td>.09</td>
<td>.44**</td>
<td>.04</td>
<td>-.14</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: 1. Correlation coefficient of variables is presented by making use of Pearson correlation.
2. **indicate level of significance at 1 percent (2 tailed).

4.2 Testing the Hypotheses

The results are presented in table 3. Model 1 uses control variables from 56 companies. Control variables explain 20% of the variance in firm performance (R² = 0.20). Profit margin is a control variable which indicates the prior firm performance. Looking at the profit margin of 2012 it can be said that the statistical relationship is very strong with a P-value of 0.00. This indicates the firm performance in 2013 has a strong relationship with the firm performance in 2012. Logarithm of total assets is a control variable for measuring the size of the firm. The logarithm of total assets appears to have a weaker relationship on firm performance, which is only 0.70. Company age is also a control variable. The relationship between company age and firm performance also is quite weak with a P-value of 0.60, which is also not significant.

Model 2 adds the CEO duality variable and the total sample size is still 56. The introduction of the CEO duality variable explains an additional 3% of the variance in firm performance. However, it is read in the table that the statistical relationship between CEO duality and firm performance is not significant with a P-value of 0.17, which > 0.05. Due to this lack of significance there is not enough statistical power to confirm hypothesis 1a or 1b. This result is as the same as prior researches, Peng et al (2007) and Baliga et al (1996) also acquired this result.

Because firms from the Netherlands and Germany have a two-tier board structure, the firms from these two countries are kind of special. Therefore in Model 3, the companies from these two countries are removed. Hence it can be compared that whether the special case for the companies from these two countries have influence on the final result. From table 6 it can be observed that the P-value of CEO duality is 0.19 and compared to the test which included the Netherlands and Germany, there is not a big difference (0.17). P-value is 0.19 > 0.05, which means not significant.

In summary the results of the regression analysis indicate that the relationship between CEO duality, firm size, company age and firm performance is weak. The only strong relationship is that between the previous profit margin and firm performance. Therefore, the hypothesis 1a and hypothesis 1b are both rejected, which means that there is no strong relationship between CEO duality and firm performance. The result obtained from this paper is consistent with the research of Rechner et al (1991).
Table 3. Results of the linear regression analysis

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-1.12</td>
<td>-3.95</td>
<td>-0.06</td>
</tr>
<tr>
<td></td>
<td>(0.72)</td>
<td>(0.28)</td>
<td>(0.26)</td>
</tr>
<tr>
<td>Profit margin 2012</td>
<td>0.44</td>
<td>0.48</td>
<td>0.40</td>
</tr>
<tr>
<td></td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.02)</td>
</tr>
<tr>
<td>Logarithm of total assets</td>
<td>0.44</td>
<td>0.90</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td>(0.70)</td>
<td>(0.44)</td>
<td>(0.41)</td>
</tr>
<tr>
<td>Company age (years)</td>
<td>0.00</td>
<td>0.00</td>
<td>9.71E-6</td>
</tr>
<tr>
<td></td>
<td>(0.60)</td>
<td>(0.32)</td>
<td>(0.33)</td>
</tr>
<tr>
<td>CEO duality</td>
<td>1.84</td>
<td>0.02</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.17)</td>
<td>(0.19)</td>
<td></td>
</tr>
<tr>
<td>R square</td>
<td>0.20</td>
<td>0.23</td>
<td>0.20</td>
</tr>
<tr>
<td>Adjusted R square</td>
<td>0.15</td>
<td>0.17</td>
<td>0.09</td>
</tr>
<tr>
<td>No. of Obs.</td>
<td>56</td>
<td>56</td>
<td>34</td>
</tr>
</tbody>
</table>

Note: 1. Unstandardized coefficients are reported
2. The significant level is 0.05

5. DISCUSSION

This paper did the research on CEO duality and firm performance in 2013. By controlling other three control variables, the linear regression model is used to test the two hypotheses. Most previous researches have reported either a positive or negative influence on firm performance and are mostly based on American firms. In this study, the samples are collected from EU listed firms and the relationship between CEO duality and firm performance is neither positive nor negative. It has been shown in the results that there is no significant relationship between CEO duality and firm performance for EU listed firms. It also means that the research question will be answered:

*To what extent does CEO duality influence the firm performance of EU listed firms?*

The answer is that CEO duality has little influence (which is not significant) as the results indicate. This means that statistically speaking, firm performance is quite independent of the CEO duality status within EU listed firms.

While it is clear that the results of the test do not make a case for either the agency theory of the stewardship theory, it also does not deny either of the two theories. There still can be made a case for either the agency theory or the stewardship theory. Arguments that are not directly related to firm performance (such as shareholder interests) can still be used regarding the two theories. Regardless of these considerations, the results do make clear that CEO duality does not have a significant impact on firm performance. The results of this study are more in line with the conclusion of Baliga et al (1996) who concluded that CEO duality is not seen as a central cause of firm performance but simply as one of many variables. In their study, Baliga et al (1996) also conclude that a single variable such as CEO duality is unlikely to lead to a measurable improvement in firm performance. One may regard as a weakness of this study that it cannot say anything about the validity of either the agency theory or the stewardship theory. Both theories may have their merit in the description of specific situations within specific firms. This
however does not mean that the results of our study does not have any strength at all. Knowledge of the fact that the influence of CEO duality of firm performance can be a great benefit. Having this knowledge beforehand can help to avoid quick and erroneous decisions about CEO duality on the part of firms and policy makers. For instance governments may compel firms to abandon CEO duality in an attempt to improve firm performance. In some countries, large pension funds and key legislators and regulators have been pushing for the separation of CEO and chairman as a matter of general board policy (Brickley et al, 1997). The results of this study can serve as a warning that such a policy decision can be ineffective if the purpose is to improve firm performance. While the study does not deny that CEO duality can have an influence. It does make clear that its importance should not be overrated.

6. CONCLUSION
This paper has investigated the influence the status of CEO duality on the performance of EU listed firms. Using a sample of EU listed firms from the Fortune Global 500 in year 2013, a linear regression analysis has provided empirical evidence on the influence that CEO duality has on firm performance.

Since corporate governance mechanisms can have an impact on firm performance, the decisions regarding the status of CEO duality is of utmost importance. Both the agency theory and the stewardship theory provide coherent arguments that may influence the decisions of firms and policymakers regarding CEO duality. One may choose to separate the roles of CEO and chairman because it may be desired to monitor the CEO, the other one may prefer to combine the roles of CEO and chairman on the grounds that it will provide a stronger leadership. It may very well be that the agency theory or the stewardship theory may have different uses in different situations. After all the agency theory is based on the assumption of managerial opportunism while the stewardship theory is based on the assumption of the good will of the CEO. It may very well be that in certain cases CEO's are indeed opportunistic; while in other instances CEO's have the best interest of the shareholders in mind. It may even be the case that the interest of the shareholders frequently coincides with the interests of the CEO. There can be many reasons for a firm to choose for either CEO duality or a separation of the CEO and chairman.

That being said, the results of the study do indicate that the influence that the status of CEO duality has on firm performance is insignificant. So when policy makers of a nation within the EU or of the European Union itself decide that all firms should have CEO duality of not, then this paper would not advise to make this decision on the basis of an improvement in firm performance. Furthermore, since the arguments of the agency theory and stewardship theory are based on different assumptions, it is perhaps more useful to let the firm itself decide on the status of the CEO and chairman. After all the board of the firm would better know which assumptions which underlie the two theories can be best applied to the situation of the firm.

The contribution of this study has been to find that CEO duality does not have much influence on firm performance in EU listed firms. It says much about the relevance of the topic with regard to other factors that influence the performance of the firm. Despite this benefit, much can still be said about the ongoing debate between the agency theory and stewardship theory. Because these theories mainly discuss the various incentives that CEO's can have in a system with or without CEO duality, more detailed studies could be made within corporations. Instead of a cross sectional study in which multiple firms are compared regarding their duality status, a longitudinal study can also be made of one or a few firms which have transitioned from a situation of CEO duality to a situation without CEO duality, or vice versa. In a longitudinal study, the variables are being studied over a longer period of time.

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8. REFERENCES


