# Say-on-pay. When is enough, enough.


## Abstract

I investigate the impact of executive compensation on say-on-pay votes in the years 2016, 2017, and 2018. Using data from AEX companies who stayed consistently in the AEX during that period. Furthermore, I also used CEOs that were appointed during those years. Finding ultimately no relationship between compensation on say-on-pay votes. I also find that executive compensation in different industries do not matter on determining voting against remuneration. Also, I find no impact of the internal pay ratio on say-on-pay votes. Concluding that shareholders do not pay care to executive compensation if they can vote against the remuneration proposal.



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# 1 Introduction

In the public domain there have been recurring discussions about excesses in executive pay in profit organizations. In 2018, the 50% salary increase of CEO Ralph Hamers from ING Bank N.V. was a hot topic in the Netherlands (NOS, 2018). And lately shareholders have on several occasions been pushing back on executive pay proposals in shareholder meetings. For example, investors' association VEB (Vereniging van Effectenbezitters) voted against the executive compensation package at the Royal Dutch Shell annual general meeting (VEB, 2016). Also a majority of the shareholders from NXP has voted against the executive compensation package from NXP too (ANP, 2020). On the other hand executive pay is not a topic of discussion in many other companies. At the annual general meeting of shareholders from Volkswagen AG in 2017, the remuneration system of the members of the board of management was approved by 80,96 % of the votes cast (Volkswagen, 2020) and at the annual general meeting of shareholders from Heineken N.V. in 2020, 96,94% of the voting cast approved the remuneration of the executive board (Heineken, 2020).

This paper investigates the correlation between a firm's performance and the acceptance level of it's executive remuneration policy. In other words, when is enough, enough.

Basically, executive compensation is determined by the performance of a firm. 'This is where the principal-agent relationship arises. 'A principal–agent relationship or agency relationship occurs when one party (the agent) is hired by another (the principal) to take actions or make decisions that affect the payoff to the principal (Besanko, Dranove, Shanley, & Schaefer, 2013) (p.402).' The executive (agent) should therefore be paid by their actions to maximize shareholder value and agency problems could be resolved with executive compensation to align managers' interests with those of shareholders (Frydman & Jenter, 2010). It could be concluded that a compensation package for an executive that will achieve maximum shareholder value should never be regarded as excessive. However, there appears to be a limit to the level of acceptance.

In 2004, Say on Pay was introduced in the Netherlands (van der Elst & Lafarre, 2017). 'Say on pay is the practice of granting shareholders the right to vote on a company's executive compensation program (Larcker & Tayan, 2016)(p. 2).' With Say on Pay, shareholders have been given more participation in a firms decision on executive pay. In a recent study, (Balsam, Boone, Liu, & Yin, 2016) find that total executive compensation and the change of executive compensation affect the percentage of votes against the compensation plan. Shareholders are more likely to vote against executive compensation when the firm pays a large absolute amount of executive compensation, has a large increase in executive compensation from the prior year, or has a larger amount of compensation that cannot be explained by economic factors. On the other hand, they find evidence that suggests that firms who reduced their compensation in advance of the say-on-pay vote were rewarded with higher approval percentages. Summarizing, evidence suggests that shareholders are more likely to vote against executive compensation when a firm pays a large amount of compensation or a large increase from the prior year, but we do not know exactly at what amount of compensation the payment to an executive is to high. There is not set a limitation of executive compensation as of today.

Rejection of an executive compensation package can have various reasons, of which lack of company financial performance is just one. Because of the financial circumstances of Air France-KLM, the Dutch minister of finance as a shareholder of Air France-KLM was against a bonus for CEO Ben Smith for his activities in 2019 (Duursma, 2020). A decline in share price could be having an effect on the rejection of an executive compensation package too (Price, 2019). The question to answer is when a compensation package is considered to become excessive.

The data consists 25 firms from the Euronext Amsterdam Stock Exchange. I will take the AEX index, a market index with the 25 largest caps on Euronext Amsterdam (*Index Rule Book AEX® Family*, 2020). These are stock traded firms and have to present their remuneration proposal to the shareholders of the firm. I will analyse these firms for the three year period 2016 till 2018. To obtain the data of these firms ThomsonOne is being used for executive compensation. Financial information is obtained also from Thomson One which has data from annual reports, as well as data about mergers and acquisitions and IPO's. Focus from this database is on listed corporations, worldwide. This data source is publicly available at the EUR financial databases. The Say on Pay voting results as well as the CEO-to-worker ratios are hand collected from the remuneration reports of the investigated firms. Software that is being used to make calculations and regressions is called Stata. This software program is used to analyse the voting pattern of a shareholder. I will follow the model of (Balsam, Boone, Liu, & Yin, 2016). According to this model, the first test is regressing the percentage of shares voted against executive compensation on different variables that could affect the voting results. The second test is the log of total compensation. Assuming shareholders are influenced by the total amount, I expect that as this amount increases, the percentage of votes against the plan will increase. Assuming that shareholders benchmark the average of executive compensation on the AEX, I expect that as this variable increases so will the percentage of votes against executive compensation.

Consistent with the theory, I will try to determine the limitation for executive compensation. I expect to find that the percentage of votes cast against executive pay varies is lower for firms that decrease their compensation and is higher for firms that increase their executive compensation. In addition, evidence suggests that every firm has a maximum amount of executive compensation related to firm performance, where stakeholders will not complain or vote against the executive compensation at the annual shareholder's meeting.

# 2 Theoretical background

## 2.1 Executive compensation

In general, executive compensation serves three objectives for an organization. First of all, it must attract people with skills, experiences, and a proven track record to fit for the position. Secondly, the amount of compensation should be sufficient to retain the executive for not to leave to another organization. Finally, the compensation should motivate the executive in a way what is consistent with the strategy and profile of the organization, so the executive would not only act in his own interest (Larcker & Tayan, 2015).

In order to know if the current executive compensation is efficient, we need to know more about the executive compensation structure as being explained by (Larcker & Tayan, 2015). Executive compensation is most of the time split in components. Common is the base salary, which is a fixed payment made every month of the year. Additional, an annual bonus could be awarded if the performance of an employee exceeds the targets for that year. These targets could be quantitative or/and qualitative factors. This bonus is usually paid in cash and is generally a percentage of the base salary with a minimum and maximum amount. In a profit organization it also possible to earn stock options. This is the right to buy shares in the future at a fixed exercise price. At last there is also the possibility in a profit organization to earn performance shares or cash. Performance pay is granted generally over a three to five year period and is comparable to the annual bonus.

## 2.2 Shareholder voting

However, shareholders are still in conflict of interest with the executives of publicly owned corporations. Despite the objective of executive compensation to not act in his own interest. In the ideal world shareholders have complete information regarding executives activities and firm's investment opportunities so they could design a specific contract. However, shareholders do not know what the actions of an executive are and which will achieve maximal shareholder value (Jensen & Murphy, 1990). Also (Crocker & Slemrod, 2008) show that compensation contracts that are written in terms of reported earnings cannot provide incentives for managers to simultaneously maximize profits and also report those profits truthfully (Bennett, Bettis, Gopalan, & Milbourn, 2017). This is a classic example of the principal-agent problem.

## 2.3 Empirical studies on relationship between executive compensation and shareholder voting

The discussion about executive pay is not new. (Jensen & Murphy, 1990) already published a paper over 30 years ago about the conflict of interest between shareholders and publicly owned corporations. More recently, (Ferri, Balachandran, & Maber, 2007) find that there is improved sensitivity between executive compensation and firm performance after the British legislation in 2002 (Cai & Walkling, 2010). There are also arguments for opposing Say on Pay. The opponents argue that the current executive

compensation structures are efficient and that there is no need for regulating this process as pronounced by (Deane, 2007) and (Bainbridge, 2008).

In the Netherlands, Norway, and Sweden shareholder votes are binding (Cai & Walkling, 2010). This means that corporations should actually act to the Say on Pay votes. But also in countries where the say-on-pay vote is officially non-binding, evidence suggests many parties, such as politicians and corporations, take the vote very seriously (Balsam, Boone, Liu, & Yin, 2016). For example, (Cai, Garner, & Walkling, 2009) examine if shareholder votes matter in director elections during 2003-2005 and find that fewer positive votes for directors lead to reductions in excessive CEO compensation levels and higher probability of CEO turnover. Their evidence suggests eventually that even non-binding shareholder votes can affect director decisions on executive compensation. In the Netherlands, Norway, and Sweden shareholder votes are binding (Cai & Walkling, 2010). This means that corporations should actually act to the Say on Pay votes.

(Carter & Zamora, 2007) used a sample of U.K. firms from 2002-2006, to examine the role of Say on Pay votes in executive compensation design. The results show that a proportion of shareholders disapprove of higher salaries, weak pay-for-performance sensitivity in bonus pay and greater potential dilution in equity pay. They also find some evidence that boards selectively respond to past negative votes by curbing salary increases.

### 2.4 Say on Pay in the Netherlands

On the other hand (Alissa, 2015) finds evidence that shareholders vote more against the compensation report when excess compensation is high. This eventually could be resulting into two actions that boards might consider when dealing with such an outcome. Boards can lower the excessive executive compensation or they can force the executive out of office. She finds evidence consistent with boards reducing excess compensation for firms whose executives have above the mean excess compensation. For executive turnover, she finds that executive turnover is increasing in shareholders' dissatisfaction. Following prior research, this leads to the following hypothesis:

**H1.** If the total amount of executive compensation increases, the percentage of votes against the executive compensation plan will increase.

I expect that if the total compensation relative to the prior year increases, more shareholders will vote against the executive compensation plan.

However, the investigated firms from the AEX index are active in different industries. To examine if hypothesis one is not giving a biased image on the Say on pay votes, the second hypothesis is formulated:

**H2.** The percentage of shareholders that vote against executive compensation will be different on every industry.

Stocks on the AEX are categorized on different industries. These are the following: Industrial, Technology, Telecommunications, Health care, Financials, Real estate, Energy, Basic materials, Consumer discretionary, and Consumer staples. Research of (Finkelstein, 2009) shows that the level of industry

discretion is significantly related to the level of CEO compensation. On the other hand (Chan, 2012) concludes that the most effective package differs among different industries, but relies on the same instruments to provide the most successful results. Compensation differs on every industry and therefore I expect that the percentage of shareholders that vote against executive compensation will be different on every industry. The final hypothesis is:

**H3.** The percentage of shareholders that vote against executive compensation is positively associated with a larger difference in executive compensation relative to the payment on the average employee.

(Crawford, Nelson, & Rountree, 2017) find evidence that, there is a significant relation between Say on Pay voting dissent and the pay gap between executives and employees. I expect to find an increase in voting against the executive compensation when a firm has a high CEO-to-worker ratio. According to the revised Dutch Corporate Governance Code (2016), as of fiscal year 2017 Dutch listed companies are required to report the CEO pay ratio in their annual report (Hulshof, 2018). The CEO pay ratio, also pronounced as the internal pay ratio, is calculated as CEO total compensation divided by mean worker pay (Balsam, Choi, John, & Ju, 2017).

# 3 Data & Methodology

## 3.1 Sample selection and data sources

The initial sample consists of all ThomsonOne firms with non-zero executive compensation for the years 2016, 2017, and 2018, resulting in a total of 30 Dutch stock-listed firms. In order to have a list of firms with data for three consecutive years from this initial sample, I deleted seven firms who not consistently stayed in the AEX. It is also important to have firms in the data set with the same CEO during the research period. This will avoid biases, such as the characteristics of a CEO which could possibly influence the final results. Therefore, another three firms have been deleted that had more than one CEO during the research period. Finally, one firm is deleted because it was acquired by an other company during the research period, because the year on year comparability changed.

For the remaining nineteen firms shareholder voting data was manually collected from remuneration reports that were filled after the annual general meeting of shareholders at companies websites. The CEO-to-worker ratios were also manually collected from the annual reports. The sample selection process is detailed in Table 1

Table 1: Sample selection of all firms at the AEX between 2016 and 2018

| **Changes** | **Firms** |
|---|---|
| Firms in ThomsonOne with non-zero CEO total compensation from 2016 to 2018 | 30 |
| Less: Firms not consistently stayed in the AEX | 7 |
| Less: Firms with change in CEO from 2016 to 2018 | 3 |
| Less: Missing ThomsonOne data | 1 |
| **Final Sample (57 observations)** | **19** |

## 3.2 Methodology

In the model to test the three hypotheses, the test variable is the percentage of votes against the executive remuneration policy. Assuming that shareholders are influenced by the total amount of compensation, I expect that as this amount increases, the percentage of votes against the remuneration plan will increase. The basic model to test the hypotheses was obtained from the paper of (Balsam, Boone, Liu, & Yin, 2016). This model was adapted to the specific purpose as follows:

$$Votesagainst = \alpha 0 + \alpha 1 Log\ compensation_{it} + \alpha 2 ROA_{it} + \alpha 2 Returns_{it} + \alpha 4 LogAssets_{it} + \alpha 5 Market - to - Book_{it} + \alpha 6 S\tan dardDeviationofROA_{it} + \alpha 7 S\tan dardDeviationofReturns_{it} + \alpha 8 Internalpayratio + \alpha 9 Year_{it} + \alpha 10 IndustryVariables_{it} + \epsilon_{it}$$

where:

Votes against = the percentage of votes against the executive remuneration policy as recorded in the remuneration report of an annual general meeting of shareholders;

Total Compensation = CEO total compensation as reported in Thomson One, including salary, bonus, non-equity incentives, stock options, restricted shares, pensions, and other compensation in million

euros;

Log Compensation = natural logarithm of Total Compensation. I am taking the log of compensation for the following reason. It can as mentioned in (Brooks, 2019) often help to rescale the data of the variable so that the variance is more constant, which masters the problem of heteroskedasticity. Furthermore logarithms can help transform the data from a positively skewed distribution to a more normal distribution. With taking the logarithm of a variable we have tackled a few possible problems that can occur with a regression.

The model further encompasses additional economic determinants of compensation from (Core, Holthausen, & Larcker, 1999). These are Return on Assets (ROA), standard deviation of ROA, shareholder returns, standard deviation of Returns, log of Assets, and the market-to-book ratio.

ROA = income before extraordinary items deflated by lagged value of assets in percentages;

Returns = buy and hold annual returns to shareholders, i.e., capital appreciation plus dividends in percentages;

Assets = Total assets of every firm in million euros;

Log Assets = natural logarithm of lagged total assets. We are taking the natural logarithm for the same reason as taking the logarithm for compensation.;

Market-to-Book = market value of equity divided by book value of equity;

Standard Deviation of ROA = standard deviation of annual ROA for the prior five years in percentages;

Standard Deviation of Returns = standard deviation of returns for the prior five years in percentages;

Subsequently the model corrects for the possibility of biased standard errors by using industry variables and multiple years (Petersen, 2008).

Year = This variable includes the years of the data set. Named 2016, 2017, and 2018; and

Industry Variables = Categorized on different industries. These are the following: Industrial, Technology, Telecommunications, Health care, Financials, Real estate, Energy, Basic materials, Consumer discretionary, and Consumer staples.

Lastly the internal pay ratio is added as a variable in the model to cover also the third hypothesis.

Internal pay ratio: Internal pay ratios obtained from annual reports of the researched firms.

### 3.3 Descriptive statistics

Table 2 below presents summary statistics of variables in the models. The table shows statistical characteristics of the data. Namely, total observations, means, standard deviations, minimum, maximum, and the median. The table presents summary statistics of variables in the model. The mean of Votesagainst and Compensation are 0,0606 and 4,9339 respectively. We see high standard deviations at Compensation (3,9435) and Assets (209868,5000). However these are absolute numbers and I take the log of

these variables when executing the regressions. Furthermore the median is added to the statistics. The mean and median of a symmetric distribution are close together. In a skewed distribution, the mean is farther out in the long tail than is the median (Moore, McCabea, Alwan, Craig, & Duckworth, 2011). For example, the median of variable Votesagainst is 0,0132 and the mean is 0,0606. This suggests that there is a skewed distribution.

Table 2: Descriptive Statistics AEX firms from 2016 until 2018.

| Variable | Obs. | Mean | Std. Dev. | Min. | Max. | Median |
|---|---|---|---|---|---|---|
| Votesagainst | 57 | 0,0606 | 0,1168 | 0,0002 | 0,6250 | 0,0132 |
| Compensation | 57 | 4,9339 | 3,9435 | 1,0620 | 20,1370 | 3,4575 |
| ROA | 57 | 0,0599 | 0,0464 | -0,0970 | 0,1670 | 0,0641 |
| Returns | 57 | 0,0925 | 0,2459 | -0,3416 | 13,2170 | 0,0493 |
| Assets | 57 | 113804,3000 | 209868,5000 | 1081,3810 | 886189 | 24191,0000 |
| Std.Dev. of ROA | 57 | 0,0273 | 0,0395 | 0,0002 | 0,1781 | 0,0170 |
| MarkettoBook | 57 | 3,2982 | 3,3414 | 0,5000 | 15,2000 | 2,1000 |
| Std.Dev. of Returns | 57 | 0,2578 | 0,2190 | 0,0581 | 0,9662 | 0,1952 |
| Year | 57 | 2017 | 0,8238 | 2016 | 2018 | 2017 |
| Internalpayratio | 37 | 63,9324 | 51,4672 | 17,3000 | 215,0000 | 41,7000 |

Table 3 below shows the correlations among the compensation-related variables. By construction, Votes against is negatively correlated with Log compensation, ROA, Returns, and Market-to-book. On the other hand, it is positively correlated with Log Assets, Standard deviation of ROA and Standard deviation of Returns. Noticeable are the correlations versus the variable of Votesagainst. I find a negative correlation with Logcompensation (-0,1236), ROA (-0,3247), Returns (-0,2085), and Markettobook (-0,0171). However, these correlation are not highly negatively correlated with Votesagainst. Furthermore, I see positive correlations on the variable Logcompensation with respect to ROA (0,3814), Returns (0,0014), Logassets (0,2183), and Markettobook (0,4502).

Table 3: Correlation table variables AEX firms from 2016 until 2018. Table shows the correlations among the compensation-related variables. Correlation takes the covariance and standardises it. Due to standardisation the correlation lies between minus 1 and plus 1.

| Variable | Votesagainst | Logcompensation | ROA | Returns | LogAssets | Std.Dev. of ROA | Markettobook | Std.Dev. of Returns | Year |
|---|---|---|---|---|---|---|---|---|---|
| Votesagainst | 1 | | | | | | | | |
| Logcompensation | -0.1236 | 1 | | | | | | | |
| ROA | -0.3247 | 0.3814 | 1 | | | | | | |
| Returns | -0.2085 | 0.0014 | 0.0402 | 1 | | | | | |
| LogAssets | 0.0228 | 0.2183 | -0.2910 | -0.0261 | 1 | | | | |
| Std.Dev. of ROA | 0.4623 | -0.2853 | -0.2664 | 0.0627 | -0.4742 | 1 | | | |
| MarkettoBook | -0.0171 | 0.4502 | 0.5610 | 0.0880 | -0.3168 | -0.0085 | 1 | | |
| Std.Dev. of Returns | 0.3918 | -0.3989 | -0.3421 | 0.1412 | -0.3182 | 0.8432 | -0.1682 | 1 | |
| Year | 0.1408 | 0.0079 | 0.0248 | -0.3629 | 0.0168 | -0.0004 | 0.0370 | -0.0420 | 1 |

## 3.4 Analysis

Drawing on the descriptive statistics of the previous section the three different hypotheses can now be tested. In the data set I will make use of Panel data, also called longitudinal data. Panel data are data for multiple entities for which each entity is observed for more than two time periods (Stock & Watson, 2011). By using the xtset command the statistical program STATA is informed set up to process Panel data.

For computing regressions, the linear regression command xtreg is a very usefull instruction in Stata as it allows you to fit random-effects models using the between regression estimator, fixed-effects models (using the within regression estimator), and more (Brooks, 2019). Furthermore I expect to have omitted variables in the data set. Omitted variable bias occurs when the omitted variable bias is correlated with the included regressor and when the omitted variable is a determent of the dependent variable (Stock & Watson, 2011). If there is omitted variable bias present, then fixed effects models may provide a solution for controlling for these omitted variable bias. In a fixed-effects model, subjects serve as their own controls. The idea is that whatever effects the omitted variables have on the subject at one time, they will also have the same effect at a later time. However with random effects, the standard errors are often lower than with fixed effects. The trade-off is that the coefficients of random effects are likely to be more biased. (Williams, 2018).

Finally a Hausman test is performed to check if either fixed or random effects should be used. The results of these models are quite different and therefore it is important to check which model is more suitable for the data. (Brooks, 2019) tells us the following about the Hausmann test: "The null hypothesis of the Hausman test is that the random effects (RE) estimator is indeed an efficient (and consistent) estimator of the true parameters. If this is the case, there should be no systematic difference between the RE and FE estimators and the RE estimator would be preferred as the more efficient estimator. In contrast, if the null is rejected, the fixed effect estimator needs to be applied"(p. 139).

With hypothesis one, I predict that the percentage of votes against executive compensation will increase with executive compensation. First, the dependent variable votes against is tested on variable Log-compensation. Secondly, I will add the average of the AEX and finally I will incorporate a variety of compensation variables that I believe may influence shareholders decisions. These variables count as control variables for this hypothesis.

At the second hypothesis, the percentage of shareholders that vote against executive compensation will be different on every industry. Therefore, I add the average on industry which is the mean sorted by every industry. Finally, all additional variables are incorporated in the regression to control for this regression.

The last hypothesis states the percentage of shareholders that vote against executive compensation is positively associated with a larger difference in executive compensation relative to the payment on the average employee. To test this hypothesis, the internal pay ratio is incorporated in the data set. Equal to the first two hypothesis, additional variables will be added at the second regression to control for. At the next section I present the results of these tests of hypothesis.

# 4 Results

First of all, I compute the Hausman test to check whether we should use fixed or random effects. Table 4 shows us the results of the test.

Table 4: Hausman test to determine to use random or fixed effects. At the result, the p-value is given whether to reject the hypothesis for difference in coefficients at the five percent level.

| **Variable** | **Fixed (b)** | **Random (B)** | **Difference (b-B)** | **sqrt (diag(V_b-V_B)) S.E.** |
|---|---|---|---|---|
| Logcompensation | -0,0566 | -0,0123 | -0,0443 | 0,0455 |
| ROA | 0,1718 | -0,3378 | 0,5096 | 0,4122 |
| Returns | -0,0696 | -0,1016 | 0,0320 | 0,0626 |
| LogAssets | -0,0354 | 0,0214 | -0,0568 | 0,2068 |
| Std.Dev. of ROA | -1,3453 | 1,1139 | -2,4592 | 1,4252 |
| MarkettoBook | -0,0055 | 0,0083 | -0,0139 | 0,0259 |
| Std.Dev. of Returns | 0,7107 | 0,1003 | 0,6104 | 0,3482 |
| Year | | | | |
| 2017 | 0,0320 | 0,0137 | 0,0183 | 0,0148 |
| 2018 | 0,0452 | 0,0174 | 0,0278 | 0,0323 |
| **Result** | | | | |
| chi2(9) | | (b- B)'[(V_b-V_B)^(-1)](b-B) | | |
| | | 9,5300 | | |
| Prob>chi2 | | 0,3903 | | |

The $X^2$ value for the Hausman test is 9.53 with a corresponding p-value of 0.3903. The null hypothesis that the difference in in coefficients is rejected at the five percent level, implies that the random effects model is preferred for testing. Therefore, we follow the Hausman test and use the random effects model for every regression we perform to test the hypothesis.

## 4.1 Impact level of compensation

Table 5 is providing us the results for hypothesis 1. The dependent variable in these tests is Votesagainst. The first test presents a p-value of 0,4900 and a negative coefficient (-0,0176) for Logcompensation which is above the five percent level. Therefore we do not have a significant influence on Votesagainst. At the second test, Average compensation is added to the test. However, the p-values still have not significant influence on the dependent variable Votesagainst. Log compensation has a p-value of 0,4900 and Average compensation a value of 0,1520. The coefficients are -0,0176 for Logcompensation and 2,7920 for Average compensation. An increase in Logcompensation by one states that variable Votesagainst will decline. However, an increase in Average compensation by one states that variable Votesagainst will rise by 2,790. The third test of hypothesis one adds all the control variables to the model. We notice that the coefficient of average compensation has declined to a value of 1,2071 and Logcompensation to -0,0123 by adding the other variables. Looking at the p-values, we do not see a significant value at the regression. None of the variables has a significant influence on Votesagainst and we can say that our first hypothesis can be rejected. Referring to prior research on this hypothesis, mentioning the findings of (Alissa, 2015), where she finds evidence that shareholders vote more against the compensation report when excess compensation is high. However, the results of the first hypothesis reporting the opposite. Possible explanations for the differences could be that the findings of (Alissa, 2015) were on a different time span and in a different country. She looked over a period between 2002 and 2012 and investigated

the UK for this evidence. My paper examines the years 2016 until 2018 and looked at firms listed on the AEX in the Netherlands. This might be an explanation for the different results.

Table 5: Regression results for hypothesis 1. If the total amount of executive compensation increases, the percentage of votes against the executive compensation plan will increase. Included are the coefficient, standard error, and the p-value. The first test only includes the variables year and Logcompensation. At the second test, Average compensation is added to the test. The third test includes all the remaining control variables. Finally, the R-squared for the representativeness of the data and total observations is included for every test.

| **Variable** | **First test** | | | **Second test** | | | **Third test** | | |
|---|---|---|---|---|---|---|---|---|---|
| | **Coefficient** | **Std. Error** | **p-value** | **Coefficient** | **Std. Error** | **p-value** | **Coefficient** | **Std. Error** | **p-value** |
| Intercept | 0,0660 | 0,0434 | 0,1280 | -3,6289 | 2,5918 | 0,1610 | -1,8057 | 2,9156 | 0,5360 |
| Logcompensation | -0,0176 | 0,0255 | 0,4900 | -0,0176 | 0,0255 | 0,4900 | -0,0123 | 0,0266 | 0,6430 |
| Year | | | | | | | | | |
| 2017 | 0,0135 | 0,0281 | 0,6310 | 0,1154 | 0,0886 | 0,1920 | 0,0578 | 0,0968 | 0,5510 |
| 2018 | 0,0402 | 0,0281 | 0,1520 | 0 | (omitted) | | 0 | (omitted) | |
| Average comp. | | | | 2,7920 | 1,9479 | 0,1520 | 1,2071 | 2,1944 | 0,5820 |
| ROA | | | | | | | -0,3378 | 0,4228 | 0,4240 |
| Returns | | | | | | | -0,1016 | 0,0597 | 0,0890 |
| LogAssets | | | | | | | 0,0214 | 0,0136 | 0,1170 |
| Std.Dev. of ROA | | | | | | | 1,1139 | 0,8252 | 0,1770 |
| MarkettoBook | | | | | | | 0,0083 | 0,0067 | 0,2140 |
| Std.Dev. of Returns | | | | | | | 0,1003 | 0,1428 | 0,4820 |
| Observations | 57 | | | 57 | | | 57 | | |
| R-squared | 0,0244 | | | 0,0244 | | | 0,5642 | | |

## 4.2 Impact level on industry

Regression results for hypothesis 2 are presented at table 6. The dependent variable is again Votesagainst. The first test presents a p-value of 0,3490 for Logcompensation which is above the five percent level of significance. Furthermore, we see a positive coefficient of 0,0452. Average compensation industry also added to the test. However, the p-value (0,5030) does not have significant influence on the dependent variable Votesagainst. The coefficients for Average compensation industry is 0,0381. If Average compensation industry rises by one, Votes against will also rise by 0,0381. The second test of hypothesis two adds all the control variables to the model and are also presented in table 6. We notice that the coefficient of average compensation industry has declined to a value of 0,0103 and Logcompensation to -0,0202 by adding the control variables. Looking at the p-values, we do not see a significant value at the regression. Log compensation has a p-value of 0,6890 and Average compensation industry 0,8590. No variable has again a significant influence on Votesagainst and we can therefore reject our second hypothesis. Previously mentioned research of (Finkelstein, 2009) shows that the level of industry discretion is significantly related to the level of CEO compensation. This evidence is the opposite of the results from the second hypothesis where there is no significance at all. The difference in results might be explainable by the sample size of (Finkelstein, 2009) comparing to the sample size of this paper. (Finkelstein, 2009) examined a total of 933 firms instead of 19 firms in this paper. Furthermore, (Finkelstein, 2009) also uses a slight different model which possibly could explain the difference in the significance.

Table 6: Regression results for hypothesis 2. The percentage of shareholders that vote against executive compensation will be different on every industry. Included are the coefficient, standard error, and the p-value. The first test includes the variables year, Logcompensation, and Average compensation Industry. At the second test, all the remaining control variables are added to the test. Finally, the R-squared for the representativeness of the data and total observations is included for every test.

| **Variable** | **First test** | | | **Second test** | | |
|---|---|---|---|---|---|---|
| | **Coefficient** | **Std. Error** | **p-value** | **Coefficient** | **Std. Error** | **p-value** |
| Intercept | 0,0520 | 0,0481 | 0,2790 | -0,2108 | 0,1609 | 0,1900 |
| Logcompensation | 0,0452 | 0,0483 | 0,3490 | -0,0202 | 0,0501 | 0,6870 |
| Year | | | | | | |
| 2017 | 0,0139 | 0,0284 | 0,6260 | 0,0142 | 0,0292 | 0,6260 |
| 2018 | 0,0401 | 0,0284 | 0,1590 | 0,0178 | 0,0317 | 0,5740 |
| Average comp. Industry | 0,0381 | 0,0568 | 0,5030 | 0,0103 | 0,0569 | 0,8560 |
| ROA | | | | -0,3252 | 0,4285 | 0,4480 |
| Returns | | | | -0,1013 | 0,0602 | 0,0930 |
| LogAssets | | | | 0,0212 | 0,0141 | 0,1320 |
| Std.Dev. of ROA | | | | 0,9919 | 0,9260 | 0,2840 |
| MarkettoBook | | | | 0,0082 | 0,0069 | 0,2360 |
| Std.Dev. of Returns | | | | 0,1180 | 0,1531 | 0,4410 |
| | | | | | | |
| Observations | 57 | | | 57 | | |
| R-squared | 0,0923 | | | 0,5546 | | |

## 4.3 Impact level with internal ratio

At the third and final hypothesis, the results for are given at table 7. The dependent variable is also Votesagainst and we add the variable Internalpayratio to the model. The first test presents a p-value of 0,8650 for Logcompensation which is above the five percent level of significance. Furthermore, we see a positive coefficient of 0,0076. Internalpayratio gives us a coefficient of -0,0003 and a p-value of 0,6460, respectively. The Internalpayratio also does not have significant influence on the dependent variable Votesagainst. At the second test, I add the economic control variables to the model of the third hypothesis. The coefficient for Logcompensation is 0,0169, which is higher than at the first test results at the first test. I also notice that the coefficient of Internalpayratio has declined to a value of -0,0004 when adding the control variables. Looking at the p-values, we do not see a significant value at the regression. Log compensation has a p-value of 0,7160 and Internal pay ratio 0,4740. Again no variable has a significant influence on Votesagainst and we can therefore reject our final and third hypothesis. (Crawford, Nelson, & Rountree, 2017) find evidence that, there is a significant relation between Say on Pay voting dissent and the pay gap between executives and employees. Therefore, they suggest that the internal pay ratio does have influence on say-on-pay votes. However, the results of the third hypothesis find absolute no significance of an effect of the internal pay ratio on say-on-pay votes. Differences at the research of (Crawford, Nelson, & Rountree, 2017) are for example the total observations. (Crawford, Nelson, & Rountree, 2017) has a total of 1.175 observations compared to the data for the third hypothesis which are 37 observations. More remarkable is the data set of firms. Where as in this paper I examined AEX firms from different industries, (Crawford, Nelson, & Rountree, 2017) investigates only U.S. commercial banks. This is a very specific industry research, which could possibly explain the difference in results.

Table 7: Regression results for hypothesis 3. The percentage of shareholders that vote against executive compensation is positively associated with a larger difference in executive compensation relative to the payment on the average employee. Included are the coefficient, standard error, and the p-value. The first test includes the variables year, Logcompensation, and the Interpayratio. At the second test, all the remaining control variables are added to the test. Finally, the R-squared for the representativeness of the data and total observations is included for every test.

| **Variable** | **First test** | | | **Second test** | | |
|---|---|---|---|---|---|---|
| | **Coefficient** | **Std. Error** | **p-value** | **Coefficient** | **Std. Error** | **p-value** |
| Intercept | 0,0284 | 0,0541 | 0,5990 | -0,2819 | 0,1899 | 0,1380 |
| Logcompensation | 0,0076 | 0,0445 | 0,8650 | 0,0169 | 0,0463 | 0,7160 |
| Year | | | | | | |
| 2017 | -0,0041 | 0,0427 | 0,9230 | 0,0235 | 0,0456 | 0,6060 |
| 2018 | 0,0421 | 0,0422 | 0,3190 | 0,0239 | 0,0469 | 0,6110 |
| Internalpayratio | -0,0003 | 0,0007 | 0,6460 | -0,0004 | 0,0006 | 0,4740 |
| ROA | | | | 0,2551 | 0,7376 | 0,7290 |
| Returns | | | | -0,1996 | 0,1208 | 0,0980 |
| LogAssets | | | | 0,0288 | 0,0151 | 0,0560 |
| Std.Dev. of ROA | | | | -0,4740 | 1,1949 | 0,6920 |
| MarkettoBook | | | | -0,0009 | 0,0110 | 0,9360 |
| Std.Dev. of Returns | | | | 0,0627 | 0,2747 | 0,8190 |
| | | | | | | |
| Observations | 37 | | | 37 | | |
| R-squared | 0,0955 | | | 0,5532 | | |

# 5 Conclusions

In this paper the question to answer was when a compensation package is considered to become excessive. More and more newspapers in the media in the Netherlands were publishing articles about executive compensation or shareholders who were not satisfied with management and let their voices being heard at the annual general meeting of shareholders. Has this topic just became popular in the media or were shareholders actually done with the firm and their remuneration of the executives they bought shares from? In my opinion, academic research was required to resolve this question.

I examined this question by letting shareholders make their voice heard voting against the remuneration proposal of AEX firms in 2016, 2017, and 2018 as the dependent variable. Data was used from the companies who were present at the AEX for these three years, as well as the CEOs. Important variables to measure were compensation, average compensation, average compensation per industry, and the internal pay ratio. Furthermore, I added different economic variables to the model in order to control for those variables. Finally, I was able to made three hypothesis to answer the main question.

The first hypothesis predicted that the percentage of votes against executive compensation will increase with executive compensation. However, the results showing us a different point of view and rejected this hypothesis by showing no significance. The second hypothesis examined the percentage of shareholders that vote against executive compensation is different on every industry. Again, the test results giving us no significance and we could therefore not accept this hypothesis. The third and final hypothesis states that the percentage of shareholders that vote against executive compensation is positively associated with a larger difference in executive compensation relative to the payment on the average employee. However, the results again concluded that we cannot accept this hypothesis. To conclude, these hypothesis are all giving the same result. Which means that we cannot tell on the hand of say-on-pay votes that executive compensation has become excessive.

A possible explanation could be that shareholders do not really care that much about executive compensation as we think. If a firm has proper results and creates shareholder value, why should you complain or vote against the numeration of executive? Another explanation could be that a lot of investors are shareholders for a short term. If investors have shares of a company for a few months, weeks or days, then probably they would not care or even think about the remuneration of a CEO. Short term profit of company shares is then most likely their goal.

However, further research suggests a bigger dataset with more firms and/or more countries involved. More data could make the sample size more reliable and different countries would make the dataset not to focused on the Netherlands. Another suggesting could be adding more or different variables to the model I have used in this paper.

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