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Employee Stock Ownership Plans in German firms

Do German firms with Employee Stock Ownership Plans perform better?

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PREFACE AND ACKNOWLEDGEMENTS

It was a hard job collecting all the information needed for writing this thesis, but I am really content with the results of this research. I want to thank everyone who supported me during the writing of my thesis and my studies, in particular my parents Joop Niesing and Trudy Niesing. They gave me the opportunity to study and motivated me when I was down. Also my sister, brother-in-law and nephews (Linda Niesing, John de Waal, Koen de Waal and Stein de Waal) were important during this period. They gave me a lot of love and hugs to carry on. And last but not least I want to thank Prof. dr. I. Dittmann for supervising me. He came up with the subject for my thesis.

All information on ESOPs over the last 10 years concerning more than 400 firms is not available in databases, available to the Erasmus University. Should you require the information please contact me.

ABSTRACT

The effect of Employee Stock Ownership Plans on the performance of 415 German firms for the years 2005-2014 will be researched in this thesis. In the end four different models will be used to look at the influence of ESOPs on a firm's performance. A distinction concerning time is also made and the influence thereof on the performance of the firm. Based on all these different models, the results are in most of the cases insignificant. When the results are significant, the firms with ESOPs perform worse.

Keywords:
Employee Stock Ownership, Panel Data Models, Firm Performance, Corporate finance and Governance, CDAX.

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CHAPTER 1 Introduction

There are lots of papers written about Employee Stock Ownership Plans (from now on ESOPs). Most of them are about firms vested in the United States (US). There are just a few papers concerning the influence of ESOPs on the performance of German firms. Their findings are shown in Chapter 2 literature review. One reason for there being so few papers concerning the influence of ESOPs on the performance of German firms may be that databases like Worldscope and Datastream only contain information about ESOPs for US firms. Information about ESOPs in German firms is not incorporated in databases as mentioned above.

The main research question in this paper is: "Do German firms with ESOPs perform better than German firms without ESOPs?"

An ESOP is a scheme that provides employees with a financial share in the business in which they work. ESOPs allow employees to gain shares (or options to shares) in the company in which they work so that the employees benefit financially when the business performs well (John McElvaney, 2006).

Whilst looking at previous research, the expectation would be that firms using ESOPs perform better. It is at least hard to find evidence that ESOPs let firms perform worse. The research that has been done is very old. To find out whether it is still true that firms in Germany perform better with ESOPs than firms that do not make use of ESOPs, the data of German firms during the period of 2005 until 2014 needs to be analyzed.

1.1 Possible explanations for increasing or decreasing performance, because of ESOPs

A possible explanation for why firms with ESOPs perform better than firms without ESOPs may be that employee ownership arrangements can help reduce the principal-agent problem and increase performance (Kruse, 2004). This explanation for the positive effect of ESOPs on the performance may be that, when employees earn a part in a firm, they will work harder to increase the value of the stock. When the value of the stock increases the

employees will get paid more. So with an ESOP, employees are motivated to work harder and so the performance of a firm increases.

It may also be that ESOPs have an insignificant influence on the performance of a firm. One reason for this might be that a firm is very large and has a lot of employees. When only one employee works harder, this does not influence the performance of a firm. When an employee knows this, he does not have the motivation to work harder, in turn not positively influencing the performance of a firm. When there are a lot of employees who start thinking like this, the performance of the firm will not increase. In this case ESOPs do not have a positive effect on the performance of the German firms. This is the so-called free-rider problem (Kruse, 2004). This means that when there are a lot of employees who are working hard, in turn increasing the performance of a firm, one employee can stop working hard, because this does not have an impact on the total performance of the firm. It would not decrease the total performance of that firm. And that one employee can benefit from this, due to the increased value of the stock he owned in the firm (Kruse, 1996). But when more employees starts to free ride, a chain reaction starts and in the end this will decrease the performance of the firm.

This paper will not answer the question *why* do German firms with ESOPs perform better than firms without. This paper will only give a "yes" or "no" answer to the question: "Do German firms with ESOPs perform better than German firms without ESOPs?". This is done for 415 German firms for the period 2005-2014.

Different kind of variables in combination with the ESOP variable will be taken into account whether they influence the performance of the firm. The findings are that ESOPs do have a insignificant influence on the performance of the German firms.

1.2 Structure of the report

The thesis is set up as follows: Chapter 2 is the literature review, it states the findings of past research concerning the influence of ESOPs on the performance of a firm. A distinction is made between the US, Australia and Germany. Chapter 3 describes the methodology and contains the description of how the data is generated and which models are used. What the outcomes of the different models are, is defined is Chapter 4. Results. The conclusion is drawn in Chapter 5.

CHAPTER 2 Literature review

There are lots of papers written about ESOPs. The most important question that arises is the effect of ESOPs on the performance of a firm. Most of them draw the same conclusion; firms which use ESOPs perform better than firms that do not make use of ESOPs. However all used different methods.

2.1 US evidence

Like Katz (2014) and Beatty (1994). Both argue that ESOPs cause a better performance of the firm. The only difference is the measure of performance. Beatty (1994) used 145 ESOP announcements' stock market reaction and studied the tax, employee benefits, capital structure, and corporate effects. One of the outcomes is that ESOPs induces an increase in tax savings. Katz's (2014) definition of a better performance of the firm: more profitability, faster growth, better pay and laying off fewer employees.

Other findings of ESOPs, like the duration of it's success, can be seen as a long-term success but the success is not permanent. So the performance improvement for the firm will last for a long time, but not forever. There will be a diminishing performance growth looking at an infinite time horizon. Park (1995) measured the impact of ESOPs on the firm by using the Tobin's q ratio, the market-to-book value ratio and the Return On Assets (ROA). Based on these ratios they came to the conclusion that the long-term industry-adjusted performance improves after establishing an ESOP. Pugh *et al.* (2000) concluded that the performance is positively affected by establishing an ESOP. What also needs to be mentioned is that they also found no permanent improvement in a company's performance. Their findings are in line with Chang (1990), who also came to the conclusion that ESOPs have no significant influence on the performance of a firm. Again the measurement of performance improvement is different.

All the literature above is about the positive effects of ESOPs on a firm's performance. However Tannenbaum (1978) conducted a survey that looked at profitability and didn't find any significant relationship between employee ownership and profitability. Long (1986), another survey, could also not find a positive relationship between ESOPs and a firm's

performance. Their conclusion is that few respondents could find advantages for their company using ESOPs and the majority of respondents saw no disadvantages. This is not enough to draw a conclusion whether the relation between ESOPs and a firm's performance is positive or negative.

What should be mentioned is that these researches were done a long time ago. So the question arises if these findings are still representative for now and whether the techniques or methodology they used are still reliable.

2.2 Australian evidence

Research into ESOPs is also done in Australia. In the research of Stradwick 1992 it is stated that there are a few major reasons for Australian Employers to implement an ESOP. One of them is the reason to improve organisational competitiveness, productivity and efficiency. He states that it is hard to find quantitative evidence that ESOPs do increase the performance of Australian firms. However, strong anecdotal evidence suggests that there is an improvement in efficiency of the Australian firms (Stradwick, 1992). Craswell *et all*, also looked at the influence of ESOPs on the performance of Australian firms. There is no evidence found of a relationship between performance and their insider ownership or institutional ownership (Craswell, 1997).

2.3 German evidence

Literature especially about the influence of ESOPs on German firms is really scarce and therefor hard to find. Poutsma *et al* (1999) did a literature study and talks about a so-called PEPPER scheme. PEPPER stands for Promotion of Participation by Employed Persons in Profits and Enterprise Results. The PEPPER schemes can be divided in to two main categories:

1) Profit sharing, this means the sharing of profits between providers of capital and providers of labor.

2) Employee share ownership, this provides employee participation in enterprise results in an indirect way.

Those two are reward systems with a greater emphasis on performance-related pay. In 1995, the German government appealed to the social partners (employers and employees of companies) to consider employee share ownership and other related schemes as part of their wage agreements. This is meant to create an environment to intensify employment growth, and to improve employee involvement in enterprise. But despite this appeal the diffusion of these schemes is lacking in Germany. Poutsma *et al* (1999) suggest just like Park (1995); Katz (2014) and Beatty (1994) that ESOPs will lead to a better performance of the firm.

Winter (1999), argues that before 1996 there were less than 10 listed Stock Option Programs (STOPs) for executive compensation in Germany. This number is too low to be able to look at the performance influence of STOPs on firms. Winter (1999) estimated that the number of STOPs would reach 100 in the course of 1999. There is only limited empirical evidence of positive wealth effects due to the introduction of option programs.

CHAPTER 3 Methodology

This Chapter describes how the data of the German firms is collected and generated. How this is done is explained in Chapter 3.1. In Chapter 3.2 are the models evaluated. Thirdly the use of the created panel data is described in Chapter 3.3. The last two paragraphs, ESOP dummy, chapter 3.4 and time dummy chapter 3.5 respectively are telling something about which dummy variables are used and what they mean.

3.1 Data

For making the data, three steps were taken. Firstly the decision needed to be made which firms were to take part in this research. This was done by looking at the German stock market index, the CDAX. This index is a composite index of all stocks traded on the Frankfurt Stock Exchange, that is listed in the General Standard or Prime Standard market segments. Due to the fact that this index contains *all* stocks traded on the Frankfurt Stock Exchange, the data set contains firms from different industries and firms of different size. So the types of businesses vary widely.

Secondly I regress four dependent variables on three independent variables. The four dependent variables used are: return on equity, return on assets, net profit margin and market-to-book ratio. The three independent variables are net income, sales and total return.

The last step is obtaining data by downloading the annual reports for German firms which are in the CDAX on the 27th of October 2015[1]. This was done for all 415 firms over a 10 years period (2005 until 2014). Different kinds of search terms were used to look up in these annual reports to see if those 415 firms make use of ESOPs. Some examples are: ESOP, Employee stock ownership plan, Employee stock and stock ownership. Due of the fact that the research is about German firms, some annual reports were not available in English, but only in German. German search terms used are: Mitarbeiterbeteiligung, Aktienbeteiligungsprogramm, Mitarbeiteraktienprogramm and also Employee stock ownership. The other part is generated through accessing World scope and DataStream also accessed at the 27th of October 2015. For this research, Worldscope is used for obtaining the

[1] The date is mentioned, because the composition of the CDAX changes over time. For example, it can be that one firm is cancelled out of the CDAX and 3 other firms are incorporated in the CDAX.

information of every firm concerning: Return on equity (ROE), Return on assets (ROA), net income, total assets, shareholder's equity, sales, number of employees, market capitalization, total operating expenses and other accrued expenses.
Datastream is used to generate the information of every firm concerning: total return, market-to-book value (M/B-value), minimum price, maximum price and market value. The output of Worldscope and Datastream are in millions, except de M/B-value.

ROE is a performance measure and shows the profitability of a corporation by revealing how much profit a company generates with the money shareholders have invested. The ROE can be calculated as follows:

$$\boldsymbol{ROE = \frac{net\ income}{shareholder's\ equity}}$$

In this research the ROE will be a dependent variable.

ROA is also a performance measure and shows also how profitable a firm is only now it is compared to the total assets. This measure contains info about how efficient management is at using assets to generate earnings. The ROA can be calculated as follows:

$$\boldsymbol{ROA = \frac{net\ income}{total\ assets}}$$

This variable is also a dependent variable in this research.

There are two other dependent variables used, to show if ESOPs do improve the performance of the German firms. One is the net profit margin. The net profit margin measures how much out of every dollar of sales a company actually keeps in earnings.
The net profit margin can be calculated as follows:

$$\boldsymbol{net\ profit\ margin = \frac{net\ income}{revenue}}$$

or

$$\boldsymbol{net\ profit\ margin = \frac{net\ profit}{sales}}$$

And the last dependent variable that is used is the M/B-ratio, this variable measures the market value of a company relative to its accounting value. It compares a company's current market price to its book value. The M/B-ratio is used to determine if a stock is undervalued or overvalued.

$$\frac{\boldsymbol{M}}{\boldsymbol{B}} - \boldsymbol{ratio} = \frac{\boldsymbol{share\ price\ of\ the\ stock}}{\boldsymbol{book\ value\ per\ share}}$$

3.2 Models used

This research is distinctive from all other studies that have been done, because it staked all German firms that are part of the CDAX. Most studies have been done concerning firms vested in the United States (US). Finding information about ESOPs for those firms in the US is not as hard to find, compared to information on ESOPs of German firms who are part of the CDAX. Collecting the information for German firms is done by creating a list comprising of all 415 firms. After selecting the firms, the annual reports of these 415 firms, over a period of 10 years, need to be collected. Due to the fact, as ready mentioned, databases do not contain information about ESOPs in German firms. The final step for generating the data is searching through more than 4150 annual reports for information on ESOPs.
A very large work file is created with all this information. In the end, eight different equations are designed for the four different dependent variables, so in total there are 32 equations generated. There are 4 different models:

1. The adjusted model, this model contains all firms, except the 2.5% lowest extreme values and the 2.5% highest extreme values. This is done by trimming and is explained in Appendix 1 [Trimming].
2. Half ESOP model, this model contains firms which have ESOPs for five years and no ESOPs for the other five years.
3. First five years ESOP model, consist of all firms that had the first five years ESOPs (years 2005-2009) and after these five years a period of five years of no ESOPs (years 2010-2014).
4. Last five years ESOPs model, involve all firms that do not have ESOPs for the first five years (years 2005-2009) and which do have ESOPs for the last five years (2010-2014).

An overview of the firms that are included in the last three models is available in Appendix 2 [overview included firms for Half ESOP model, First five years ESOP model and Last five years ESOP model].

3.3 Panel data

Basic panel data analysis, observe the same relationship of same individuals at 2 or more points in time. When creating a regression with panel data it is important to be aware of what kind of model you are going to choose. There are many models for running a regression with panel data. In this survey three different kinds of models for running a regression with panel data are emphasized.

Firstly there is the *pooled data model*. When running a regression in the pooled data model, it neglects the differences or individualities that there are between firms. A pooled data model assumes that all firms are the same.

Secondly there is the *fixed effects model.* When running a regression in the fixed effects model, it allows for heterogeneity or individuality among firms by allowing them to have their own intercept value. A fixed effects model assumes that there can be differences between firms.

Lastly there is the *random effects model*. When running a regression in the random effects model, it also allows for individuality among firms but instead of firms having their own intercept, firms do have a common mean value for the intercept.

All of these three models have positive and negative effects. The pooled data model is not useful in this research because it is clear that all firms are different. They differ in size, industry, employees et cetera. The last decision to make is the choice between the fixed effects model and the random effects model. This can be done by a Hausman test. The hypothesis tested in the Hausman test is:

H0: The random effects model is appropriate
Ha: The fixed effects model is appropriate

In this research for almost every equation made, the null hypothesis is not rejected. This means that there is no strong significant evidence that the fixed effects model should be used. Because of this outcome the random effects model is used for a lot of equations in this research. All different outcomes can be seen in the appendices 4-7.

3.4 ESOP dummy

To see if having ESOPs is of influence on the performance of the German firms, an ESOP dummy is incorporated. This ESOP dummy has the value 1 when a firm uses ESOPs and the value 0 when a firm does not make use of ESOPs. In chapter 4.1 the results are stated for the different equations made with the ESOP dummy and their meaning. The descriptive statistics of the ESOP dummy are also given in Appendix 3 [Descriptive statistics].

3.5 Time dummy

By including a time dummy it is possible to look at the different effects of time on the independent variable that do affect the dependent variables. Something remarkable might of happened at some point in time, which could have affected the results. By including a time dummy it is possible to show whether there are such important time influences. For the time dummy implementation only equations 10, 20, 30 and 40 are used. In the adjusted model. For the models with the dependent variable Return on equity, Return on assets and Net profit margin the random effects model is used. For the model with the dependent M/B-ratio the fixed effects model is used. This is stated in Appendix 8 [Time dummy output].

4. Results

In this research there are four dependent variables (ROE, ROA, net profit margin and M/B-ratio) and three independent variables (net income, sales and total returns). Appendix 3 [descriptive statistics of the variables used] shows the descriptive statistics of these seven variables in the four different models. What these four different models are, is described in Chapter 3.2 Models used. The descriptive statistic of the ESOP dummy is also shown in that table.

As mentioned in Chapter 3.1 Data, in this research a selection has been made of 4 dependent variables that measure the performance of the German firms. The 3 independent variables are also stated, namely net income, total return and sales. There are 32 equations made to look at the different effects of those 3 different independent variables on the 4 different dependent variables.

The empirical hypothesis tested is as follows:

H0: German firms with ESOPs do perform better
Ha: German firms with ESOPs do not perform better

There are four different models: (1) The adjusted model, (2) The half ESOP model, (3) The first five years ESOP model and (4) The last five years ESOPs model. For testing the hypothesis the P-values of 0.01, 0.05 and 0.10 are used to test if the outcomes are of significant value.

4.1 Adjusted model

When including an ESOP dummy, there are just very little results significant with a P-value of 0.01, 0.05 and 0.10. The outcomes of all equations can be seen in Appendix 4 [Adjusted model output]. In 13 out of the 32 equations the ESOP dummy is from significant influence on the dependent variables. In most of these equations the coefficients have a negative sign. This means that when the ESOP dummy is of significant influence, it will negatively influence the coefficients which determine the performance. The conclusion that can be drawn out of the adjusted model is that German firms which use ESOPs do not perform better.

It is important to look at the adjusted R-squared. The value of the adjusted R-squared tells you how much the independent variables explain the dependent variable. For a lot of equations the adjusted R-squared is very low. So the independent variables do not explain the dependent variable very well. When looking at the adjusted R-squared for the equations 1-8 for the M/B-ratio, equation 5 for ROA and equation 1 for net profit margin, the adjusted R-squared is around 0.50. This means that the independent variables explain almost or more than 50% of the dependent variable.

4.2 Half ESOP model

When looking at model 2, the Half ESOP model, and the significant ESOP dummy values, there are 11 equations that have significant values for the ESOP dummies. In Appendix 5 [Half ESOP model output] the outcomes of all the equations are presented. The conclusion of this model is that it is equal to the conclusion of the Adjusted model, because most of the time the sign of the significant ESOP dummy is negative. This insinuates that the performance of the German firms is influenced negatively when they use ESOPs.
When looking at the adjusted R-squared, this values is only above 0.50 (50%) for equations 3, 7 and 8 when the dependent variable is the M/B-ratio.

4.3 First five years ESOP model

When looking at model 3, the first five years ESOP model, there is only one significant ESOP dummy. The sign of the ESOP dummy is positive. In Appendix 6 [First five years ESOP model output] an overview Is available. Which means that ESOPs do have a significant positive effect on the performance of German firms. However when taking a closer look at the adjusted R-squared in Equation 7 when the performance measure is ROE, the value is very low, 0.10. This means that only 10% of the dependent variable ROE is explained by the included independent variables. The overall influence of the positive sign of the ESOP dummy on the performance measure is very small.

4.4 Last five years ESOP model

The last model, model 4 the last five years ESOP model, do contain ESOP dummies that are from significant influence. The total overview of the outcomes are standing in Appendix 7 [Last five years ESOP model output]. There are 13 equations that do have significant ESOP dummies. In this model most of the time the sign of the ESOP dummy is negative. This leads to the same conclusion as in Chapter 4.1 and 4.2. There is a significant evidence that ESOPs negatively influence the performance of German firms.
In this model there are just a few adjusted Rs-squared around the 0.50, only equation 8 with the ROE as dependent variable, equations 6 and 8 with dependent variable ROA and equation 8 with dependent variable M/B-ratio.

4.5 Time dummy

When including a time dummy in equation 8, 16, 24 and 32, there are less variables significant with a P-value of 0.01, 0.05 and 0.10. The results of the four different models are shown in Appendix 8 [time dummy output]. Only the equation with the M/B-ratio as the dependent variable contains significant ESOP dummies. This is also the model with the highest adjusted R-squared. It has an adjusted R-squared of 0.61, 61% of the dependent variable is explained by the independent variables that are used. This equation contains a positive and a negative slope ESOP dummy. When the slope ESOP dummy is positive, it is negatively influenced by the significant year dummy. And when the slope ESOP dummy is negative, it is positively influenced by the significant year dummy.

CHAPTER 5 Conclusion

The overall conclusion of the above result is that German firms with ESOPs do not perform better than German firms that do not use ESOPs. So in empirical terms, the H0: German firms with ESOPs do perform better is rejected. Including an ESOP dummy, gave the result that when the coefficient is significant, the sign of the coefficient is negative. This means that the firms do not perform better when they make use of ESOPs. Instead of that it can be said that they presumably perform worse.

When looking at the literature review the conclusion of this research is in contradiction with the already mentioned studies of Katz (2014), Chang (1990), Park (1995), Poutsma (1999) and Pugh (2000). They all did their own study and used their own (different methods). But they conclude that, ESOPs, or a form of ESOPs, should have a positive or even an insignificant influence on the performance of a firm.

This paper does not give an answer to the question why or why not German firms with ESOPs perform better. This could be a recommendation for further research. One explanation for why firms perform better with ESOPs and one explanation why firms with ESOPs do not perform better are given. What could also be a recommendation for further research is looking at the different effects of ESOPs on the performance of German firms, by distinguishing them by size. Size can mean the number of employees, but also the market value of the firms.

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APPENDIX 1 [Trimming]

The adjusted model as described in Chapter 3.2 is generated by using the statistical trimming method. The trimming method is applied on the dependent variables: ROE, ROA, M/B-ratio and net profit margin. When using the trimming method, the first step is to order all the values from high to low (or vice versa) and the next step is to choose a percentage you want to delete. In this research 5% of the total data points are deleted. So the 2.5% highest and the 2.5% lowest values are deleted. The following values are deleted out of the different dependent variables:

- ROE:	all values below -122.8209
	all values above 73.32942
- ROA:	all values below -51.80524
	all values above 28.25170
- M/B-ratio:	all values below -0.55
	all values above 7.56
- net profit margin	all values below -2.842286
	all values above 0.543999

APPENDIX 2

[overview included firms for Half ESOP model, First five years ESOP model and Last five years ESOP model]

In this appendix, three different models are shown including firms are incorporated in those models.

- Half ESOP model means that out of the ten years (2005-2014) at least five years contain an ESOP. It does not matter in which order they have ESOPs.

- First five years ESOP model means that these firms have ESOPs for the first five years 2005-2009 and they do not have ESOPs for the last five years 2010-2014

- Last five years ESOP model means that these firms have no ESOPs for the first five years 2005-2009 and they do have ESOPs for the last five years 2010-2014

Half ESOP model	First five years ESOP model	Last five years ESOP model
Amadeus Fire AG	Amadeus Fire AG	Brenntag AG
Baywa Registered AG	Baywa Registered AG	Fair Value Reit AG
Brenntag AG	Euromicron Communication & Control Techn	Francotyp-Postalia Holding
Euromicron Communication & Control Techn	Heidelberger Druckmaschinen	GK Software AG
Fair Value Reit AG	Technotrans AG	Indus Holding AG
Francotyp-Postalia Holding	Turbon AG	KWS Saat AG
GK Software AG	Value Management K Agency	Tom Tailor Holding AG
Heidelberger Druckmaschinen	Washtec AG	
Heliocentris Energy Solutions AG	Your Family Entertainment AG	
Hypoport Finance AG		
Indus Holding AG		
KWS Saat AG		
Odeon Film AG		
Praktiker AG		
SKW Stahl-Metallurgie Holding AG		
Technotrans AG		
Tom Tailor Holding AG		
Turbon AG		
Value Management K Agency		
Vita 34 AG		
Washtec AG		
Your Family Entertainment AG		

APPENDIX 3 [descriptive statistics of the variables used]

	Adjusted model	Half ESOP	First five years ESOP	Last five years ESOP
ROE	mean: 6,347390 median: 9,573473 maximum: 73,28520 minimum: -121,8182 Std. Dev.: 23,25795 observations: 3360	mean: -0,32168 median: 7,516289 maximum: 148,6486 minimum: -203,0275 Std. Dev.: 37,81561 observations: 213	mean: 6,351477 median: 8,773867 maximum: 40,22331 minimum: -88,41969 Std. Dev.: 18,88113 observations: 90	mean: 6,191518 median: 10,98103 maximum: 148,6486 minimum: -203,0275 Std. Dev.: 40,31479 observations: 67
ROA	mean: 3,183917 median: 4,622210 maximum: 28,24203 minimum: -51,16896 Std. Dev.: 10,737 observations: 3293	mean: 0,813324 median: 4,590380 maximum: 27,48195 minimum: -116,6667 Std. Dev.: 17,53012 observations: 208	mean: 4,891198 median: 5,396425 maximum: 27,48195 minimum: -54,63210 Std. Dev.: 10,47956 observations: 90	mean: 2,925980 median: 4,867420 maximum: 14,51562 minimum: -116,6667 Std. Dev.: 15,96234 observations: 63
net profit margin	mean: -0,005001 median: 0,038971 maximum: 0,536284 minimum: -2,755648 Std. Dev.: 0,278769 observations: 3323	mean: -0,60003 median: 0,028624 maximum: 0,599075 minimum: -5,711568 Std. Dev.: 0,512746 observations: 212	mean: 0,011885 median: 0,038807 maximum: 0,599075 minimum: -2,291457 Std. Dev.: 0,322790 observations: 90	mean: 0,018929 median: 0,033113 maximum: 0,364092 minimum: -0,555556 Std. Dev.: 0,125125 observations: 66
m/b-ratio	mean: 1,722189 median: 1,38 maximum: 7,52 minimum: -0,53 Std. Dev.: 1,370402 observations: 3427	mean: 1,647626 median: 1,335 maximum: 7,44 minimum: 0,01 Std. Dev.: 1,193914 observations: 198	mean: 1,603000 median: 1,24 maximum: 7,44 minimum: 0,34 Std. Dev.: 1,253301 observations: 90	mean: 1,921852 median: 1,86 maximum: 5,22 minimum: 0,43 Std. Dev.: 0,949479 observations: 54
net income	mean: 194,8809 median: 7,047 maximum: 21717 minimum: -5255 Std. Dev.: 932,9371 observations: 3557	mean: 10,20368 median: 3,1215 maximum: 339,3 minimum: -555,633 Std. Dev.: 74,98791 observations: 214	mean: 6,092982 median: 4,3745 maximum: 262,9930 minimum: -248,7070 Std. Dev.: 62,33953 observations: 90	mean: 43,16712 median: 4,12 maximum: 339,3 minimum: -64 Std. Dev.: 80,68182 observations: 67
total return	mean: 559,1221 median: 89,92 maximum: 16123,09 minimum: 0,02 Std. Dev.: 1461,817 observations: 3664	mean: 226,3692 median: 77,49 maximum: 2795,31 minimum: 0,06 Std. Dev.: 437,85 observations: 198	mean: 220,9684 median: 75,735 maximum: 1469,75 minimum: 1,95 Std. Dev.: 367,6803 observations: 90	mean: 404,6069 median: 155,2750 maximum: 2795,31 minimum: 4,58 Std. Dev.: 649,6482 observations: 54

CONTINUATION OF APPENDIX 3 [descriptive statistics of the variables used]

	Adjusted model	Half ESOP	First five years ESOP	Last five years ESOP
sales	mean: 4606,841 median: 216,8895 maximum: 202458 minimum: -0,274924 Std. Dev.: 15956,15 observations: 3560	mean: 1198,093 median: 129,929 maximum: 15957,62 minimum: 0 Std. Dev.: 2649,604 observations: 214	mean: 1497,606 median: 129,929 maximum: 15957,62 minimum: 1,514 Std. Dev.: 3219,705 observations: 90	mean: 1342,756 median: 300,2140 maximum: 10015,6 minimum: 0 Std. Dev.: 2644,776 observations: 67
ESOP dummy	mean: 0,470571 median: 0 maximum: 1 minimum: 0 Std. Dev.: 0,499205 observations: 3466	mean: 0,533981 median: 1 maximum: 1 minimum: 0 Std. Dev.: 0,500059 observations: 206	mean: 0,5 median: 0,5 maximum: 1 minimum: 0 Std. Dev.: 0,502801 observations: 90	mean: 0,593220 median: 1 maximum: 1 minimum: 0 Std. Dev.: 0,495450 observations: 59

APPENDIX 4 [adjusted model output]

In this appendix the coefficients for all different equations are given. Coefficients with one star (*) are significant with a critical value of 0.01 and 0.05, coefficients with two stars (**) are significant with a critical value of 0.1. In the rows “firm-random effect” and “firm-fixed effect” it is stated which model is used.

ROE	Equation 1	Equation 2	Equation 3	Equation 4	Equation 5	Equation 6	Equation 7	Equation 8
esop dummy	-1,752514*	-2,44679**	-1,485765	-2,095058	-1,78479*	-2,333880**	-1,508684	-1,51811
Netincome		0,002871**			0,002297**	0,003672**		0,003217**
netincome*esopdum		0,002598**			0,002323**	0,002283**		0,002055*
total return			4,173368**		0,001412**		0,002308**	0,001852**
totreturn*esopdum			0,0000682		0,000204		0,00052	0,0000184
Sales				0,0000623		-0,000121*	-0,0000286	-0,000173**
sales*esopdum				0,0000491		0,00000404	0,0000225	-0,000000105
Constant	6,115831**	5,550424**	4,565570**	5,845635**	4,522033	5,927041**	4,599111**	4,847126**
firm-random effect	yes	yes	yes	yes	yes	yes	yes	yes
firm-fixed effect	no	no	no	no	no	no	no	no
adjusted R^2	0,000612	0,024352	0,013054	0,001342	0,028046	0,025378	0,012504	0,030843

CONTINUATION OF APPENDIX 4 [adjusted model output]

ROA	Equation 1	Equation 2	Equation 3	Equation 4	Equation 5	Equation 6	Equation 7	Equation 8
esop dummy	0,048488	-0,676064	-0,45581	-0,607733	0,139713	-0,690627	-0,450526	-0,474592
Netincome		0,001003**			0,000828**	0,001372**		0,00110**
netincome*esopdum		0,000638*			0,000676	0,000342		0,000358
total return			0,001038**		0,000738**		0,001219**	0,001041**
totreturn*esopdum			0,0000578		-0,000015		-0,0000951	-0,00021
Sales				0,0000115		-0,0000568*	-0,000038	-0,0000861**
sales*esopdum				0,000014		0,0000148	0,0000151	0,0000175
Constant	3,123055**	2,583959**	2,205675**	2,726787**	2,339903**	2,770605**	2,274948**	2,376103**
firm-random effect	no	yes	yes	yes	no	yes	yes	yes
firm-fixed effect	yes	no	no	no	yes	no	no	no
adjusted R^2	0,475325	0,012163	0,009997	-0,000241	0,482987	0,012783	0,010027	0,018562

MB	Equation 1	Equation 2	Equation 3	Equation 4	Equation 5	Equation 6	Equation 7	Equation 8
esop dummy	-0,144696**	-0,159086**	-0,110270*	-0,171353**	-0,116606*	-0,174915**	-0,125129**	-0,124628**
Netincome		0,0000193			-0,0000813**	0,0000705*		-0,00000331
netincome*esopdum		0,0000521			0,0000104**	-0,000013		0,0000102
total return			0,000268**		0,000304**		0,000331**	0,00331**
totreturn*esopdum			-0,0000297		-0,0000716**		-0,0000947**	-0,0000963**
Sales				-0,00000553		-0,00000969*	-0,0000195**	-0,0000192**
sales*esopdum				0,0000024		0,00000335	0,00000433	0,00000404
Constant	1,934213**	1,945310**	1,759907**	1,982689**	1,772328**	1,988893**	1,848256**	1,847366**
firm-random effect	no	no	no	no	no	no	no	no
firm-fixed effect	yes	yes	yes	yes	yes	yes	yes	yes
adjusted R^2	0,58386	0,577576	0,598138	0,577557	0,592397	0,577874	0,594713	0,594163

CONTINUATION OF APPENDIX 4 [adjusted model output]

Netprofitmargin	Equation 1	Equation 2	Equation 3	Equation 4	Equation 5	Equation 6	Equation 7	Equation 8
esop dummy	-0,029213**	-0,044097**	-0,042779**	-0,045308**	-0,043950**	-0,046390**	-0,014859**	-0,04485**
Netincome		0,0000138**			0,0000097	0,0000184**		0,0000152*
netincome*esopdum		0,0000197**			0,0000179*	0,0000125		0,0000114
total return			0,0000133**		0,0000107*		0,0000148**	0,0000124*
totreturn*esopdum			0,00000697		0,0000024		0,00000348	0,000000575
Sales				0,000000555		-0,000000394	-5,45E-08	-0,000000755
sales*esopdum				0,000000930*		0,000000649	0,00000071	0,000000559
Constant	0,008921	-0,01202	-0,014185	-0,012018	-0,014741	-0,011141	-0,014859	-0,013228
firm-random effect	no	yes	yes	yes	yes	yes	yes	yes
firm-fixed effect	yes	no	no	no	no	no	no	no
adjusted R^2	0,543501	0,01021	0,007332	0,004455	0,011007	0,009807	0,007097	0,01064

APPENDIX 5 [Half ESOP model output]

In this appendix the coefficients for all the different equations are given. Coefficients with one star (*) are significant with a critical value of 0.01 and 0.05, coefficients with two stars (**) are significant with a critical value of 0.1. In the rows “firm-random effect” and “firm-fixed effect” it is stated which model is used.

ROE	Equation 1	Equation 2	Equation 3	Equation 4	Equation 5	Equation 6	Equation 7	Equation 8
esop dummy	6,41301	1,81676	11,78887**	3,569379	2,508418	0,974904	10,10258**	2,975186
netincome		0,344462**			0,347066**	0,349632**		0,339321**
netincome*esopdum		-0,247959**			-0,251930**	-0,243317**		-0,232756**
total return			0,027644**		0,001512		0,051506**	0,014825
totreturn*esopdum			-0,018670*		0,003078		-0,041286**	-0,007673
sales				0,0000279		-0,001758	-0,003757**	-0,002786*
sales*esopdum				0,00258		0,00054	-0,006293**	0,001503
constant	-4,62314	-2,581988	-12,10923	-5,418554	-4,382212	-0,456913	-13,94675**	-4,10451
firm-random effect	yes	yes	yes	yes	yes	yes	yes	yes
firm-fixed effect	no	no	no	no	no	no	no	no
adjusted R^2	0,008187	0,35311	0,034924	0,013567	0,378155	0,352686	0,076619	0,3804

CONTINUATION OF APPENDIX 5 [Half ESOP model output]

ROA	Equation 1	Equation 2	Equation 3	Equation 4	Equation 5	Equation 6	Equation 7	Equation 8
esop dummy	0,116336	-1,074246	0,765982	-0,75597	-0,905819	-1,15239	0,299254	-0,739173
netincome		0,059811**			0,057183**	0,061980**		0,055333**
netincome*esopdum		-0,023357			-0,020662	-0,021313		-0,016194
total return			0,007979*		0,003462		0,014538**	0,008391
totreturn*esopdum			-0,003601		-0,000727		-0,009428**	-0,004454
sales				0,000364		-0,000577	-0,00727	-0,001097
sales*esopdum				0,000834		-0,0000478	0,001716**	0,000493
constant	1,020732	1,25528	-0,695071	0,375338	0,387203	2,013863	-1,651358	0,64451
firm-random effect	yes	yes	yes	yes	yes	yes	yes	yes
firm-fixed effect	no	no	no	no	no	no	no	no
adjusted R^2	-0,004961	0,097996	0,002145	-0,003054	0,092136	0,092605	0,020335	0,092589

MB	Equation 1	Equation 2	Equation 3	Equation 4	Equation 5	Equation 6	Equation 7	Equation 8
esop dummy	-0,028579	-0,097732	0,127454	-0,059781	0,084872	-0,086334	0,132413	0,128394
netincome		0,002340*			0,000905	0,002430*		0,000286
netincome*esopdum		0,000265			0,000812	0,000539		0,001
total return			0,002568**		0,00219**		0,003949**	0,00391**
totreturn*esopdum			-0,000951**		-0,000853**		-0,001980**	-0,001979**
sales				0,0000237		-0,0000169	-0,000277**	-0,000294**
sales*esopdum				0,0000286		-0,0000207	0,000184**	0,000126**
constant	1,706930**	1,707487**	1,1277324**	1,671634**	1,258015**	1,734232**	1,144433**	1,173245**
firm-random effect	yes	yes	no	yes	yes	yes	no	no
firm-fixed effect	no	no	yes	no	no	no	yes	yes
adjusted R^2	-0,004858	0,017732	0,639132	-0,012609	0,182525	0,008089	0,679437	0,676893

CONTINUATION OF APPENDIX 5 [Half ESOP model output]

netprofitmargin	Equation 1	Equation 2	Equation 3	Equation 4	Equation 5	Equation 6	Equation 7	Equation 8
esop dummy	0,060082	0,051852	0,07713	0,063463	0,067774	0,060447	0,073872	0,068766
netincome		0,000371			0,000252	0,000366		0,000255
netincome*esopdum		-0,000106			0,0000971	-0,000011		0,000128
total return			0,000124		0,000103		0,00014	0,000112
totreturn*esopdum			-0,000084		-0,0000778		-0,000103	-0,0000846
sales				0,0000103		0,00000561	-0,00000098	-0,00000331
sales*esopdum				-0,00000292		-0,00000947	0,00000737	-0,000000413
constant	-0,095921	-0,094639	-0,12297	-0,108649	-0,119457	-0,100724	-0,127227	-0,117152
firm-random effect	yes	yes	yes	yes	yes	yes	yes	yes
firm-fixed effect	no	no	no	no	no	no	no	no
adjusted R^2	0,000464	-0,006998	-0,008195	-0,00859	-0,017036	-0,016369	-0,018583	-0,027907

APPENDIX 6 [First 5 years ESOP model output]

In this appendix the coefficients for all different equations are given. Coefficients with one star (*) are significant with a critical value of 0.01 and 0.05, coefficients with two stars (**) are significant with a critical value of 0.1. In the rows “firm-random effect” and “firm-fixed effect” it is stated which model is used.

ROE	Equation 1	Equation 2	Equation 3	Equation 4	Equation 5	Equation 6	Equation 7	Equation 8
esop dummy	2,915246	0,508638	5,031063	2,239496	0,842178	0,125285	6,971538*	2,012654
netincome		0,170102**			0,164108**	0,193946**		0,174228**
netincome*esopdum		-0,055628			-0,055997	-0,07802		-0,052163
total return			0,031794**		0,006544		0,041080**	0,025597**
totreturn*esopdum			0,005846		0,002503		-0,027588	0,010277
sales				0,000425		-0,001122	-0,003532**	-0,003139**
sales*esopdum				0,000654		-0,000137	0,00254	-0,001669
constant	4,893854	5,498549	-3,692084	4,171495	3,710196	7,489807**	-0,196362	3,936605
firm-random effect	yes	yes	no	yes	yes	yes	yes	yes
firm-fixed effect	No	no	yes	no	no	no	no	no
adjusted R^2	-0,002703	0,249775	0,336695	-0,020884	0,236707	0,244383	0,101065	0,300317

CONTINUATION OF APPENDIX 6 [First 5 years ESOP model output]

ROA	Equation 1	Equation 2	Equation 3	Equation 4	Equation 5	Equation 6	Equation 7	Equation 8
esop dummy	0,726515	0,099804	1,973772	0,611172	1,0034	0,101149	2,749475	1,647842
netincome		0,038671			0,02582	0,046986*		0,031414
netincome*esopdum		-0,007591			0,003621	-0,013633		0,00395
total return			0,007577*		0,006242		0,020825**	0,017192**
totreturn*esopdum			-0,002929		-0,001259		-0,008225	0,000426
sales				-0,0000604		-0,000506	-0,002003**	-0,001832**
sales*esopdum				0,0000702		-0,000209	0,000482	-0,000553
constant	4,527940*	4,665413*	2,4817	4,63064	2,934106	5,55458**	2,308555	3,111847
firm-random effect	Yes	yes	yes	yes	yes	yes	yes	yes
firm-fixed effect	No	no	no	no	no	no	no	no
adjusted R^2	-0,009549	0,023214	0,006515	-0,032737	0,018341	0,009916	0,073238	0,07489

MB	Equation 1	Equation 2	Equation 3	Equation 4	Equation 5	Equation 6	Equation 7	Equation 8
esop dummy	-0,196667	-0,241663	0,018474	-0,237423	-0,009965	-0,284001	0,219591	0,061759
netincome		0,004982*			0,000782	0,005759*		0,003748
netincome*esopdum		-0,003248			0,00234	-0,004071		-0,002818
total return			0,002695**		0,002796**		0,004735**	0,005005**
totreturn*esopdum			0,000287		0,000401		-0,001327	0,001153
sales				0,00000393		-0,0000561	-0,000426**	-0,000279**
sales*esopdum				0,0000327		0,0000136	0,0000806	-0,0000818
constant	1,701333**	1,719043**	0,973646**	1,694651**	0,948959**	1,81712**	1,146067**	0,836743**
firm-random effect	Yes	yes	yes	yes	yes	yes	yes	no
firm-fixed effect	Nog	no	no	no	no	no	no	yes
adjusted R^2	0,000006	0,023272	0,26742	-0,020995	0,274748	0,005561	0,475592	0,743051

CONTINUATION OF APPENDIX 6 [First 5 years ESOP model output]

netprofitmargin	Equation 1	Equation 2	Equation 3	Equation 4	Equation 5	Equation 6	Equation 7	Equation 8
esop dummy	0,024192	0,015956	0,033664	25878	0,019789	0,018794	0,037727	0,020287
netincome		0,00052			0,00445	0,00056		0,000639
netincome*esopdum		-0,000114			-0,0000476	-0,00011		-0,00017
total return			0,0000663		0,0000378		0,000134	-0,0000877
totreturn*esopdum			-0,0000173		0,00000157		-0,000023	0,000139
sales				0,000000534		-0,00000364	-0,0000101	-0,0000104
sales*esopdum				-0,00000113		-0,00000398	-0,000000416	-0,0000194
constant	-0,000211	0,001638	-0,018113	-0,001119	-0,008842	0,007976	-0,019138	-0,00398
firm-random effect	yes	yes	yes	yes	yes	yes	yes	yes
firm-fixed effect	no	no	no	no	no	no	no	no
adjusted R^2	-0,009668	-0,024552	-0,030614	-33075	-0,048221	-0,048108	-0,053061	-0,069549

APPENDIX 7 [Last 5 years ESOP model output]

In this appendix the coefficients for all different equations are given. Coefficients with one star (*) are significant with a critical value of 0.01 and 0.05, coefficients with two stars (**) are significant with a critical value of 0.1. In the rows “firm-random effect” and “firm-fixed effect” it is stated which model is used.

ROE	Equation 1	Equation 2	Equation 3	Equation 4	Equation 5	Equation 6	Equation 7	Equation 8
esop dummy	8,676228	12,23812**	17,58539**	8,336658	18,90113**	13,12176**	22,01142**	2,169017
netincome		0,510714**			1,189279**	0,528470**	0,020525	2,341072**
netincome*esopdum		-0,472105**			-1,152435**	-0,382938	-0,019549	-2,085981**
total return			0,025068*		-20679		0,018299	-0,028385
totreturn*esopdum			-0,022199*		0,023213		-0,015186	0,032974*
Sales				0,001712		0,001275		-0,089423**
sales*esopdum				-0,000773		-0,004925		0,069819**
constant	-0,23987	-6,137989	-10,4596	-1,527941	-13,80513**	-7,166695	-16,63102*	17,1094
firm-random effect	yes	yes	yes	yes	yes	yes	yes	no
firm-fixed effect	no	no	no	no	no	no	no	yes
adjusted R^2	0,028168	0,119092	0,070779	0,0029	0,32851	0,121226	0,071951	0,413506

CONTINUATION OF APPENDIX 7 [Last 5 years ESOP model output]

ROA	Equation 1	Equation 2	Equation 3	Equation 4	Equation 5	Equation 6	Equation 7	Equation 8
esop dummy	1,082345	1,066899	1,723628	0,392176	1,512254	1,403353	1,780131	-2,36139
netincome		0,109394**			0,158967**	0,197471**		0,441572**
netincome*esopdum		-0,082783*			-0,126150*	-0,054708		-0,352415**
total return			0,004438		-0,002399		0,004632*	-0,004443
totreturn*esopdum			-0,0028		0,00277		-0,002754	0,005712
Sales				-0,000572		-0,009697**	0,001003	-0,022918**
sales*esopdum				0,000788		-0,000859	-0,000763	0,016260**
constant	4,019254**	2,542742**	2,660220*	4,336019**	1,761653	11,19858**	2,0827992	11,21104**
firm-random effect	yes	no	yes	yes	no	no	yes	no
firm-fixed effect	no	yes	no	no	yes	yes	no	yes
adjusted R^2	0,001444	0,318927	0,018405	-0,005411	0,324258	0,44095	0,074134	0,513848

MB	Equation 1	Equation 2	Equation 3	Equation 4	Equation 5	Equation 6	Equation 7	Equation 8
esop dummy	-0,001708	-0,011012	-0,096519	-0,0136	-0,119455	-0,119615	-0,018699	-0,365458
netincome		0,010751			0,01933	0,019154		0,038664*
netincome*esopdum		-0,006441			-0,016417	-0,012026		-0,032747
total return			0,001166*		0,000982		0,001462*	0,001324
totreturn*esopdum			-0,000402		-0,0000318		-0,000538	-0,0000612
Sales				0,00022		-0,00057	0,000315	-0,00146
sales*esopdum				-0,0000974		0,000435	-0,0002	0,001057
constant	1,971422**	1,719926**	1,731324**	1,771137**	1,496727**	1,891071**	1,445222**	1,851325**
firm-random effect	yes	yes	yes	yes	yes	yes	yes	no
firm-fixed effect	no	no	no	no	no	no	no	yes
adjusted R^2	-0,01923	0,003992	0,063858	-0,031529	0,121182	-0,03026	0,076945	0,51476

CONTINUATION OF APPENDIX 7 [Last 5 years ESOP model output]

netprofitmargin	Equation 1	Equation 2	Equation 3	Equation 4	Equation 5	Equation 6	Equation 7	Equation 8
esop dummy	0,035437	0,066897**	0,054444	0,040093	0,063994	0,066338**	0,070549	-0,003228
netincome		0,002811**			0,003566**	0,002809**		0,009118**
netincome*esopdum		-0,002794**			-0,003567**	-0,002077*		-0,007721**
total return			0,0000999		-0,0000392		0,0000826	-0,001
totreturn*esopdum			-0,0000801		0,000059		-0,000063	0,000121
sales				0,00000436		0,000000577	0,0000494	-0,000388**
sales*esopdum				-0,00000566		-0,000025	-0,0000505	0,000275
constant	0,006535	-0,025991	-0,02115	0,004123	-0,030664	-0,026322	-0,05274	0,1163
firm-random effect	yes	yes	yes	yes	yes	yes	yes	no
firm-fixed effect	no	no	no	no	no	no	no	yes
adjusted R^2	0,010927	0,118069	0,023975	-0,024011	0,070798	0,109735	-0,008286	0,072323

APPENDIX 8 [Time dummy output]

In this appendix the coefficients for all different equations are given. Coefficients with one star (*) are significant with a critical value of 0.01 and 0.05, coefficients with two stars (**) are significant with a critical value of 0.1. In the rows “firm-random effect” and “firm-fixed effect” it is stated which model is used.

time dummy	ROE	ROA	MB	Netprofitmargin
esop dummy	-1,425421	-0,386919	-0,116935*	-0,043905**
netincome	0,003418*	0,000869	-0,000156*	0,0000115
netincome*esopdum	0,000768	0,000244	-0,000042	0,00000884
netincome*year1dum	-0,000653	-0,000905	0,000121	-0,00000525
netincome*year2dum	-0,003466	-0,001301	0,000117	-0,00000925
netincome*year3dum	0,000578	0,000853	0,00000351	0,0000112
netincome*year4dum	0,003151	0,001143	0,000233*	0,0000412
netincome*year5dum	0,001402	0,00000537	0,00022*	0,00000517
netincome*year6dum	0,002537	0,001962	0,000246	0,0000307
netincome*year7dum	-0,000626	-0,00000157	0,000159	-0,00000027
netincome*year8dum	-0,001322	0,000216	0,000113	-0,00000121
netincome*year9dum	0,004568*	0,000413	-0,000039	0,00000604
sales	-0,000113	-0,0000599	0,00000442	-0,000000330
sales*esopdum	-0,0000504	-0,000000282	0,00000804*	0,000000250
sales*year1dum	0,00000208	0,00000857	-0,0000143*	0,000000271
sales*year2dum	0,000113	0,0000136	-0,000012	0,000000091
sales*year3dum	-0,0000422	-0,0000678	-0,00000158	-0,000000638
sales*year4dum	-0,0000706	-0,0000263	-0,0000153**	-0,000000319
sales*year5dum	-0,0000118	-0,00000467	-0,0000112*	0,000000150
sales*year6dum	-0,0000955	-0,0000903	-0,0000135	-0,000001280
sales*year7dum	0,0000246	-0,000000626	-0,0000102	0,000000108
sales*year8dum	0,0000332	-0,000018	-0,00000749	0,000000062
sales*year9dum	-0,000199	-0,0000127	-0,000000392	-0,000000150
total return	0,001309*	0,001094**	0,000372**	0,0000129
totreturn*esopdum	-0,0000479	-0,000449	-0,000153**	-0,000000274
totreturn*year1dum	0,004056**	0,002199**	0,000546**	0,0000207
totreturn*year2dum	0,004555**	0,002171**	0,000407**	0,0000213*
totreturn*year3dum	0,002124**	0,000849**	0,000282**	0,00000649
totreturn*year4dum	0,002933**	0,001523**	0,000199**	0,00000552
totreturn*year5dum	0,000465	0,000459	0,000154**	0,00000481
totreturn*year6dum	0,000895	0,000423	0,0000985**	0,00000315
totreturn*year7dum	0,00142	0,000797*	0,0000503	0,00000824
totreturn*year8dum	0,000889	0,000282	0,0000375	0,00000198
totreturn*year9dum	-0,000307	-0,0000207	0,0000361	-0,00000108
constant	4,308352**	1,995101**	1,665891**	-0,017911
firm-random effect	yes	yes	no	yes
firm-fixed effect	no	no	yes	no
adjusted R^2	0,037887	0,024351	0,612113	0,005367