

## **The Causes and Effects of Earnings Management on Stock Prices in the Operating Companies an Empirical Study in the Dutch and German Listed Companies**

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### **Abstract**

This study uses a sample of Dutch and German listed companies to compare performance of academic discretionary accruals estimation models. The actual accounting framework provides a wide scope for managers to influence data in financial reporting. Corporate reporting strategy, the manner in which managers use their discretionary accounting, has a significant effect on the company's financial reporting. The authors contribute to the literature through improvement to these models to achieve better results of detecting earnings management as well as to present evidence that is particular to the Dutch and German setting. For this, we follow the methodology of Dechow, Sloan, and Sweeney (1995) and Chan et al. (2006) and test which model can detect Dutch and German firm's earnings management better by applying those models to the artificially manipulated earnings after adding some amount to the reported earnings. This study found that earnings management was managed relatively more highly in Germany than in the Netherlands. The relationship between earnings management, stock returns, and corporate governance has been tested. Our results suggested that the strong or weak impact of corporate governance in these two countries varied. The multi-sectoral Jones model has a modest illustrative capacity. Finally, the results show that maximum discretionary accruals involve a large number of estimated errors which have foreseeable effect on income, stock returns and future cash flows. The decrease in level of earnings management indicates that the measurement error has been largely eliminated in the estimated performance -related accruals.

**Keywords:** Stock returns, reported earnings, accruals, cash flows, investors, corporate governance

### **Introduction**

Most of the previous studies on earnings management have fixated on why the operating companies manage earnings. Many motives have been acknowledged that include; income smoothing (Yoon and Miller, 2002b), ownership control (DeAngelo, 1988), equity offerings (Rangan, 1998; Teoh et al., 1998; Yoon and Miller, 2002a) and political costs (Jones, 1991). Healy and Wahlen (1999) define: "Earnings are managed when executives use financial reporting provisions and transactional structuring to change financial reports to misguide certain stakeholders about the fundamental economic execution of the company or to effect contract results based on reported accounting figures" Siregar and Utama (2008) note that the difference between two conflicting perceptions about earnings management practices that occur by companies should be determined. They are: efficient and opportunistic earnings

management. Efficient earnings management refers to improving the value of profit information by transferring company information to external entities. Therefore, the main driver of earnings management is to demonstrate how users of financial statements and accounting information can be affected to strike a balance between return and risk level, to ensure that the company remains viable in the competitive market. While, with another perception, opportunistic earnings management, the company manages earnings to increase self-interest to achieve more profits. This management motive may lead to an uneven allocation of resources and mislead investors and others with an interest in the outcome of the operation. (Scott, 2015). Accordingly, based on the arguments provided by the two contradictory perceptions, earnings management could be either efficient performance to improve the specific information value of earnings to the external bodies or opportunistic conduct to increase self-interest of managers. Several studies have been showed to distinguish between the two. For example, Collins and Reitenga (2003), they found that managers opportunistically manage earnings relative to the award date when compensated with stock options. Given the intensification of interest in accounting earnings, managers have a motive to be antagonistic in using accounting rules so as not to disappoint investors and analysts. Fiscal Agency Financial Report (2012) refers to various scandals related to the manipulation of managers with high-profile companies that have had too high earnings over long periods, including companies in the Netherlands and Germany. Accordingly, much attention has been paid to the reported earnings quality of the company, which reflects the operational preliminaries.

In the determining of stock prices, there may be temporary exceptions to deviation from the correct prices value if the market settles the reported income in spite of the quality of the company's profits. In other words, measuring profit quality may be a prognostic power for future activities in stock prices (Chan et al. 2006). Moreover, a recent study conducted by Scott (2015), he shows that the earnings management has many advantages; since it improves the information value of earnings, reduces the estimation of risk and also have a positive impact on stock prices.

Finally, by fixing specially on the effect of governance appearances on earnings management inducements, corporate governance codes around the world emphasize the role of governance in reducing opportunistic manipulation of earnings and ensuring that profit figures are real information about the company's operations (Liu and Lu 2007). To understand the causes and

effects of earnings management on stock prices, we study the relationship among earnings management as dependent variable, expected stock returns, and corporate governance as independent variables. We find that the relationship exists between the level of earnings management and expected stock returns, and the discretionary accruals- relation depends on reported earnings and corporate governance.

This paper intends to determine the causes and effects of earnings management on stock prices through stock returns. Moreover, we investigate the effect of corporate governance as an independent variable in reducing opportunistic manipulation of earnings.

In the determining of corporate governance with regard to earnings management and stock returns, this study find that the relationship is somewhat different in these two countries. It lies primarily in the strength of corporate governance. Thus, corporate governance and accounting systems seem to have a considerable impact on earnings management according

to empirical literature. Other factors also play a role, such as size of firms and institutional advantage (Wali, 2017).

The central point is the use of accruals measures. For the reporting period, net profit is a key index of the overall capacity of the company. In addition, to identify the most important indicators of the causes and effects on the practice of earnings management using a sample of 777 and 1477 company-years for Dutch and German listed companies respectively during the year 2004-2014, including variables which are value relevant based on previous studies.

This study takes part to current research in a number of ways: it improves a model for estimated accruals, which takes the relationship between several variables more desirable than previous models. It suggests that the modified Jones model has moderate explanatory power. Moreover, the paper extends the literature on earnings management to a European setting, includes the examinations whether earnings management through accruals accounting effects the stock returns, and the influence of corporate governance in determining opportunistic earnings manipulation.

The remainder of the paper is structured as follows: Section 2 presents the literature review on the two arguable perceptions about earnings management with a summary overview on the evidence and test hypotheses related to relationships between earnings management, stock return, and corporate governance. Section 3 Sets up and describes the models of discretionary accruals and methodology used in the study, further this section formulated the hypotheses. Section 4 demonstrates and analyzes the result that obtained from the models empirically. Section 5 concludes.

## **Literature Review and Hypotheses Development**

### Causes of earnings management

Earnings management is efficient to value relevant information.

Prior studies classify earnings management into two parts: actual (real) earnings management and accruals management. They indicate that managers are much more prepared to involve in actual earnings management, for example by influencing on operating cash flows, than accruals management during alterations by management in ratings and accounting plans. Accordingly, seems discrepant with the higher cost of actual earnings management. Other study finds that strength of governance decreases the certain correlation between discretionary accruals and audit fees, therefore, suggesting that earnings exercised to convey incremental information content. (Dichev et al. 2012).

Other example of study that examine the relevancy of earnings value based on US GAAP, IAS and German GAAP. The study finds that IAS earnings are more value relevant than those based on German GAAP. The discrepancy in the results of these two studies may be found it in that Bartov et al. eliminate the variables that do not meet at least one of the sample-criteria. However, these are comprising by other studies such as Sloan (1996) and Chan et al. (2006).

Earnings management is opportunistic

To understand how to detect earnings management, one needs to make comparison between accruals-models to find out for the models that suitable in the context of earnings management. Therefore, only accruals management can be addressed and any actual (real) earnings management is excluded from the analysis (Ball and Shavikumer, 2008).

Ball et al. (2003) indicate that the institutional of the country plays an essential role in reducing the self-interest of earnings management opportunistically and improving the quality of financial reporting. While, there is another opinion suggests that even generalization firms, such as Hong Kong, Singapore and Malaysia, report profits that do not show an improvement in country public law. Another study conducted by Larcker and Richardson (2014), when they studied the connection between earnings and a self-employed auditor, they found that insufficiency of a self-employed audit is related with earnings management

Several studies examine the relationship between discretionary accruals and opportunistically earnings management (Balsam1998, Baker, Collins and Reitenga 2003). They found that manage earnings relative associated with self-interest. Hence, following the above explanations, the purpose of presence of earnings management is tend to be more opportunistic than efficient to value relevant information.

Effect of earnings management, stock returns and corporate governance

In the determining of stock prices, insofar that the market focuses on declared earnings and ignoring the quality of corporate earnings, there probably an irregular in prices deviating from the real values. In other words, quality of earnings can have prognostic effect for future activities on stock prices (Chan et al. 2006).

Sloan (1996) finds that stock with high accruals, which means that earnings are higher compared to cash flows, next have a lower return and less effect than stocks with low accruals, as a result investors focus on reported earnings, they are temporarily misled. For example, as managers inflate earnings above cash flows, accruals rise. High accruals may reflect increases or decreases in account receivables or in account liabilities respectively with regards to record of sales.

Another example is a study that conducted by Allen et al. 2011, they use two samples in their analysis, accruals and inventory accruals samples from the COMPASTA data and stock return data from the CRSP monthly returns. They show that estimation errors in extreme accruals are pervasive and that have an economically and statistically effect on earnings management and stock returns.

Recent research conducted by Jiang and Liu (2017), examines the contradictory effects and causes of corporate governance on stock returns reveals its role in determining the discretionary relationship between accruals and expected stock return. When the management of the company is sufficiently effective, the level of earnings management is usually relatively small. Thus the first effect, the reduced uncertainty of manipulation and thus the reduced risk payment. The second effect, more weight on reports about prices, dominates and ensures that the required return increases. To merge, earnings management and stocks returns are likely to move in the same contradictory direction in companies with strong (weak) corporate governance.

The endogeneity of both the level of earnings management and the expected stock return offers a way to deepen an insight into the effects of information on asset prices, Jiang and Liu (2017). Corporate governance indicates in general to the group of techniques that affect the decisions made by managers when there is a segregation of proprietorship and supervision (David et al. 2005).

Following up on Sloan (1996) and Chan et al. (2006) to test whether earnings are managed in the Dutch and German listed companies to determine the causes and effects of earnings management on stock returns by applying discretionary accruals models to the artificially manipulated earnings after adding some amount to the reported earnings and also this study shines a light on testing the corporate governance in relation to earnings management and stock returns.

### **Hypotheses development**

Some studies have documented that the relationship between earnings management and stock returns is negatively strong, while others suggest a positive strong relationship between earnings management and stock returns (Wali, 2017).

Following Dechow, Sloan, and Sweeney (1995) and Chan et al. 2006 to test the relationship between accruals and stock returns concerning the earnings management. Stock with high accruals, indicate that earnings are high compared to cash flows, next have a lower returns and less effect than stock with low accruals, as a result investors focus on reported earnings will tentatively misled them. For example, as managers puff earnings above cash flows, accruals rise. High accruals may indicate increase or decrease in account receivables or in account liabilities respectively with regards to record of sales. In other words; stock with high accruals have low returns and less effect than stock with low accruals due to earnings management.

Following the core insight of Cohen and Zarowin (2010) and Zang (2012), they notice that managers have more opportunities for incorrect reporting through accruals management and real activities, as well as other ways such as balance sheet or operation of cash flows management. The result is therefore often too high due to the opportunistic manipulation of

managers. Put on, that the relationship between stock returns and accruals is stronger in high- profit companies compared to less profitable ones. Therefore, our first hypothesis will formulate as follows:

H1: Stock with high accruals have low returns and less effect than stock with low accruals due to earnings management

Jiang and Liu (2017), examines the contradictory effects and causes of corporate governance on stock returns reveals its role in determining the discretionary relationship between accruals and expected stock returns. While the management of the company is sufficiently effective, the level of earnings management is usually relatively small. Thus the first effect, the reduced uncertainty of manipulation and thus the reduced risk payment. The second effect, more weight on reports about prices, dominates and ensures that the required return increases. As result, earnings management and stock returns are likely to move in the same contradictory direction in companies with strong (weak) corporate governance. To follow this explanation, we can formulate our second hypothesis

H2: Corporate governance, whether strong or weak, affects the level of earnings management accordingly, increase or decrease the stock returns.

Burgstahler, Hail and Leuz (2006) have shown that countries with strong public law have lower earnings management and that countries with poor investor protection generally have a higher level of earnings management.

## Research Methodology

### Models

The two browser models are the cross-sectional Jones model and the cross-sectional modified Jones model. These models are identical to the Jones and modified Jones models, severally, unless that model factors are estimated using cross-sectional data rather than time series. Hence, the estimated factors  $\alpha_1$ ,  $\alpha_2$  and  $\alpha_3$  of equation 1 for industry year and not specific to the company are obtained by estimating equation 2, using data from all companies corresponding to the year (i.e. the year of event) and two SIC industry figures. Note that each type of model depends on a different set of assumptions that will probably not be supported by all companies.

The estimated portion of total accruals in this study is used to look for earnings management instead of estimated portion of one accrual because total accruals have to absorb a larger part of managers' manipulation (Jones, 1991). In this study, the methodology based on total accruals will be used, this will rise the opportunity to examine earnings management besides, increases a room to research particular to the Dutch and German setting.

The purpose of this paper is to examine the market reaction with reverence to specific accruals, through the simple and multiple regression of the returns on stock and its components such as total estimated accruals, non-discretionary accruals, net income, non-estimated accruals, and operating cash flow.

### Sample and Data Description

The original sample consists of 1370 company-years for the Dutch listed companies and 1890 company-years for German listed companies during 2004-2014. The financial institutions are excluded in this study because they have a different structure and their annual reports are not directly comparable to non-financial companies such as banks, stock brokerage companies, and insurance companies where one or more of the variables are missing, are deleted. This results in a loss of 397 and 210 company-years for Dutch and German listed companies, respectively. Extraordinary cases are also deleted. This leads to a further loss of 196 and 203 company-years reducing the final sample of Dutch and Germany listed companies to 777 and 1477 company years, respectively. Data are available on the data stream of Thomson ONE Banker.

### Control Variables

Jones (1991) mitigates the previous hypotheses that the difference between accrued accruals and accrued charges is only due to changes in the estimated accruals due to the fact that non-discretionary accruals are assumed to be determined from time to time. Therefore, the following anticipation model is used for the total accruals to manage changes in the economic conditions of the company:

$$ACCR_t / A_{t-1} = \beta_1 (1/A_{t-1}) + \beta_2 (\Delta REV_t) + \beta_3 (PPE_t) / A_{t-1} + v_t \quad \text{eq. (1)}$$
 Where:  
 $\Delta REV_t$  = revenue in year  $t$  less revenue in year  $t-1$  scaled by total asset at  $t-1$ ,

$PPE_t$  = gross property plant and equipment in year scaled by total asset at  $t-1$   $A_{t-1}$  = total asset at  $t-1$  and  $\beta_1, \beta_2, \beta_3$  = company-specific factors

$v_t$  = the error term

Dechow (1994) and others point out that the implied postulate in the Jones model is that revenue is not discretionary. The Jones model will strip part of the managed earnings from the estimated accrual proxy if earnings are managed by estimated revenue. Therefore, modified Jones model developed as follows:

$$NDAC_t = \alpha_1 (1/A_{t-1}) + \alpha_2 (\Delta REV_t - \Delta REC_t) + \alpha_3 (PPE_t) \quad \text{eq. (2)}$$

Whereas:  $\Delta REC_t$  = net receivables in year t minus receivables in year t-1 scaled to total assets in year t. The contrast with the original Jones model is that the change in turnover is corrected for the change in receivables in the period in which systematic earnings management takes place.

The industry model runs the following regression to estimate non-discretionary accruals:  
 $NDAC_t = \alpha_1 + \alpha_2 \text{median}_i (ACCR_t) \quad \text{eq. (3)}$

Whereas:  $\text{Median}_i (ACCR_t)$  = the median value of total accruals scaled by deferred assets for

all non-sampling companies in the same two-digit SIC1 code. The company specific factors  $\alpha_1$

and  $\alpha_2$  are estimated using (OLS) 2 on the explanations in the estimation period from 2009 to

1 The use of two-digit SICs is an interaction between the definition of industry groups with sufficient accuracy that the industry model covers the consequences for the entire industry against a sufficient number of companies in each industry group so that the model can effectively diversify the industry.

2 The smallest squares or common squares (OLS) is a mathematical enhancement technique. When a set of measured data is presented, you try to find a function that is closely aligned with the data ("Most appropriate").

2012 as shown in Table 4.1 and 4.2., the estimated accruals for company i in forecast year p are the forecast error uip calculated as follows:

$$DA = ACCR_{it} / A_{t-1} - (b_{1i} 1 / A_{t-1} + b_{2i} (\Delta REV_t - \Delta REC_t) / A_{t-1} + b_{3i} PPE_t / A_{t-1}) \quad \text{eq. (4)}$$

whereas:  $b_{1i}$ ,  $b_{2i}$ , and  $b_{3i}$  are OLS estimates of  $\alpha_{1i}$ ,  $\alpha_{2i}$ ,  $\alpha_{3i}$  company-specific factors

Multiple regression model with the forecast error from equation 5 as the dependent variable will be used to test the hypotheses:

$$Da_{ip} = B_0 + B_1 \text{size}_{ip} + B_2 \text{Lev}_{ip} + B_3 \text{Mgt}_{ip} \quad \text{eq. (5)}$$

where  $\text{Size}_{ip}$  is an indicator variable, which is equal to 1 if company i's sales for 2009 are the highest quartile and 0 otherwise,  $\text{Lev}_{ip}$  is equal to the book value of long term debt divided by total assets for company I for each prediction year p,  $\text{Mgt}_{ip}$  is the percentage of outstanding stock owned for company i for each prediction year p.

## Empirical Results

### Descriptive statistics

This paragraph is considering at the average, median, minimum, maximum and standard deviation of the total accruals and their components, then income and associated components. Tables 4.1 and 4.2 provide brief statistics on the estimation of Equation 1 for each sample company. The modified Jones model has a modest illustrative capacity; the average (median) adjusted R<sup>2</sup> is 0.301 (0.289), 0.347 (0.344) for the Dutch and German severally. It seems that the residue is not a serious problem. To test the hypotheses, we analyze the total accruals rather than the current accruals.

Table 4.1

### Descriptive statistics -Dutch Co.

	Coefficient	Mean	25%	Median	75%
NI Estimated	$\alpha_{1i}$	0,0698	-0,6190	0,0699	0,4260
t-statistic		0,1051	-0,6160	0,1091	0,9290
Estimated	$\alpha_{2i}$	-0,0376	-0,8770	-0,0449	0,7560
t-statistic		-0,0096	-0,8010	-0,0074	0,5759
Estimated	$\alpha_{3i}$	-0,0280	-0,2800	-0,0307	0,2001
t-statistic		0,0795	-0,4600	0,0752	0,8500
Adjusted R <sup>2</sup>		0,3011	0,0888	0,299	0,3199

The total accruals (accr) are calculated as:  $accr = ch \text{ current assets} - ch \text{ current liabilities} - \text{cash and d debt equivalent short-term debt and the short-term part of long-term debt income tax payable} - \text{consumption, depletion and amortization}$ .  $drev_t = \text{revenue for the year } t \text{ less revenue per year } t-1 \text{ by size total assets at } t-1$ ,  $ppet = \text{total plant equipment and equipment per year were measured by total assets at } t-1$   $A_{t-1} = \text{total assets in } t-1$  and  $a_{1i}, a_{1i}, a_{1i} = \text{company factors } v_t = \text{the term error}$

Table 4.2

### Descriptive statistics -German Co.

Coefficient		Mean	25%	Median	75%
Estimated	$\alpha_{1i}$	0.052	-0.196	0.042	0.295
t-statistic		0.095	-0.303	0.095	0.485
Estimated	$\alpha_{2i}$	-0.042	-0.394	-	0.325
t-statistic		-0.003	-0.361	-	0.359
Estimated	$\alpha_{3i}$	-0.039	-0.158	-	0.091
t-statistic		0.056	-0.310	0.050	0.450
Adjusted R <sup>2</sup>		0.347	-0.088	0.344	0.606



Total accruals are calculated as:  $ch$  current assets -  $ch$  short-term debts-  $ch$  cash & equivalent + short-term part long-term debts +  $ch$  income taxes payable- depreciation, depletion & amortization. Discretionary accruals ( $dac$ ) are fixed. Non-discretionary accruals are calculated as the variation between total accruals ( $accr$ ) and discretionary accruals ( $dac$ ). Non-discretionary net income ( $ndni$ ) is the variation between net income ( $ni$ ) and discretionary accruals ( $dac$ ).

Table 4.3

(Dutch & German) Multi-Regression analysis

Panels	Pearson Coefficient R	R Square	Adjusted R Square %	Std. Error of the Estimate
Panel A	0.699 <sup>a</sup>	0.489 <sup>b</sup>	0.484	0.03231
Panel B	0.773 <sup>a</sup>	0.647	0.644	0.02231

a. Pearson Coefficient for the Dutch and German companies

b. Dependent variable: R Sq. Stock return for the Dutch and German companies

Table 4.3 indicates a summary of regression analysis of independent variables and dependent variable. Panels A and B report multi-regressions which are used to test either independents variables for example  $ni\_lta$ ,  $ppe\_$ ,  $drec$ ,  $drev$ ,  $ocf\_lta$ , and  $acc$ , are linked or impact the dependent variable stock returns  $stq-r$ . The analysis suggests that the association between the two variables is very purposeful with less than 1%. The R-square coefficient indicates a strong negative correlation between these variables. Where this parameter demonstrated that 48.90% and 64.70% of the independent variable for the Netherlands and Germany correspondingly can be described by changes in the dependent variable (stock returns). It can therefore be decided that there is a significant association between earnings management and stock returns. This result is in line with hypothesis H1.

### Multi- Regression Analysis

Tables 4.4 and 4.5 show the estimated results of equation 5 for each expected year. The sample size is expected to be 137 and 189 companies each year from 2009 to 2011 and 2012 for the

Netherlands and Germany severally. The adjusted R2 for 2009, 2010, 2011, and 2012, are 38.90%, 44.21%, 49.30%, and 46.41%, and 51.11%, 57.8110%, 60.10%, and 57.31%

correspondingly for The Netherlands and Germany. The biggest adjusted R-square is 2011, that is, the year before income increasing. The F statistics for the regression model is only significant at the 0.01 level in 2011. As expected the measurements on company's magnitude are positive and significant in 2009. Moreover, the companies with less capacity have more total accruals' decreasing in the year before book-value decreasing. Then again this measurement is positive in 2009 but not significant. The outcomes are ineffectively fixed with hypothesis H1. The effect on company's magnitude has been measured; the measurements indicate that the intercept for operation leverage, and management ownership, in 2010 and 2011 are not positive, but significant. These results are in line with hypothesis H2; Dutch and German listed companies' accruals tend to be negative at the year before

decreasing book-value with the managerial share ownership. This is a strong evidence that companies-level earnings management is reduced by effective governance structure confirms with (Dechow2012, Dechow, Sloan, and Sweeney 1995, Wild 1995, and Liu and Lu 2007, and Leuz et. al 2003) find that investor protection plays important role in influencing the earnings management. Jiang and Liu (2017) The measurement on Lev is positive and significant in 2011 as expected, proposing if the company has a minimal level of debt covenant; the more companies' managers choose income- decreasing accruals. Despite that this measurement is positive but not significant in 2010. This result is futilely confirmed with hypothesis H1. The measurement on Mgt is positive and significant in 2011 which is not in line with expectation of hypothesis H2. In summary, these results support the hypothesis that managers in The Netherlands and Germany are trying to manage earnings through the accruals-relation discretionary

Table 4.4

Dutch Multi- Regression of Discretionary Accruals

$$da = b_0 + b_1 \text{Size} + b_2 \text{Lev} + b_3 \text{Mgt}$$

Years	Coef.	N	Mean	Median	St. Dev.	t-value	Q1	Q3	P.Value
2009 (45.4%)	b1	137	-3.097	0.0041	0.0033	1.065	0.010	0.001	**0.000
	b2	137	2.500	0.0832	0.5233	14.847	0.011	0.348	*0.0000
	b3	137	3.994	0.3981	0.1975	2.500	0.165	0.475	**0.000
Adj.R <sup>2</sup>									38.90%
D. Watson									2.317
F. test.									38.236
Z. test.									3.518
2010 (38.7%)	b1	137	0.001	0.0031	0.0034	-22.47	0.001	0.001	**0.000
	b2	137	0.168	0.1039	0.4365	-16.89	-0.270	0.278	**0.000
	b3	137	0.335	0.3231	0.1975	14.98	0.156	0.457	**0.000
Adj.R <sup>2</sup>									44.21%
D. Watson									2.354
F. test.									39.324
Z. test.									-3.808
2011 (35.4%)	b1	137	0.013	0.0013	0.0014	-23.21	0.011	0.001	**0.000
	b2	137	0.168	0.0012	0.0012	-17.51	-0.270	0.278	**0.000
	b3	137	0.323	0.0022	0.0111	15.74	0.162	0.477	**0.000
Adj.R <sup>2</sup>									49.30%
D. Watson									2.284
F. test.									35.217
Z. test.									-1.812
2012 (35.2%)	b1	137	0.000	0.0031	0.0034	-25.13	0.010	0.001	**0.000
			1				0	3	0

	b2	137	0.1457	0.0012	0.0012	-17.11	-0.270	0.2786	**0.0000
	b3	137	0.3325	0.0022	0.0111	7.710	0.1652	0.4757	**0.0000
Adj.R <sup>2</sup>									46.41%
D. Watson									2.277
F. test.									40.118
Z. test.									-3.371

To obtain meaningful estimates with the three models are estimated for Dutch listed companies. N refers to 137 company-year regressions associated with the 1370 industry-year observations. Mean (median) coefficients are reported with t-statistics (Wilcoxon z-scores) and p-values. Both parametric t test and non-parametric Wilcoxon signed rank test are applied to test whether mean and median coefficients are significantly different from zero.

\*, \*\*, \*\*\* indicate statistical significance at the 10%, 5% and 10% respectively (two tailed). % Adj-R2 is the average adjusted R-squares of 777 industry-year pair's regressions Sizeip is equal to 1 if company i's sales for 2009 are the highest quartile, and 0 otherwise. Levip is equal to the book value of long-term debt divided by total assets for company I for prediction year p. Mgtip is equal to the percentage of outstanding stocks owned by managers of company I for prediction year p. da is equal to the prediction error for company i for prediction year p. and it computed as in equation 5.

Table 4.5

German Multi-Regression of Discretionary Accruals Data

Year	Coef.	N	Mean	Median	St. De.	t-value	Q1	Q3	P.Value
2009 (60.0%)	b1	189	0.0080	0.0310	0.0085	-145.164	3.13E-7	3.95E-6	**0.000
	b2	189	0.7092	0.0792	9.9478	-3.298	0.0779	0.2244	**0.001
	b3	189	0.5301	0.2783	0.0003	112.366	0.1593	0.4216	**0.000
Adj.R <sup>2</sup>									51.11%
D. Watson									2.623
F- test									33.671
Z. test.									-3.631
2010 (55.5%)	b1	189	0.0070	0.0130	0.0085	-148.979	3.1467	3.1234	**0.000
	b2	189	0.5645	0.0653	7.8398	124.830	-0.017	0.1846	**0.000
	b3	189	0.3301	0.2783	0.0002	-8.967	0.1435	0.3994	**0.000
Adj.R <sup>2</sup>									57.81%
D. Watson									2.568
F. test									43.324
Z. test.									-3.252
2011 (49.5%)	b1	189	0.0060	0.0013	0.0058	-149.926	3.7120	3.5410	**0.000
	b2	189	0.4645	0.0653	0.0002	125.742	-0.0137	0.1821	**0.000
	b3	189	0.5202	0.2783	0.0001	-9.194	0.1393	0.4139	**0.000
Adj.R <sup>2</sup>									60.10%
D. Watson									2.458
F. test									34.156

Z. test.										-3.343
2012 (44.6%)	b1	189	0.0050	0.0013	0.0075	-131.535	3.6527	3.3971	**0.000	
	b2	189	0.5445	0.0653	0.0003	125.504	-0.0216	0.1846	**0.000	
	b3	189	0.4300	0.2783	0.0011	-10.601	0.1865	0.4131	**0.000	
Adj.R <sup>2</sup>										57.31%
D. Watson										2.587
F. test										35.121
Z. test.										-3.267

To obtain meaningful estimates with the three models are estimated for German listed companies. N refers to 189 company-year regressions associated with the 1890 company-year observations. Mean (median) coefficients are reported with t-statistics (Wilcoxon z-scores) and p-values. Both parametric t test and non-parametric Wilcoxon signed rank test are applied to test whether mean and median coefficients are significantly different from zero. \*,

\*\*, indicate statistical significance at the 5% and 1% respectively (two tailed). Adj-R2 is the average adjusted R- squares of 1443 industry-year pair's regressions. Sizeip is equal to 1 if company i's sales for 2009 are the highest quartile, and 0 otherwise. Levip is equal to the book value of long- term debt divided by total assets for company I for prediction year p. Mgtip is equal to the percentage of outstanding stocks owned by managers of company I for prediction year p. da is equal to the prediction error for company i for prediction year p. and it computed as in equation 5

### Conclusion

This paper examines a sample of listed operation companies in the Netherland and Germany to compare performance of academic discretionary accruals estimation models. Corporate reporting strategy that is, the manner in which managers use their discretionary accounting has a paramount impact on the company's financial reporting. Through improvement models of discretionary accruals (earnings management) in relation to stock return and corporate governance to achieve better results of detecting earnings management as well as to present evidence that is particular to the Dutch and German setting, formed the main drive of this study.

To gain insight into the causes and consequences of earnings management on stock prices, we investigated the relationship between earnings management, stock return, and corporate governance. We believe that the relationship exists between earnings management and the expected stock returns and that the discretionary accruals- relation depends on reported earnings and corporate governance. The relationship between earnings management, stock return, and corporate governance has been tested. Our findings suggest that strong or poor effect of corporate governance in these two countries varied. This study suggests that corporate governance appears to have a moderate effect on the level of earnings management. In addition, maybe other factors also play a role, such as the size of company, capital structure or business sector.

Models of discretionary accruals are compared to check for a better fit and then their ability to detect earnings management is measured with samples where earnings management is expected. This study expects that earnings are managed more in Germany than in The Netherlands. The modified Jones cross-sectional model has a modest illustrative capacity. The Jones model postulates that all changes in credit turnover during a certain period are due to profit management. In addition, the results indicate that maximum discretionary accruals

involve a large number of estimated errors which have predictable effect on income, stock returns and future cash flows. Further study in this area is needed to test this statement.

#### References

- Allen, E. J., C.R. Larson; and R. G. Sloan, (2010). Accrual Reversals, Earnings and Stock Returns, " Unpublished paper, University of California, Berkeley and Washington, University in St. Louis.
- Bartov, E., F.A. Gul and J. Tsui, (2000). Discretionary-accruals models and audit qualifications. *Journal of Accounting and Economics*, December: 421-452.
- Burgstahler, D., Hail, L., Leuz, C., (2006). The importance of Reporting Incentives: Earnings management in European Private and Public Firms. *The Accounting Review* 81 (5), pp.983-1016
- Chan, Louis K. C., Narasimhan Jegadeesh, and Josef Lakonishok. (2006). Earnings Quality and Stock Returns: *The Journal of Business*, Vol 79, No. 3, pp. 1041-1082
- Cohen, D. and Zarowin, P. (2010). Accrual-based and real earnings management activities around seasoned equity offerings. *Journal of Accounting and Economics*, 50(1): 2-19.
- Collins, D. W., and P. Hribar. (1999). "Errors in Estimating Accruals: Implications for Empirical Research." Working Paper, University of Iowa.
- DeAngelo, L.E., (1986), Accounting numbers as market valuation substitutes: A study of management buyouts of public stockholders, *The Accounting Review*, 400-420
- Dechow, P. M., Hutton A. P., Kim J. H (2011). "Detecting Earnings Management: A New Approach".
- Dechow, P.M. (1994), Accounting earnings and cash flows as measures of company performance: The rule of accounting accruals, *Journal of Accounting & economics* 18, pp3-42.
- Dechow, P.M., R. G. Sloan. (1995). Detecting earnings management. *The Accounting Review* 70 (April): 193-225.
- Dichev, I., Graham, J., and Rajgopal, S. (2012). Earnings Quality: Evidence from the Field
- Jiang, Jiajun, Lu, Qi. (2017). Earnings management and stock returns: Theory and evidence, *International Finance*, Pekin University, pp,1-29.
- Jones, J., (1991), Earnings management during import relief investigations, *Journal of Accounting Research*, pp. 193-228
- Healy, P.M. and Wahlen, J. (1999). A Review of Earnings Management Literature and its Implications for Standard Setting. *Accounting Horizons*, 13(4) 365-383.
- Larcker D. F., and Richardson S. A. (2014). "Fees paid to audit firms, accrual choices, and corporate governance". *Journal of Accounting Research* 42 (3): 625-656

Siregar and Sidharta Utama, (2008). Type of earnings management and the effect of ownership structure, firm size, and corporate-governance practices: Evidence from Indonesia The International Journal of Accounting, vol. 43, issue 1, 1-27

Teoh, S., Wong, T., Rao, G. (1998). Are accruals during initial public offering opportunistic? Review of Accounting Studies 3, 175-208.

Yoon, S. & G. Miller. (2002a). Earnings Management of Seasoned Equity Offering Firms in Korea, International Journal of Accounting 37, pp. 57-68.

Yoon, S.& G. Miller. (2002b). Cash from Operation and Earnings Management in Korea, International Journal of Accounting 37, pp. 395-412.1

Wali, K. (2017). The Dutch firm's performance on discretionary Accrual Models: Evidence from the Netherlands, Zanko Journal, PP 374 - 401

Zang, A., (2012). Evidence on the Trade-Off between Real Activities Manipulation and Accrual-Based Earnings Management, The Accounting Review 87(2), pp. 675–703