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IMPLICATIONS OF CLAWBACK ADOPTION
FOR EXECUTIVE COMPENSATION
CONTRACTING

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ABSTRACT

In this thesis I examine the implications of voluntarily implemented clawback provisions on executive compensation contracting. More precisely, how the adaption of clawbacks in executive contracts affects other areas of these contracts, namely the use of accounting conservatism and the sensitivity of executive compensation towards Non-GAAP earnings. For the first hypothesis I employ two conservatism measures and find a significant negative relation between conservatism and clawback adoption in one of them. The negative relation indicates that clawback provisions seem to increase effective contracting themselves and substitute the need for conservative accounting in the sample firms. The analysis of the second hypothesis shows that the adoption of clawback provisions does not seem to affect the pay-for-performance relation for Non-GAAP earnings, as I could not find a significant association between Non-GAAP earnings and compensation after the adoption. Overall, the findings of this thesis provide new insights on how clawback adoption affects the financial reporting and compensation decisions of firms and could be relevant for the current discussions on executive compensation design.

Table of Contents

1. Introduction	1
2. Literature Review	6
2.1 Executive Compensation Contracts.....	6
2.1.1 Accounting conservatism	9
2.1.2 Non-GAAP earnings	12
2.2 Clawback provisions	14
3. Hypothesis Development	17
4. Methodology	20
4.1 Data and Sample Selection.....	20
4.2 Research Design	21
4.2.1 Accounting Conservatism	21
4.2.1 Compensation Sensitivity.....	25
5. Empirical Results	27
5.1 Descriptive results	27
5.1.1 Accounting conservatism	27
5.1.2 Compensation Sensitivity.....	28
5.2 Main regression results.....	29
5.2.1 Accounting conservatism	29
5.2.2 Compensation Sensitivity.....	30
5.3 Robustness test	31
6. Discussion and Conclusion	33
7. References	35
Appendix A: Tables.....	39
Table 1: Variable Definition.....	39
Table 2: Sample Selection	40
Table 3: Clawback Adoption.....	41
Table 4: Descriptive Statistics – Conservatism AT Measure	42
Table 5: Descriptive Statistics – Conservatism ACC Measure	43
Table 6: Descriptive Statistics – Compensation Sensitivity	44
Table 7: Correlation Matrix – Conservatism AT Measure.....	45
Table 8: Correlation Matrix – Conservatism ACC Measure.....	46
Table 9: Correlation Matrix – Compensation Sensitivity.....	47
Table 10: Main Regressions – Conservatism	48
Table 11: Main Regression – Compensation.....	49
Table 12: Regressions with additional Controls – Conservatism.....	50
Table 13: Robustness Test – Conservatism.....	52

1.Introduction

Clawback provisions in compensation contracts are a new and increasingly popular governance mechanism. They allow companies to recover unjustified compensation paid to executive managers after certain trigger events such as restatements of published earnings. This has the effect of a more direct link between the actions of the manager and his compensation and is therefore said to mitigate managerial opportunistic behaviour (Chan et al. 2012; DeHaan et al. 2013).

In this thesis I examine the implications voluntary adaption of clawback provisions has for executive compensation contracting. More precisely, how the adaption of clawbacks in executive contracts affects other areas of these contracts, namely the use of accounting conservatism and the sensitivity of executive compensation towards Non-GAAP earnings, earnings that are not based on generally accepted accounting principles.

An important task of designing compensation contracts is to provide executives with sufficient incentives to take actions in the best interest of the firm and maximize shareholder value. These performance-based compensation contracts can however introduce problems on their own by incentivizing executives to manipulate accounting numbers in order to increase their payouts (Jensen and Meckling 1976). Following the discovery of financial reporting scandals of well-known firms such as Enron or WorldCom and the limited penalties for the responsible executives, there was growing public criticism about the practices of executive compensation and the demand for more accountability. Consequently, the US administration introduced the Sarbanes-Oxley-Act (SOX) to reinstate the public trust in the financial market, where clawback provisions were introduced among several other regulations in Section 304. The Securities and Exchange Commission (SEC) was tasked with the enforcement of clawbacks, however because of several ambiguities in the act, the filed cases stayed on a low level (DeHaan et.al 2013; Fried and Shilon 2011; Prescott and Vann 2018). To strengthen the enforcement power of clawbacks, Section 954 of the Dodd-Frank Act introduced in 2010, mandates all listed firms to implement and enforce clawbacks in their compensation contracts. The formal implementation of the Section 954 has not yet passed but in the meantime a majority of firms implemented clawbacks voluntarily in order to strengthen their governance. In the year 2016 92% of the S&P 500 companies had clawback provisions implemented – which makes the topic also an interesting field of research (Prescott and Vann 2018). Consequences and associations of voluntary clawback provisions adoption are examined in several academic

papers. Topics include the effects on financial reporting quality, firm value, auditor and investor perception and changes in compensation.¹ Overall, the findings suggest a positive influence on financial accounting and managerial behaviour. My thesis will add to the growing literature on this field by examining the influence of clawbacks on different areas of compensation contracting.

First, I examine the indirect effects of the adoption on another feature that is implemented for effective contracting, the practice of conservative accounting, and provide evidence on how clawbacks affect the use of conservative accounting. The choice of conservative accounting can either be complementary towards corporate governance or serve as a substitutional mechanism. As clawback provisions in compensation contracts are a new method of corporate governance, the effects of the implementation on accounting conservatism can be explored in different directions. One explanation for the existence of conservatism is the contracting theory. Conservatism is said amongst others to address the problem of asymmetric information between managers and shareholders as contracting parties are in need of timely and verifiable information about the firm's performance to be effective (Watts 2003). As clawbacks are a part of compensation contracts and contracting is facilitating accounting conservatism the implementation could lead to an increase in conservatism. On the other hand, clawback provisions are said to increase effective contracting themselves by strengthening the link between compensation and actions of the managers (Chan et al. 2012; Iskandar and Jia 2013). This effect could lead to a decreased need of conservatism as clawback provisions could substitute the need for conservative accounting.

Secondly, I test the direct implication of clawback adaption on the pay-for-performance sensitivity of compensation towards Non-GAAP earnings and examine if there is a higher or lower sensitivity after implementation. Non-GAAP earnings, also referred to as pro forma earnings, are used to supplement GAAP earnings. Managers adjust GAAP earnings, by excluding certain items such as restructuring charges because they are seen as non-recurring. The advantage of these adjusted numbers is that they can provide a more relevant picture of the company's performance (Bradshaw and Sloan 2002). Prior studies have only examined the positive relation between the sensitivity of compensation towards GAAP earnings after clawback implementation but have not looked at Non-GAAP numbers (Chen et al. 2015; DeHaan et al. 2013). As Non-GAAP earnings are becoming more and more popular as performance measures in compensation plans, it is therefore of interest to test how Non-GAAP

¹ Prescott and Vann (2018) give a good overview of relevant studies on clawback provisions in quality journals.

earnings relate to clawback provisions within compensation plans (Audit Analytics 2016). Clawback adoption could lead to an increase in compensation sensitivity towards Non-GAAP earnings as managers could demand to be compensated for the higher risk of possible financial penalties by increasing compensation which is not subject to clawbacks. On the other hand, prior research shows that the choice of a performance measure and the weight placed on it depends on the precision of the measure itself. Through the higher quality of GAAP earnings after clawback adoption the compensation sensitivity towards Non-GAAP earnings could decrease (Holmstrom 1979; Lambert and Larcker 1987).

For the analyses I obtain a random sample of the Russell 3000 Index firms with information about clawbacks from my supervisor and match these to data from Compustat and ISS about firm and governance characteristics. To test the association with conservatism I need additional information on returns from CRPS. For the second analysis about compensation sensitivity I access Excomp data about annual compensation and Non-GAAP data, again from my supervisor. For both analyses I employ a difference-in-differences design to examine the changes in the variables of interest before and after the implementation of clawbacks. This design also allows me to account for time-invariant variables and common macroeconomic trends and therefore reduces the concerns about omitted variable bias. Further I add selected control variables depending on the outcome variable, including time and industry fixed effects in the regressions and cluster the standard errors by firms.

For the conservatism hypothesis I employ two measures of conservatism, the Basu (AT) and Ball & Shivakumar (ACC) model, which are both based on the asymmetric timeliness notion (Basu 1997; Ball and Shivakumar 2005). In the main regression I find a significant negative association between clawbacks and conservatism in only the ACC measure. As a robustness check I perform the main regressions again with a propensity-score matched sample to mitigate the self-selection bias due to the voluntary decision to implement clawbacks. The robustness test supports the findings of a negative relation between conservatism and clawbacks in the ACC measure. The negative sign of the coefficient suggests the notion that the use of conservatism is substitutional to corporate governance. More specifically, that clawback provisions increase effective contracting themselves by strengthening the link between compensation and action of managers which leads to a decreased need of conservatism, as contracting is a main explanation for the use of conservative accounting (Iskandar and Jia 2013; Watts 2003). The Basu measure does not provide significant results for both the main and the robustness test, which could be due to several limitations associated with the model.

Nevertheless, as only one model produces significant results my findings should be viewed with caution. Further examination of this issue should be of interest for future research.

In order to examine the change in compensation sensitivity towards Non-GAAP earnings after the adaptation of clawback provisions in compensation contracts I implement a multivariate pay-for-performance analysis where I regress the cash compensation of the CEO on GAAP and Non-GAAP earnings. The results of the analysis show that the adoption of clawback provisions does positively affect the compensation sensitivity towards GAAP earnings in the regression without further control variables, which is in line with prior research (DeHaan et al. 2013). I could not find proof for a change in compensation sensitivity towards Non-GAAP earnings after clawback adoption. However, due to the limited data availability of Non-GAAP earnings my findings could be affected by the relatively small sample size and are therefore not generalizable.

This thesis contributes to the growing literature on clawback provisions by accessing the consequences of clawback adoption on different areas of compensation contracts. My study makes several contributions. I inform organizations about consequences of clawback adoption on other areas of compensation contracts. As clawback provisions alter compensation contracts and therefore influence the financial risk and pay-offs of managers, it is of interest how they affect managerial reporting behaviour. First, I examine the link between conservative accounting and clawback provisions, which has not been previously established. Additionally, I am able to expand the literature on the relation between corporate governance provisions and accounting conservatism, where I provide evidence for a substitutional association between them. The interdependency between the two should be of interest for standard setters and regulators and taken into consideration in the development of federal clawback laws. My findings could be especially interesting for The Financial Accounting Standards Board (FASB) organization which favours a neutral stance on financial reporting over conservatism. The decrease in conservatism after clawback adoption could be also of interest for market participants as a decrease could disadvantage bondholders as found in Ahmed et al. (2002). The thesis also contributes to the literature on executive compensation and use of accounting information as performance measures. This section of the thesis is related to the studies of Chen et al. (2015) and DeHaan et al. (2013), which examine the pay-for-performance sensitivity as well. My thesis differs from them as I examine the compensation sensitivity towards Non-GAAP earnings instead of only GAAP earnings, which extends the literature on this topic. This is of interest as Non-GAAP earnings are more and more used in compensation contracts as performance measures and their usefulness is still under debate. Overall, my findings suggest

that clawbacks do not only directly affect compensation contracts through changes in compensation sensitivity but also indirectly affect contracting by influencing another feature of contracting, accounting conservatism.

The rest of the paper is organized as follows. Chapter 2 consist of concepts and findings from prior research to provide the theoretical background for this thesis. I present the main ideas of CEO contracting and the connections with conservatism, Non-GAAP measures and clawback provisions. In section 3 I continue the theoretical part with a thorough description of my hypotheses, which is followed by the explanation of the research design and methodology in chapter 4. The descriptive statistics, main empirical results and additional tests are presented in chapter 5. Finally, I draw the conclusion and suggestions for future research in section 6.

2. Literature Review

In this chapter I provide the necessary theoretical background for my study. First by explaining the relevant theories and concepts regarding CEO contracting and by establishing the connection with accounting conservatism and Non- GAAP earnings and secondly by introducing the concept of clawback provisions and outlining their effects on CEO contracts.

2.1 Executive Compensation Contracts

To understand the underlying concept of compensation contracts, it is necessary to take a look at the agency theory first. The agency theory describes the relation between an agent, in this thesis specified as the top executive of the firm, and the principal, here the shareholders represented by the board of directors. Due to the separation of ownership and control in a firm the principal must delegate control and decision-making authority to the agent (Jensen and Meckling 1976). Difficulties occur in this relation because of the limited observability of management actions by the principal, leading to managers having private information. As both the agent and the principal try to maximize their individual utilities, their goals are not fully aligned, and the actions of the agent are expected to be not in the best interest of the principal, leading to agency costs (Kaplan and Atkinson 1989). In order to reduce these costs and discipline self-serving behavior of managers the principal has to both offer incentives for goal alignment between the parties and monitor actions taken by the manager.

Compensation contracts are widely used to induce executives to act in the firm's best interest by linking part of the compensation to the agent efforts and firm performance (Jensen and Meckling 1976). Commonly, corporate executive compensation contracts are composed of a short-term component including a base salary, annual bonus payments, stock options and then a long-term equity component which includes amongst others restricted options of the firm. In this thesis I focus on the short-term incentive component of the executive contracts as it is more relevant for this topic. Bonus plans are most common as short-term incentives schemes and reward managers for meeting a certain, agreed on target during the current year. The compensation committee of the board is responsible for the bonus composition and how it is awarded, this means also the choice of performance measures. As mentioned above, incentive pay should reward favorable actions of the agent in regard to the proposed goals and the performance of the firm. Therefore, the committee should choose performance indicators for the compensation contract that best measures value increasing actions taken by the executive (Smith and Watts 1982). Both earnings and stock returns are used for the short-term incentive payments but especially in the annual bonus plans the use of earnings is more common and

present in nearly every firm (De Angelis and Grinstein 2015; Healy 1985; Sloan 1996). Furthermore, Li and Wang (2016) show that especially the use of multiyear accounting-based performance (MAP) plans increased significantly in recent years and that payouts of these plans are a significant part of the total compensation. Following the agency theory stock-based bonus plans should in theory be better suited for goal alignment as the stock price increasing actions of the agent would directly benefit shareholders who seek to maximize firm value (Kaplan and Atkinson 1989; Sloan 1996). However, rewards based on stock options introduce more risk on the risk-averse agent than he or she would prefer- leading to risk avoiding behavior. This is due the volatility of the stock market, which additionally adds noise to the link between the action of a manager and the firm's stock performance, as events outside of the manager's control can affect his wealth and are therefore not a good portrayal of his actions. For this reason, the use of earnings in bonus plans, such as earnings per share, is popular as it shields executives from the market-wide volatility of stock prices and is therefore said to better depict actions taken by the management (Kaplan and Atkinson 1989). Also, characteristics of the firm itself play a role in deciding the performance measures. De Angelis and Grinstein (2015) show that mature firms depend more on accounting-based measures, though consistent with Lambert and Larker (1987) they find that high growth firms favor market-based measures over accounting-based measures, as accounting numbers are less informative about executive's action that affect future growth opportunities. Sloan's (1996) findings also indicate that incentives compensation is shown to be more sensitive to earnings when stock returns are associated with higher market-wide volatility.

The use of short-term incentives based on earnings in compensation contracts is criticized as they create opportunities for executives to manipulate earnings metrics in order to boost their personal wealth instead of firm value (Kaplan and Atkinson 1989; Sloan 1996). Healy's (1985) study shows that bonus plans indeed encourage executives to influence or change accruals and accounting procedures to maximize their bonus and therefore engage in earnings management. A further constraint of earnings measures is that they are backward looking and do not anticipate future gains. Moreover, due to accounting rules restraints, earnings metrics cannot fully depict value changes in assets. Firms address these constraints by also including Non-GAAP performance measures in compensation contracts as there are said to deliver better indications of operating performances and forecasts (Merchant and Sandino 2009). Further criticism of short-term incentives plans is directed towards the limited horizon of managers in comparison with the firm's horizon. As executive's bonus payments are rewarded based on the firm performance of the current year, managers have incentives to focus

more on maximizing the short-term performance instead of creating long-term value, which can affect real investment decisions of the firm (Smith and Watts 1982). This could lead to executives passing over long-term positive net present value investments, as the expenses would decrease their current bonus payments and they cannot profit of expected future payoffs. Dechow and Sloan (1990) find that executives reduce R&D expenses and therefore manage investment expenses to improve the short-term performance of the firm, when they find themselves in their final years in office, with a limited time horizon in the firm. The incentives for manipulation of accounting numbers are however not limited to earnings measures as there is a correlation between earnings numbers and stock performance (Ball and Brown 1968). Sloan (1996) was the first to show that executives purposely inflate net income of the firm to influence stock-prices and therefore their expected pay-offs. More recent studies in this field show that equity incentives obtain a significant part in the total CEO compensation composition and most findings suggest that this leads to more aggressive accounting, accounting irregularities and restatements (Bergstresser and Phillipon 2005; Efendi et al 2007; Harris and Bromley 2007).

The consequences of earnings manipulation can be severe. The inflation of net income can weaken the link between compensation and performance – the pay- for- performance sensitivity is disrupted, as managers gain unjustified rewards. This issue is especially essential for cash compensation, as cash compensation is awarded more quickly and is difficult to recoup in an ex-post settling and can lead to higher pay-outs than necessary, called excess pay (Fried and Shilon 2011; Iskandar-Datta and Jia 2013). Additionally, the time managers spent on the manipulation of accounting numbers, limits the time they could spend on firm value maximizing actions, which generates even higher costs. Further, restatements due to earnings manipulation have reputational consequences and induce high costs for the firm and especially the shareholders, as investors do not trust the financial reporting of the firm anymore. Shareholders therefore have incentives to restrain opportunistic managerial behaviour to avoid losing in firm value (Fried and Shilon 2011; Iskandar-Datta and Jia 2013; LaFond and Watts 2008). Additionally, due to several grave financial reporting scandals at the turn of the millennium, the public demand for more accountability and higher financial reporting quality increased as well (Iskandar and Jia 2013).

There are several ways to address and deter the opportunistic behavior of managers. First of all, it is important to employ strong corporate governance mechanisms, which is necessary due to incomplete contracts and high monitoring costs. A mechanism of corporate governance includes legal and economic institutions that are put in place to influence

managerial decision-making in order to mitigate agency problems that arise, as stated above due to the separation of ownership and control. Good governance should reduce agency costs by preventing managers to inappropriately distribute assets to themselves and therefore assure the financiers a return on their investment. This can be achieved by appointing boards of directors and auditors, who can efficiently monitor executives and contracts for shareholders (Larcker et al. 2007; Shleifer and Vishny 1997). A more recent addition to the governance mechanism is the implementation of clawback provision in compensation contracts. The goal of these clawbacks is to discourage managers ex-ante to publish false financial statements and secondly to punish them ex-post after certain pre-set trigger events by regaining the fraudulently obtained compensation (Denis 2012; Fried and Shilon 2011). Another way firms address the agency problems is with the practice of accounting conservatism. Conservatism delivers reliable accounting data that can be used for efficient contracting and thereby benefiting all parties of the firm by reducing the ability of managers to overstate earnings and thereby constraining the fraudulent behaviour (Watts 2003). As mentioned above firms also use Non-GAAP measures in compensation contracts to address certain valuation constraints of earnings measures that are based on the Generally Accepted Accounting Principles (GAAP) and often disclose Non-GAAP earnings prominently in their quarterly earnings announcements. Prior literature however shows mixed results in regard to the informativeness and opportunistic use of Non-GAAP earnings (Curtis et al. 2014; Merchant and Sandino 2009). As clawback provisions do only cover GAAP and not Non-GAAP earnings and both clawback provisions and accounting conservatism are said to mitigate the conflict of interest between managers and other parties of the company, it is of interest to examine the interrelation and effects of these elements in the light of compensation contracting.

2.1.1 Accounting conservatism

Conservatism has been present in the accounting practice over centuries. There are two forms of conservatism – conditional and unconditional. Unconditional conservatism refers to the predetermined application of conservative accounting such as expensing advertising costs, while conditional conservatism is news dependent as for example the practice of goodwill impairment (Ball and Shivakumar 2004; Beaver and Ryan 2005). In this thesis the focus lays on conditional conservatism, where the core of the principle is to treat revenues differently than expenses (Watts 2003). More precisely, Basu (1997, p.7) defines conservatism as “the accountant’s tendency to require a higher degree of verification to recognize good news as gains than to recognize bad news as losses”. This behaviour results in an asymmetrical verification measurement for gains and losses and consequently in an understatement of the firm’s net asset

values. Watts (2003) names four explanations for the existence and need of conservatism in accounting, namely the contracting explanation, the risk of shareholder litigation, taxation reasons and preferences of accounting regulators. I will, however, focus only on the contracting explanation as it is the most relevant explanation for this thesis and connects accounting conservatism with CEO contracting.

As mentioned above, one of the main explanations for the existence and need of accounting conservatism is that conservatism promotes effective contracting and restricts the occurrence of agency problems between the parties of the firm and is therefore also reducing incentives for opportunistic managerial actions, which in turn could decrease firm value (Watts 2003). Consequently, conservatism can be used to address the agency problems discussed in the last paragraph. This is necessary as stakeholders have asymmetric pay-offs and information in comparison to the managers of the firm.

For contracts to be effective, they are in need of timely and verifiable information about the firm's performance. Regarding compensation contracts this means that for the performance measurement of the CEO, timely information can help to better depict the consequences of the actions taken by the executive and therefore reduce the negative effects of manager's limited time horizon. However, the timeliness of earnings conflicts with the verification necessary for enforceable contracting, as timely information about future pay-offs of investments must be estimated by the manager and therefore give room for manipulation. This conflict is enhanced by the limited liability of the manager and his or her short time horizon, which is especially problematic as it is costly and difficult to recoup excess payment in an ex-post settling, as mentioned in the first paragraph. Through the asymmetric verification requirement, conservatism can deliver timely and verifiable accounting numbers that can be used in contracts. Consequently, this reduces the likelihood of executives overstating and manipulating earnings for their personal wealth maximization through performance-based compensation. Additionally, in another area of firm contracting, here debt contracts, conservatism can assure that debtholders are protected by executives, by restricting dividend payments to shareholders at the expense of the debtholders. Conservatism is also linked to the corporate governance mechanism of the firm. Conservative accounting helps to recognize loss-making projects faster and therefore provides board of directors a timely warning signal to investigate and avert decreases in firm value (Watts 2003).

The Financial Accounting Standards Board, however, which is responsible for setting and communicating accounting rules and providing reporting guidance, takes a stance against

the use of accounting conservatism (prudence), despite the mentioned advantages. Prudence is seen as a violation of the neutrality approach of the FASB and in one of their statements of financial accounting concepts in 2010, the board advocates to remove conservatism from desirable characteristics of faithful accounting presentation. The argument of the FASB for that is, that the understatement of assets in one period can oftentimes lead to the overstatement of financial performance in future periods, thereby introducing a certain bias to the financial accounting reporting which should not be a characteristic of faithful presentation of accounting numbers (FASB 2010).

In summary, conservatism is said to deliver reliable accounting data that can be used for efficient contracting and thereby benefit all parties of the firm by constraining managerial bias (Watts 2003). Conservatism is however not approved and endorsed by the regulation body due to the possible bias of earnings.

The above-mentioned explanations are endorsed by various empirical and theoretical findings. Ahmed et al. (2002) show in their study that conservatism helps to reduce bondholder-shareholder conflicts over dividend distributions and that firms that use conservative accounting have lower cost of debts. Lafond and Roychowdhury (2007) examined the demand for conservatism for different degrees of managerial ownership. The authors hypothesized that when managerial ownership is low, agency problems and costs increase and as conservatism is said to address these agency problems, the demand for conservatism should rise with low managerial ownership. They find more conservative earnings for lower managerial ownership firms, which shows that shareholders demand conservative accounting to address agency problems. Additionally, LaFond and Watts (2008) find that conservatism reduces information asymmetry. Market users demand more conservative accounting when the information asymmetry between managers and outside investors is high, for example in high growth firms, as they value the provision of verifiable information. Chen et al. (2007) theoretically illustrate that the marginal cost of earnings manipulation increases, and the noise of performance measures decreases in the presence of accounting conservatism. Iyengar and Zampelli (2010) then show empirically, that conservative firms have a higher pay-for-performance sensitivity towards accounting earnings, which shows that conservatism is successful in mitigating managerial manipulations and allows conservative firms to stronger link performance to accounting measures. But there are also studies that provide evidence for the stance of the FASB. Jackson and Liu (2009) test if firms indeed use conservative accounting to engage in earnings management. The authors specifically test one item of the balance sheet, allowance,

and find that conservative allowance managing facilitates the degree to which firms manage bad debt expense, thereby providing one of the first links between earnings management and conservatism. This suggests that conservative accounting can also be used for the manipulation of earnings.

In regard to the relation between the firm's corporate governance and the use of conservatism, prior literature findings show mixed results. This is especially interesting for this thesis, as the use of clawback provisions in compensation contracts is a new mechanism of corporate governance and the effects of the implementation on accounting conservatism can be explored. Prior literature distinguishes between two possible effects. Ahmed and Duellman's (2007) findings suggest that the use of conservatism is complementary towards corporate governance as it supports board directors in reducing agency costs in companies. In the same vein, Lara et al. (2009) demonstrate that firms with a strong corporate governance mechanism demand a more conservative approach in their accounting because it facilitates monitoring. Chi et al. (2009) findings on the other hand suggest a substitutive role for conservatism, as they find that the strength of the firm's corporate governance is negatively related to accounting conservatism.

2.1.2 Non-GAAP earnings

As shown in the chapter Literature Review, the use of accounting earnings is essential for executive's compensation contracting. These findings however refer only to GAAP earnings. In recent years the disclosure of Non-GAAP earnings became quite popular, and prior literature shows mixed results regarding their usefulness. As Non-GAAP earnings are more and more used in compensation contracts as performance measures, it is of interest to test how Non-GAAP earnings in compensation contracts relate to clawback provisions (Audit Analytics 2016).

Non-GAAP earnings, also referred to as pro forma earnings, are used to supplement GAAP earnings. Managers make adjustments to GAAP earnings by excluding certain balance sheet items such as restructuring charges because they are seen as non-recurring. The advantage of these adjustments argued by managers are that the disclosure of Non-GAAP can provide a more relevant picture of the company's performance and especially expected future performance than GAAP earnings. Disclosures of Non-GAAP earnings are especially common in high-tech and service companies, where GAAP earnings cannot fully disclose all relevant information because of accounting rules restraints (Bhattacharya et al. 2003; Entwistle 2010).

Pro forma earnings are often disclosed with GAAP earnings in press releases and in recent years a rift between them has formed (Bradshaw and Sloan 2002).

In the academic press one can find two possible reasons for the disclosure of Non-GAAP earnings. For once, managers can disclose pro forma earnings to provide better forecasts for future earnings, as one-time expenses are excluded. The other possible reason is that managers use Non-GAAP earnings to disclose higher earnings and therefore increase stock prices of the firm, thereby misleading investors (Bradshaw and Sloan 2002). There are empirical findings in prior literature that support both these hypotheses.

Bhattacharya et al. (2003) and Entwistle (2010) both study the value relevance of several earnings measures. They find that pro forma earnings in comparison to I/B/E/S earnings and GAAP earnings are more strictly tied to stock prices. This shows that Non-GAAP earnings have a higher value relevance and are seen as more persistent by investors. Doyle et al. (2013) and Black and Christensen (2009) find however that managers use the discretion of Non-GAAP earnings opportunistically to meet or beat forecasts by analysts when Non-GAAP earnings are higher than GAAP earnings and that market participants only fractionally understand this opportunistic use. Curtis et al. (2014) examine the presence of transitory gains instead of expenses, to more precisely divide between the opportunistically and informative view. They find that the majority of the firms in their sample disclose Non-GAAP earnings because they want to present a better picture of the performance thereby informing the investors. Though, they also find a significant number of firms that disclose opportunistically – only if it increases investors perception about the firm's performance. In conclusion, the consequences of Non-GAAP earnings on the financial reporting quality is a debatable topic. However, Non-GAAP earnings do not only affect financial reporting but also compensation contracts. The analysis of proxy statements shows that more and more firms decide to implement Non-GAAP metrics in compensation contracts for performance-based bonus. Lahart (2016) argues that shareholders should be aware of these metrics as the use of Non-GAAP metrics can help managers to increase their bonuses. He discusses that executives can avoid lower bonus payments due to Non-GAAP earnings, as some items that are excluded reflect poor decisions of managers and are not taken into consideration and profit from the higher Non-GAAP earnings. The academic literature on Non-GAAP earnings and compensation contracts is quite limited but the study of Black et al. (2015) can deliver some relevant insights. They test how managers disclose pro forma earnings in regard of how board of directors express the use of Non-GAAP compensation metrics. When the board of directors has the discretion to compensate executives on the basis of Non-GAAP earnings, managers disclose them more opportunistically and aggressively. This is however not

the case, when Non-GAAP earnings are explicitly named as earnings metrics, which suggests that the board tries to mitigate opportunistic behaviour when relying on these specific measures. Additionally, they find that only long-term incentives plans can reduce aggressive Non-GAAP disclosure in comparison to short-term performance plans.

2.2 Clawback provisions

As illustrated in Chapter 2.1 about Executive Compensation Contracts, the separation of ownership and control in modern firms gives way to agency problems and one way to address these are incentives contracts. However, these contracts bring new problems of their own, most prominent a limited liability of managers and the opportunity to maximize their personal wealth at the expense of shareholders due to earnings manipulation and therefore unjustified excess payments. Through the discovery of the financial reporting scandals at the turn of the millennium and the limited penalties for the responsible executives there was growing public criticism and demand for more accountability. The US administration reacted and introduced the Sarbanes-Oxley-Act to reinstate the public trust in the market. Among the new regulations of SOX was the introduction of clawback provisions. These provisions then have been also established voluntarily by firm, especially after the financial crisis of 2008 (DeHaan et.al 2013; Fried and Shilon 2011; Iskandar and Jia 2013). Clawback provisions allow companies to recover unjustified compensation paid to executive managers, after the discovery of misstatements in financial statements and are therefore said to mitigate managerial opportunistic behaviour arising from said compensation payments, which makes them an effective corporate governance tool (Chan et al. 2012). This has the effect of a more direct link between the actions of the manager and his compensation (Chan et al. 2012; DeHaan et.al 2013).

Section 304 of SOX deals with the introduction of mandatory clawback provisions for public companies. It enables the United States Securities and Exchange Commission (SEC) to start a recoupment process of the incentive pay of top executives of the firm, when the firm had to do a restatement due to misconduct. However, this only applies to payments that were made during the next twelve months after the misstatement. Mandatory clawbacks were introduced as a powerful corporate governance tool, the execution of these rules, however did not fulfil the expectations of the regulators and the public. The SEC only has limited resources to engage in the complex ex-post settlements, where they also have to prove the misconduct of the executives in charge. Until 2013 they were only 7 cases processed by the SEC, where executives had to repay their received bonuses (Fried and Shilon 2011; Morgenson 2013). To strengthen the

position of the SEC, Section 954 of the Dodd–Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank) in 2010 was established. According to the added Section 10d, all public firms are required to establish clawback provisions in executive compensation contracts and if a restatement happened the firm has to recoup part of the compensation (Fried and Shilon 2011; Denis 2012). The Dodd-Frank law has however not come into effect yet but instead voluntary clawbacks are implemented by the firms and are on the rise with 92% of the S&P 500 companies implementing clawbacks by 2016 (Prescott and Vann 2018). Due to the popularity and available data I focus on voluntary clawback provisions in my thesis.

As mentioned above, clawbacks can reduce incentives for earnings manipulation by managers, which can arise from bonus driven executive compensation contracts. They serve two means, first they should discourage managers ex-ante to publish false financial statements and secondly punish managers ex-post for discovered misconduct and thereby increase the cost of earnings manipulation for managers (DeHaan et al. 2013). There are several empirical findings that support the use of clawbacks. Iskandar-Datta and Jia (2013) show in their study that firms with a history of financial misreporting experience positive stock market response after the adaption of clawbacks. Chan et al. (2012) research suggest that the adoption of clawback provisions leads to lower audit fees and to a decline in accounting restatements, which suggest that incentives for managerial opportunistic behaviour is lower after the adoption of clawbacks. This result is supported by DeHaan et al. (2013) who find that the financial reporting quality of adopter firms improved. Consistent with Iskandar-Datta and Jia (2013) they find evidence that the investors and analysts view the financial reporting as more credible after the adoption. On the other hand, the use of clawbacks can also have drawbacks and their usefulness depends on how they are enacted. Erkens et al. (2018) show that there appears to be differences in the characteristics of voluntary clawbacks regarding for example their enforcement strength and coverage, which leads to differences in their effects on manager behaviour. They construct a Deterrence Index which consists of several components such as triggering events, enforcement and coverage and afterwards divide their sample between high and low deterrent clawbacks. Between these two levels of deterrence, they find significant differences. For example, the findings of prior literature in regard to the improvement of financial reporting quality is only applicable for adopter with high deterrent clawback provisions. Further, Chan et al. (2015) show that clawbacks can induce a shift from accrual manipulation towards real earnings manipulation. Especially high growth firms that use clawbacks engage in real transaction management, such as a reduction in R&D expenses, in comparison to non-adopters. These findings show that the consequences of conservatism and clawbacks on financial

accounting and managerial behaviour in the setting of compensation contracts are similar. Hence, the examination of the relation between them should be interesting. The most relevant studies for the second part of this thesis about the sensitivity of compensation towards Non-GAAP earnings are the studies about the direct effects of clawbacks on executive compensation and the sensitivity towards GAAP earnings. Chen et al. (2015) and DeHaan et al. (2013) find an increase in total executive compensation after adoption of clawbacks. Additionally, they show that the sensitivity of executives' incentive pay is higher towards accounting earnings for adopters, suggesting that boards of directors see earnings as more reliable after an adoption and that clawbacks influence the design of compensation contracts. This stands however in contrast to the findings of Iskandar-Datta and Jia (2013), who find no evidence on changes in CEO compensation and thereby rule out modifications in compensation contracts for adopters. Interestingly, Erkens et al. (2018) show that an increase in total and in incentive compensation is higher for low deterrent adopters in comparison to the high deterrent group. So there seems to be not a clear indication how exactly clawbacks affect the size of executive compensation. However, it seems clear that the adoption of clawbacks increases the sensitivity of the pay-for-performance for GAAP earnings possible due the above-mentioned increase in the cost associated with earnings manipulations and therefore higher credibility. This has consequences for the other accounting measure – Non-GAAP earnings. As pro forma earnings are not subject to the restraints of clawbacks like GAAP earnings are, managers can opportunistically use them. Kyung et al. (2013) find that executives of firms disclose Non-GAAP earnings more frequently in comparison to non-adopters and that the quality of these earnings decrease, more precisely that Non-GAAP earnings are used more aggressively. This suggests that managers try to avoid the restraints of clawbacks on GAAP earnings by focusing on Non-GAAP earnings. This is especially interesting, as stated-above Non-GAAP earnings are also used for compensation contracting and it is therefore relevant to explore not only the sensitivity towards GAAP earnings but also Non-GAAP earnings in compensation contracts to get a full picture of the consequences of clawback provisions on executive compensation contracts.

3. Hypothesis Development

In this chapter I illustrate the underlying theory and hypotheses of my thesis. The basis for the hypotheses development is the theoretical framework described in chapter 2 of this paper.

As established in the theoretical framework, the separation of ownership and control in a firm has created certain agency problems and costs in modern firms. As both the agent and the principal try to maximize their individual utilities, their goals are not fully aligned, and the actions of the agent are expected to be not in the best interest of the principal. In order to reduce these costs and discipline self-serving behaviour of managers, the principal has to both offer incentives for goal alignment between the parties and monitor actions taken by the manager. One way for firms to incentivize executives is through pay-for-performance compensation contracts, which should reward actions of the management that are in the best interest of the firm. These incentive compensation contracts however introduce problems of their own for the firm, as especially short-term performance measures entice managers to maximize their own wealth instead of firm value (Jensen and Meckling 1976; Kaplan and Atkinson 1989). To address these constraints, firms developed several governance mechanisms such as supervision by board of directors or auditors, the use of conservative accounting or long-term incentives plans (Merchant and Sandino 2009). Through the discovery of the financial reporting scandals at the turn of the millennium and the limited penalties for the responsible executives there was however a growing public criticism and demand for more accountability and stronger restraining mechanisms to reduce executive opportunistic behaviour. Clawback provisions were therefore implemented to address the concerns of the public as a new governance tool. As clawbacks allow companies to recover unjustified compensation paid to executive managers after the discovery of misstatements in financial statements, they are said to mitigate managerial opportunistic behaviour arising from above mentioned incentive compensation payments actions (Chan et al. 2012; Iskandar and Jia 2013). Regarding the popularity of voluntary clawback adaption, it is of interest to research the effects of this new governance tool on other areas of compensation contracts. First, I examine the indirect effects of the adoption on another provision that is used for effective contracting, the practice of conservative accounting. And then secondly, I test the direct implication of clawback adaption on the pay-for-performance sensitivity of compensation towards Non-GAAP while controlling for GAAP earnings.

The empirical interrelation between accounting conservatism and corporate governance mechanism is not clear. The choice of conservative accounting can either be complementary towards corporate governance or serve as a substitutional mechanism. As clawback provisions

in compensation contracts are a new mechanism of corporate governance, the effects of the implementation on accounting conservatism can be explored in different directions.

One explanation for the existence and need of accounting conservatism is that conservatism promotes effective contracting and can therefore address the problem of asymmetric information between managers and debt- and shareholders as well as the limited liability of managers. To be effective, contracts are in need of timely and verifiable information about the firm's performance (Watts 2003). As clawbacks are a part of compensation contracts and contracting is facilitating accounting conservatism, I would expect an increase of conservatism with the adoption of clawback provision and therefore following Basu (1997) an increase of timely recognition of losses. On the other hand, clawback provisions are said to increase effective contracting themselves by strengthening the link between compensation and action of managers and making them more liable for their fraudulent actions (Chan et al. 2012; Iskandar and Jia 2013). This effect could lead to a decreased need of conservatism, as contracting is a main explanation for the use of conservative accounting and clawback provisions could substitute the need for conservatism. Following Chan's et al. (2012) interpretation of the signalling theory, the adaption of clawback provisions does not necessarily has to affect accounting conservatism. They argue that firms could use the adoption of clawback provisions to signal to market participants that they already employ effective corporate governance mechanisms and a high financial reporting. Therefore, the clawback adoption would not change the degree of conservatism in the firm as it would not affect the behaviour of the manager. Following this argumentation, I propose the hypothesis in the null form.

- 1) H_0 : The degree of accounting conservatism is not influenced by the adaption of voluntary clawback provisions in compensation contracts.

The second hypothesis centres on the reliance on specific accounting measures in compensation contracts. The use of Non-GAAP earnings measures in incentive compensation plans of managers is increasing. Clawback provisions however, do not cover pro forma earnings and the earnings are therefore not subject to the same constraints as GAAP earnings. To get a full picture of the consequences of clawback provisions on executive compensation contracts, it is important to not only examine the influence on GAAP earnings but also on Non-GAAP earnings measures, more specific for this thesis the changes in compensation sensitivity towards pro forma earnings after clawback adoption. Prior studies find that after clawback implementation the financial reporting quality increased and consequently the sensitivity of compensation towards GAAP earnings as well, which suggests that boards of directors see

earnings as more reliable after an adoption and that clawbacks influence the design of compensation contracts (Chen et al. 2014; DeHaan et al. 2013). As the costs of misstating earnings increases, due to the adaption of clawbacks, managers try to evade these restraints by shifting attention towards Non-GAAP earnings. This leads to a more frequently and more aggressive disclosure and suggests that managers disclose Non-GAAP earnings with lower quality in the light of clawback adoption (Kyung et al. 2013). Additionally, Holmstrom (1997) and Lambert and Larcker (1987) show that the choice of a performance measure and the weight placed on it depends on the precision of the measure itself. Drawing from the above-mentioned literature I therefore argue that through the higher quality of GAAP earnings and the subsequent opportunistic use of Non-GAAP earnings, the compensation sensitivity towards Non-GAAP earnings should decrease after clawback adaption. Yet, the manager also has to be compensated for the higher risk of possible financial penalties that clawbacks introduce, which could lead to an increase in compensation which is not subject to clawbacks, here Non-GAAP earnings (Dehaan et al. 2013; Prendergast 1999). Additionally, powerful CEO's can influence the weight attached to performance measures and therefore induce the compensation committee to rely more on the better performing measure in their assessment. So, executives themselves could demand that their compensation is more tied to Non-GAAP earnings instead of GAAP earnings (Morse et al. 2008). Hence, after the adaption of clawbacks I could examine a higher sensitivity of compensation to Non-GAAP earnings. Consequently, I make no directional prediction for the sensitivity of compensation after clawback adaption and display the second hypothesis in the null form.

- 2) H_0 : Compensation sensitivity towards Non-GAAP earnings does not change after the adaption of clawback provisions in compensation contracts.

4. Methodology

4.1 Data and Sample Selection

For the analyses I employ data from several databases such as Compustat, CRSP, Execucomp, ISS (former Risk Metrics) and data about clawbacks and Non-GAAP earnings obtained from my supervisor Dr. Michael Erkens.

The data set about clawbacks contains a random sample of 4870 annual firm-year observations by 666 individual firms taken from the Russell 3000 Index over the period of 2007 to 2016. For my research design I require at least two years of data pre and post clawback adoption. Therefore, I only allow treatment firms in the sample that implemented clawbacks prior the year 2014 to ensure a post period of at least two years. In agreement with my supervisor I also presume that there was no clawback use for firms prior to the first implementation year in the sample which helps to enhance my sample period to 2002 and therefore ensures a sufficient pre-adaption period. This is conclusive with prior research, as Iskandar-Datta and Jia (2013) find that adaption started in 2005 but stayed at a low level until 2007. For the testing of my first hypothesis I match the initial set with the extended time frame with annual data about firm characteristics from Compustat. Next, I need additional information about stock prices and return, which is gathered from CRSP. Information about CEO compensation from Execucomp and an additional data set about Non-GAAP, received from my thesis professor, is needed for the second hypothesis. For both analyses, I add governance characteristics from ISS (former RiskMetrics). As the ISS data is only available from 2007 on, I conduct a second analysis for both hypotheses with the specific governance control variables as a robustness check. Additionally, firms in the financial sector are excluded for all analyses as they were mandated by the federal bailout program to implement clawbacks (Chan et al. 2012).

The initial clawback data set consists of 666 firms over the given sample period. Through the unavailability of data and specific requirements of the research design the sample size is reduced to 285 and respectively 279 firms that are applicable for my analysis about the association between conservatism and clawbacks. A more detailed overview about the sample and data selection is presented in Table 2 in the Appendix. For the second hypothesis the sample is further reduced due to data unavailability. The final sample consists only of 46 firms, that have sufficient data for the analysis.

4.2 Research Design

For the examination of my two hypotheses I use the same empirical approach. First, I rely on a commonly used method – the difference-in-differences design to examine the changes in the variable of interest before and after the implementation of clawbacks. This design also allows me to account for time-invariant variables and common macroeconomic trends and therefore reduces the concerns about omitted variable bias. For the control firms I generate a random implementation date and I require at least two years of data that has to be available for both the pre and post implementation period to assure reasonable comparability. Further, I employ several additional empirical methods to mitigate the risk of possible bias. Depending on the outcome variable in the analysis I include various control variables. As outliers can bias the findings, I winsorize all continuous control variables at the 1st and 99th percentiles in my sample, so observations that are more extreme than these percentiles are set at the same value. Additionally, I add year and Fama-French industry fixed effects to control for differences resulting from industry regulations and competition as well as macroeconomics shocks. Lastly, I cluster the standard errors of the regression by firms. These methods should minimize the bias resulting from omitted variables and macroeconomic influences and make my results robust.

Due to the voluntarily decision nature to adopt clawback provision I address the potential endogeneity concerns in additional tests as a robustness check for my findings. Following prior research, I match control firms on several key characteristics with treatment firms using the propensity-score method. By matching treatment firms with their closest control firms, I can control for characteristics that influence the decision to adopt clawback provisions. I match the firms in the year before clawback adoption to ensure a sufficient comparability.

4.2.1 Accounting Conservatism

Following my first hypothesis I aim to examine the influence of clawback provisions on conditional conservatism. There are several key measures for conservatism used in prior research, with the most popular being the Basu model.² The underlying idea of the Basu regression is that due to conservatism bad news are reflected earlier than good news, leading to an asymmetric timeliness of earnings. By regressing stock returns (*Returns*), which proxy either for good or bad news, on earnings (*EP*) the formula shows how timely the news contained in the stock returns are recognized in the earnings of the firm. Due to the asymmetric timeliness notion a higher association between negative returns and earnings is expected when firms

² Wang et al. (2008) summarize the most common measures of conservatism. They find that the Basu formula is the most popular (out of 53 papers on conservatism, 36 papers use the Basu formula).

engage in conservative accounting (Basu 1997). Despite the popularity of the Basu measure, concerns have been raised about limitations and possible bias in the measure.³ One limitation concerns the reverse regression of earnings on returns-concept of the measure. Dietrich et al. (2005) argues that earnings news, for example through earnings announcements, can affect the returns and bias the results. Ryan (2006) however suggests that the implied biases are likely to be small. Yet, I still follow the suggestion of Ryan (2006) who recommends mitigating the earnings news distortion by using fiscal year returns instead of returns measured nine months before and three months after the fiscal year end. Further, I employ an additional conservatism measure to increase the internal validity of my research. Despite its limitations prior research findings suggest that the Basu measure provides solid results (Lara et al. 2009; Nikolaev 2010; Roychowdhury and Watts 2006). Therefore, I run the following asymmetric earnings timeliness notion of Basu (1997) extended by Nikolaev (2010), for my analysis.

$$\begin{aligned} \frac{E_t}{P_{t-1}} = & \alpha_0 + \alpha_1 D(RET_t < 0) + \alpha_2 RET_t + \alpha_3 D(RET_t < 0) RET_t + \beta_0 Clawback \\ & + \beta_1 D(RET_t < 0) Clawback + \beta_2 RET_t Clawback + \beta_3 D(RET_t < 0) RET_t Clawback \\ & + \gamma_0 After_t + \gamma_1 After_t Clawback + \gamma_2 D(RET_t < 0) Clawback After_t \\ & + \gamma_3 RET_t Clawback After_t + \gamma_4 D(RET_t < 0) Clawback After_t \\ & + \gamma_4 D(RET_t < 0) RET_t Clawback After_t + Control Variables + Fixed Effects \\ & + \varepsilon_t \end{aligned}$$

Where the dependent variable *EP* is measured as income before extraordinary items divided by the market value of equity at the beginning of the year. The variable *Returns* shows the monthly stock market returns compounded over twelve months starting at the beginning of the year and *D* is an indicator function which equals one if *Returns* is negative or zero and equal to zero if positive. The independent variable *Clawback* is an indicator function that equals one in case the firm uses clawback provisions and otherwise zero. For the difference-in-differences analysis I have to include *After*, which takes the value of one for firm-years after a company implements clawbacks and zero otherwise. The coefficient α_3 captures the underlying level of conservatism and is expected to be significantly positive in the presence of conservatism. The interaction term β_3 shows the differences between treatment and control group before clawback adoption. Of primary interest is the coefficient of the interaction term γ_4 - which shows the difference in the degree of conservatism of the treatment group after the adaption of clawbacks in relation to the control group and in relation to the degree of conservatism in the years before

³ Ryan (2006) summarizes several limitations of the Basu measure and gives possible solutions for the improvement of the measure

the adoption. As the effects of clawback provisions on conservatism are not clear yet, I cannot make a prediction about the value of this coefficient. A significant positive coefficient would suggest an increase in the level of conservatism and support the complementary notion. A negative coefficient would on the other hand show a decreased need for conservative accounting and therefore support the substitutional notion of conservatism in regard to clawback provisions.

In addition to the Basu Model I also employ the asymmetric accruals-to-cash-flow measure by Ball and Shivakumar (2005) to ensure that my results are not influenced by the measurement choice of conservatism. This is consistent with Lara et al. (2009) and Nikolaev (2010), who also use the ACC model as an alternative conservatism measures to address the validation concerns regarding the Basu measure. The fundamental model of the ACC measure is similar to the Basu measure as it is also based on the asymmetric timeliness notion of earnings. However, Ball and Shivakumar (2005) use a regression consisting of accruals and cash flows instead of earnings and market returns, which is therefore also applicable to non-listed firms. They follow the notion that accruals and operational cash flow are consistently negatively correlated as found in Dechow et al. (1998) but through the different verification requirements for good and bad news there exists an asymmetry in accruals as well, which weakens the negative correlation between accruals and cash flows. This leads to a positive instead of a negative relation between accruals and cash from operations in bad news periods. I employ the following asymmetric accruals-to-cash-flow measure by Ball and Shivakumar (2005).

$$\begin{aligned}
Accruals = & \alpha_0 + \alpha_1 D(CFO_t < 0) + \alpha_2 CFO_t + \alpha_3 D(CFO_t < 0)CFO_t + \beta_0 Clawback \\
& + \beta_1 D(CFO_t < 0) Clawback + \beta_2 Ret_t Clawback \\
& + \beta_3 D(CFO_t < 0)CFO_t Clawback + \gamma_0 After_t + \gamma_1 After_t Clawback \\
& + \gamma_2 D(CFO_t < 0)ClawbackAfter_t + \gamma_3 CFO_t ClawbackAfter_t \\
& + \gamma_3 D(CFO_t < 0)ClawbackAfter_t + \gamma_4 D(CFO_t < 0)CFO_t ClawbackAfter_t \\
& + Control Variables + Fixed Effects + \varepsilon_t
\end{aligned}$$

The variable *Accruals* is calculated as the net income before extraordinary items less operating cash flows. Both *Accruals* and *CFO*, defined as cash from operations, are scaled by the beginning of period total assets. *D* is an indicator variable turning one if *CFO* is negative and zero otherwise. Consistent with the notion of a negative correlation between cash flows and accruals the coefficient of *CFO* is expected to be significantly negative and the coefficient α_3 of the interaction term *D***CFO* to be significantly positive in the presence of conservative

accounting. The interaction term β_3 shows the differences between treatment and control group before clawback adoption. Of primary interest is again the coefficient of the interaction term γ_4 . It shows the difference in the degree of conservatism of the treatment group after the adaptation of clawbacks in relation to the control group and in relation to the degree of conservatism in the years before the adoption. Just like for the Basu Model I cannot make a prediction about the sign of this coefficient.

A concern of both regressions is the possibility that the relation between clawbacks and conservatism is affected by factors omitted from my analysis. It is therefore necessary to control for common determinants of conservatism and clawback adoption such as major firm-specific and governance-specific characteristics. The selected control variables are in line with prior research findings and are described next.

I use the variable *Size* to control for effects due to differences in size of the sample firms. LaFond and Watts (2008) for example find that larger firms generate more public information and therefore have lower information asymmetry than smaller firms, which negatively affects the use of conservatism. Givoly et al. (2007) however argue that due to political costs larger firms induce more conservative accounting. Additionally, Babenko et al. (2017) find that clawbacks are more likely to be adapted by larger firms which is consistent with the notion that larger firms are more complex and therefore place higher demands on governance structures (Lara et al. 2009). The size of the firm is computed as the natural logarithm of total assets. I also control for the performance of the firm with the variable *Return on Assets*, which is calculated as income before extraordinary items divided by total assets and an indicator variable *Loss* if a firm reports negative net income. According to Babenko et al. (2017) firms that perform well are more likely to adapt clawbacks. Watts (2003) names litigation risk as one of the reasons for applying accounting conservatism. Through the conservatism induced understatement of net assets, firms can reduce the cost of litigation procedures. I therefore include the dummy variable *Tech*, which is one for technology firms and zero otherwise to control for firms with high litigation risk, as technology firms have higher risk of litigation in comparison to other industries.

I include the variable *Leverage* as Ahmed et al. (2002) find that higher leveraged firms experience greater bondholder and shareholder conflicts, and this increases the demand for conservatism. The leverage of the firm is computed as debt divided by total assets. Beaver and Ryan (2005) and Roychowdhury and Watts (2006) show that unconditional conservatism is linked to the level of conditional conservatism. To control for the influence of unconditional conservatism I therefore include the market-to-book ratio (*Market-to-Book*) as a proxy for

unconditional conservative accounting, defined as the market value of equity scaled by the book value of equity.

In addition, I also control for the strength of the corporate governance as it is associated with clawback implementation and conservative accounting (Babenko et al. 2017; Lara et al. 2009). To account for the level of corporate governance I employ two characteristics about the independence of the board. When the CEO is also the chairman of the board he has greater influence on the other directors and the independence of the board is limited. Therefore, I control for the higher influence of the CEO by including the variable *CEOChair* which is an indicator variable that takes the value of one if the CEO is also chairman of the board and zero if not. The second factor to control for the governance function of the firm is the board composition. Independent directors are associated with a higher demand for conservatism and stronger corporate governance mechanism (Ahmed and Duellman 2007). Therefore, I include the variable *Independent*, conducted as the percentage of independent directors on a firm's board of directors.

4.2.1 Compensation Sensitivity

The second analysis is examining the change in compensation sensitivity towards Non-GAAP earnings after the adaption of clawback provisions in compensation contracts. Two recent papers have already studied the change in compensation sensitivity towards GAAP earnings after clawback implementation. As Non-GAAP earnings are getting more common as performance measures in compensation plans I add to this literature by examining the influence on Non-GAAP sensitivity while controlling for GAAP earnings. Similar to DeHaan et al. (2013) and Chen et al. (2015) I implement the following multivariate pay-for-performance analysis where I regress the cash compensation of the CEO on the performance measures of interest.

$$\begin{aligned} \logCashPay = & \alpha_0 + \alpha_1 After + \alpha_2 Clawback + \alpha_3 ClawbackAfter + \beta_0 EPS_NonGAAP \\ & + \beta_1 EPS_NonGAAPClawback + \beta_2 EPS_NonGAAPAfter \\ & + \beta_3 EPS_NonGAAPAfterClawback + \beta_4 EPS_GAAP + \beta_5 EPS_GAAPClawback \\ & + \beta_6 EPS_GAAPAfter + \beta_7 EPS_GAAPAfterClawback + Control\ Variables \\ & + Fixed\ Effects + \varepsilon_t \end{aligned}$$

Where the dependent variable *LogCashPay* is the logarithm of annual cash compensation, which is calculated as the total amount out of bonus, salary and non-equity incentive payments of the CEO. To catch the performance of the firm I use annual earnings per share for both GAAP (*EPS_GAAP*) and Non-GAAP earnings (*EPS_NonGAAP*).

The independent variable *Clawback* is an indicator function that equals one for the treatment group and zero for the control group. *After* indicates one for firm-years after a company implements clawbacks and zero otherwise. In this regression the coefficient β_0 captures the underlying sensitivity of CEO compensation towards Non-GAAP performance, which is expected to be positive if compensation is on average sensitive to Non-GAAP measures. The interaction term β_3 then captures the difference in the degree of sensitivity of the treatment group after the adaption of clawbacks in relation to the control group and in relation to sensitivity in the years before the adoption. As the hypothesised implications for the sensitivity of compensation towards Non-GAAP earnings are contrary, I cannot make a prediction about the value of this coefficient. A positive coefficient would suggest an increase in the pay-for-performance sensitivity after clawback adoption relative to control firms and prior adoption years over the sample period. This would support the notion that managers have to be compensated for the higher financial risk imposed by the adoption of clawbacks by an increase of compensation that is not affected by clawback provisions- Non-GAAP earnings . A negative sign would be in line with a decrease in sensitivity and show that the higher quality of GAAP earnings and the subsequent opportunistic use of Non-GAAP earnings does affect the relation between Non-GAAP earnings as a performance measure and compensation negatively.

Control variables for this analysis include again firm size (*Size*), the ratio of leverage (*Leverage*), profitability of the firm (*Loss* and *Return on Assets*) and the governance characteristics (*CEOChair* and *Independence*), which are all related to the implementation of clawback or compensation. Furthermore, I add variables that are necessary to control for specific influences regarding Non-GAAP earnings. Earnings of firms with a high amount of intangible assets have a lower information value and firms are consistently more likely to publish Non-GAAP earnings, which can also affect the use of Non-GAAP earnings in compensation measures (Lougee & Marquardt, 2004). I therefore control for the level of intangibles by using the variable *Intangibles* defined as intangible assets scaled by total assets. Similar to high intangible assets firms, firms with high growth opportunities also have lower information content regarding their firm value and are more likely to produce Non-GAAP earnings than low growth firms. I proxy growth opportunities with the variables *Sales Growth*, as one-year growth of sales, and the market to book ratio (*Market-to-Book*).

5. Empirical Results

5.1 Descriptive results

5.1.1 Accounting conservatism

In table 3 I provide the frequency of clawback adoption for the firms over the sample period. The increase in the use of clawbacks in the sample is consistent with the increasing popularity shown in the Equilar 2016 study (Prescott and Vann 2018). Specifically, firms that use clawbacks in their compensation contracts increased from 13.7% to 58.7% (58.6%) between 2007 and 2016 in the AT (ACC) sample.

Table 4 contains the descriptive statistics of the variables used in the Basu analyses about the association between clawback provisions and conservative accounting. Panel A of the table provides the summary statistics of all firms in the sample period and Panel B and C show the statistics separately for adopter and non-adopter firms. The results of the descriptive statistics are in line with the findings from related studies such as Nikolaev (2010) and Lara et al. (2009). Average firm size equals 7.23 and 21.4 % of the firms report a negative net income. 30% of the firms in this sample are set in the technology industry and the variable *Return on Assets* is positive for the average firm in the sample. The mean market-to-book ratio is 3.24 which shows that conservatism is present in the sample firms (Lara et al. 2009). The results of the Welch T-test show that several firm characteristics differ between clawback adopter and non-adopters. Consistent with Babenko et al. (2017) I find that clawback adopter firms are on average larger in size and more profitable. The descriptive statistics of the ACC measure are presented in table 5 and show similar statistics for the control variables. Similar to Lara et al. (2009) I also find a slightly negative coefficient for the variable *Accruals* and slightly positive coefficient for the cash flow from operations (*CFO*).

To provide a preliminary overview about the association between the key variables used in the regression I conduct the Pearson and Spearman correlation matrix. The Basu measure is shown in table 7. The dependent variable *EP* is significantly positively associated with *Return on Assets* and negatively with *Loss*. The independent variable *Clawback* however is only significantly and positively associated with the dependent variable in the Spearman Matrix. The correlation between clawbacks and the control variables are however all significant. The positive association of *Return on Assets* and *Size* and the negative association of *Loss* with *Clawback* further supports the findings in the descriptive statistics that adopter firms are on average larger in size and more profitable. The results for the ACC measure can be found in

table 8. The correlation matrix shows the expected significant negative relation between *Accruals* and cash flows (*CFO*) as well as it shows that the independent variable *Clawback* is significantly associated with all control variables, except for the variable *Tech*. The independent variable *Clawback* is similar to the AT measure only significantly and positively associated with the dependent variable in the Spearman Matrix. Additionally, I find for both measures that the correlations within the independent variables are not high enough to cause concerns of multicollinearity.

5.1.2 Compensation Sensitivity

In table 6 the descriptive statistics of the variables used in the analysis about the association between clawback provisions and the compensation sensitivity towards pro forma earnings are presented. The sample size decreased significantly for this test due to data unavailability. In total there are only 46 firms available to test the hypothesis, which could bias the results. In addition, I had to take the annual mean of the quarterly observations of Non-GAAP earnings instead of the last quarter of the fiscal year to avoid losing more sample firms, which could lead to further bias.

The logarithm of annual cash payments is on average 7.34 and the market-to book value is quite high with a mean value of 5.01, which suggests high growth opportunities. The ratio of intangible assets to total assets is 26.6% and 13.7% of firms report on average a negative net income. Similar to the conservatism sample set the clawback adopter firms in this sample, are on average larger in size and more profitable. However, there are no significant differences in the percentage of loss making firms between them.

To show the univariate association between the key variables used in the regression I also employ the Pearson and Spearman correlation matrix for this sample. The results are presented in table 9. Both the performance measures, based on GAAP and Non-GAAP numbers, are significantly positively correlated with the dependent variable, which shows that compensation is partially based on the firm's performance. Additionally, GAAP and Non-GAAP are highly correlated with each other, which is logical due to the fact that Non-GAAP earnings are based on GAAP earnings. The size and profitability of a firm has a positive influence on the compensation of the CEO, negative net income and high intangible assets are negatively correlated with compensation. The independent variable clawback has a positive and significant association with the dependent variable as well. Again, I find no correlations within the independent variables that are high enough to cause concerns of multicollinearity.

5.2 Main regression results

5.2.1 Accounting conservatism

In order to provide an answer on how the adaption of clawback provisions is influencing conservative accounting, I employ two conservatism measures, the AT and ACC model including selected control variables. The sample period is set from 2002 to 2016. The regression results are presented in table 10. Column 1 shows the findings for the Basu conservatism proxy and column 2 the results of the Ball and Shivakumar accruals measure. The coefficient α_3 of the interaction term $D*Returns$, which captures asymmetric timeliness in the Basu model, is as expected significantly positive and shows that conservatism is present in the sample firms. This is in line with the findings of prior research (Basu 1997; Nikolaev 2010, Lara et al. 2009). Lara et al. (2009) point out that difference in size between the coefficient of $Returns$ and $D*Returns$ shows that negative news is reflected in a more timelier manner than positive news. The Ball and Shivakumar ACC measure supports the presence of conservative accounting in the sample firms. The coefficient of the variable CFO is significantly negative, which shows the negative relation between accruals and cash flows. The interaction term $D*CFO$ on the other hand is positive and significant and therefore provides proof of a positive association between accruals and cash from operation in bad news periods. The coefficient of interest γ_4 -the difference-in-differences estimator- is however only significant for the ACC conservatism model. The regression results of the ACC measure display a significantly negative coefficient suggesting a decrease in timely loss recognition and therefore conservative accounting after clawback adoption. This is in line with the notion that conservatism is a substitute for corporate governance mechanisms. More specifically, that clawback provisions increase effective contracting themselves by strengthening the link between compensation and action of managers. Therefore, leading to a decreased need of conservatism, as contracting is a main explanation for the use of conservative accounting. (Iskandar and Jia 2013; Watts 2003). The coefficient of interest in the Basu measure displays a negative coefficient as well, which is however not significant. It is not clear why only the ACC measure shows significant results and not the AT model. I could only interpret these findings with the already mentioned limitations of the Basu Model which could have affected the results and that the two models capture conservatism differently. A good indication about the reliability and validity of the different measures is the explanatory power of the model. The ACC model has a higher explanatory power than the AT model as shown with the value of the adjusted R^2 , which could militate in favour of the ACC model and support the finding of a decrease in conservatism after clawback

adoption. A further examination of this issue however is beyond the scope of this thesis and should be of interest for future research.

As mentioned in chapter 4, I perform the main regression tests again with additional control variables for the corporate governance characteristics of the firms. The results are presented in the table 12. Due to the data unavailability in the ISS database the sample period is limited to the years between 2007 and 2016. This has the consequence of a reduced sample size. Similar to the primary results of the first regressions I do not find a significant relation between accounting conservatism and clawback provisions in the Basu measure, which coefficient of interest even turns positive and the explanatory power of the test decreases as well. The regression results for the ACC measure stay significant and the coefficient of interest y_4 becomes more negative. The value of the interaction term $D*Returns$, which captures the level of conservatism, however becomes negative. The results could be affected by the smaller sample size and therefore be biased. As a robustness test, I will therefore only replicate the main regressions with a propensity-score matched sample to avoid the unnecessary reduction of sample years and firms.

5.2.2 Compensation Sensitivity

In order to examine the change in compensation sensitivity towards Non-GAAP earnings after the adaption of clawback provisions in compensation contracts I implement a multivariate pay-for-performance analysis where I regress the logarithm of the annual cash compensation of the CEO on the performance measures of interest. The regression results are presented in table 11. Both coefficients of the performance measures are not significant as expected, despite a significant correlation with the dependent variable in the univariate tests. The coefficient of the Non-GAAP measure even shows a negative sign. This could be due to the small sample size and the influence of the control variables or the high correlation between the two earnings measures. I additionally run a baseline regression without control variables, which does not affect the explanatory power of the model strongly. The coefficient of Non-GAAP then turns significant and positive. However, for both regressions I do not find a significant association between clawback adoption and change in compensation sensitivity towards Non-GAAP measures as the coefficient of interest β_3 is not significant. I therefore cannot reject the null hypothesis for this test. The coefficient is positive which in case of significance would indicate a stronger correlation between compensation and Non-GAAP measures after clawback adoption in comparison to the control group and would support the notion that managers have to be compensated for the imposed financial risk of clawback provisions by increasing compensation which is not subject to clawbacks, here Non-GAAP earnings. However, as there

is no significant association the findings provide no further proof for this theory. For GAAP earnings I find a significant positive value only in the baseline regression, which shows that the pay-for-performance relation for GAAP earnings is strengthened after clawback adoption. This is consistent with findings of Chen et al. (2015) and DeHaan et al. (2013) and suggests that boards of directors see GAAP earnings as more reliable after an adoption and favour them as performance measures. So, the adoption of clawback provisions in this sample does partially seem to affect the pay-for-performance relation for GAAP earnings, however not Non-GAAP earnings. An explanation for this could be that executives get compensated for the additional risk by an increase in total compensation, as found by Dehaan et al. (2013) and Erkens et al. (2018) and the board does not change the reliance on Non-GAAP measures. Supporting this presumption is the finding of DeHaan et al. (2013), that the increase in total compensation is primarily due to a higher base salary, which is normally not affected by clawback provision. However, my findings could be influenced by the relatively small sample size and the computation of the Non-GAAP earnings. A chance for future research would be to test this association again with sufficient data availability. Due to the small sample size I also cannot conduct the additional regression with governance control variables.

5.3 Robustness test

As a robustness test I repeat the main regressions about the association between clawback provisions and conservative accounting with a propensity-score matched sample. Due to data unavailability and limited sample size the test is not possible for the second part of my thesis covering the relation of compensation sensitivity with Non-GAAP earnings.

As shown in the descriptive statistics several firm characteristics are significantly different between clawback adopters and non-adopter firms. Following prior research, I match control firms on several key characteristics with treatment firms using the propensity-score method. I include firm size (*Size*), the ratio of leverage (*Leverage*) and profitability of the firm (*Loss* and *Return on Assets*), which are said to determine clawback adoption. By matching treatment firms with their closest control firms, I can control for characteristics that influence the decision to adopt clawback provisions (Dehija and Wahba 2002). I generate a random implementation date for the control groups and match, both treatment and control firms, in the year before adoption to ensure a sufficient comparability. The matching model consists of a logit regression with the dependent variable being an indicator variable that is one for firms that use clawbacks during the sample period. The maximum propensity score difference allowed is 0.08 to ensure a close and reasonable match. The matching process results in 226, respectively

224, matched pairs of treatment and control firms for the AT and ACC regression. The results of the additional test are presented in table 13 and are similar to the main findings. The coefficients α_3 of the interaction terms $D*Returns$ and $D*CFO$ are significantly positive for both measures and show that conservatism is present in the sample firms. The γ_4 coefficient of the Basu measure is still insignificant and turned slightly positive but the coefficient of the ACC measure is again significant and negative. This suggests that the main results were not affected by the self-selection bias associated with the voluntary decision to implement clawbacks and that the Basu measure does not seem to be the best fit for this particular sample. The ACC measure displays significant results during several regression tests with a high explanatory power and thereby provides proof for the notion that conservatism is substitutional to corporate governance and decreases after clawback adoption. Nevertheless, as only one model produces significant results my findings should be viewed with caution.

6. Discussion and Conclusion

This thesis examines the effects and consequences of the implementation of clawback provisions in executive compensation contracts. Regarding the popularity of voluntary clawback adoption, it is of interest to have a look at the effects of this new governance tool on other areas of compensation contracts. First, I examine the indirect effects of the adoption on another provision that is used for effective contracting, the practice of conservative accounting. Secondly, I test the direct implication of clawback adaption on the pay-for-performance sensitivity of compensation towards Non-GAAP and GAAP earnings.

My analyses are based on a random sample of public US firms from the Russell 3000 Index with information about clawback provisions. For the first hypothesis I employ two conservatism measures and find a significant negative relation between conservatism and clawback adoption in one of them. The negative relation supports the notion that the use of conservatism is substitutional to corporate governance. To be more specific, clawback provisions seem to increase effective contracting by strengthening the link between compensation and action of managers which leads to a decreased need of conservatism in the sample firms. To test the second hypothesis about the association between compensation sensitivity and Non-GAAP earnings after the adaption of clawback provisions I employ a multivariate pay-for-performance analysis where I regress the cash compensation of the CEO on GAAP and Non-GAAP earnings. I could not find proof for a change in compensation sensitivity towards Non-GAAP earnings after clawback adoption. An explanation for this could be that executives get compensated for the risk imposed by clawbacks, through an increase in base salary as found by Dehaan et al. (2013).

This thesis contributes to the growing literature on clawback provisions by accessing the consequences of clawback adoption on different areas of compensation contracts. I am able to examine the link between conservative accounting and clawback provisions, which has not been previously established. I find evidence for a substitutional association between them, which is especially interesting for The Financial Accounting Standards Board organization which favours a neutral stance on financial reporting over conservatism. The decrease in conservatism after clawback adoption could also be of interest for market participants as a decrease in conservatism could lead to more bondholder-shareholder conflicts over dividends as found in Ahmed et al. (2002). The thesis also contributes to the literature on executive compensation and use of accounting information as performance measures. I extend prior research, which examines the pay-for-performance sensitivity towards earnings, by examining the compensation sensitivity towards Non-GAAP earnings instead of only GAAP earnings.

This is of interest as Non-GAAP earnings are more and more used in compensation contracts as performance measures and their usefulness is still under debate.

Overall, the findings provide new insights in how clawback adoption affects the financial reporting and compensation decisions of firms and could be relevant for the current discussions on executive compensation design in the light of the decision to implement mandatory clawback provisions by the US government. The findings should therefore be of interest for market participants, standard setters and regulators and taken into consideration in the development of federal mandatory clawback laws.

My study is subject to some limitations. First, I only take into account the implementation and use of clawbacks contained in a compensation contract. As shown in Erkens et al. (2018), the influence of clawbacks also depends on the design and deterrence of the provision and there are significant differences between high deterrent and low deterrent adopters. Due to the scope of this thesis and data availability, however, I cannot measure the strength of each clawback imposed. Secondly, to avoid reducing my sample observations, I assume for all firms in the sample that there was no clawback adoption prior to their first appearance in the data set. This is conclusive with prior research, as Iskandar-Datta and Jia (2013) find that clawback adoption started in 2005 but kept at a low level until 2007. However, my choice has the consequence that if a firm used clawbacks prior to the point the data suggests, I classify them as non-adopters, which could bias my results. Additionally, I can only work with a small sample size for my second hypothesis due to data unavailability. This could bias my results and limits the external validity of my findings. Therefore, it would be a chance for future research to replicate the study with sufficient data availability for a more generalizable outcome. Another potentially interesting subject is the difference of the results of the two conservatism measures, which could be investigated in the future as well.

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Appendix A: Tables

Table 1: Variable Definition

<i>Variable</i>	<i>Description</i>	<i>Data Source</i>
<i>EP</i>	Year t earnings divided by the market value of equity in the end of year $t-1$.	Compustat
<i>Accruals</i>	Net income before extraordinary items less operating cash flows scaled by average total assets.	Compustat
<i>LogCashpay</i>	Logarithm of annual cash compensation: Consisting of bonus, salary and non-equity payments	Execomp
<i>Clawback</i>	One in case of clawback use and zero otherwise	Michael Erkens
<i>After</i>	One for periods following clawback adoption, and zero otherwise	Own computation
<i>Returns</i>	Monthly stock market returns compounded over twelve months starting at the beginning of the fiscal year	CRSP
<i>D (Returns)</i>	Indicator function which equals one if variable <i>Returns</i> is negative/zero and equal to zero if positive	Own computation
<i>CFO</i>	Cash from operations scaled by average total assets	Compustat
<i>D (CFO)</i>	Indicator function which equals one if variable <i>CFO</i> is negative/zero and equal to zero if positive	Own computation
<i>EPS_GAAP</i>	Annual earnings per share based on GAAP earnings	Compustat
<i>EPS_NonGAAP</i>	Annual earnings per share based on Non-GAAP earnings	Michael Erkens
<i>Size</i>	Natural logarithm of total assets	Compustat
<i>Return on Assets</i>	Income before extraordinary items divided by total assets	Compustat
<i>Loss</i>	One if the firm reports a negative net income in the period and zero otherwise	Compustat
<i>Leverage</i>	Short and long-term debt divided by total assets	Compustat
<i>Market-to-Book</i>	Market value of equity scaled by the book value of equity	Compustat
<i>Tech</i>	One for firms in the technology industry and zero otherwise	Compustat
<i>Sales Growth</i>	One-year growth in total sales	Compustat
<i>Intangibles</i>	Intangible assets scaled by total assets	Compustat
<i>CEOChair</i>	One if the CEO is also the chairman of the board of directors and zero otherwise	ISS
<i>Independent</i>	Ratio of independent directors on a firm's board	ISS

This table provides an overview of all variables used in this thesis, their definitions and data sources.

Table 2: Sample Selection

Panel A: Accounting Conservatism		
<i>Data Source</i>	<i>AT Measure: Firm observations</i>	<i>ACC Measure: Firm observations</i>
Initial Clawback Sample: Russell 3000 Index	4870	4870
Merging with Compustat data	- 921	-1408
Extending sample period to 2002	+3276	+1989
Merging with CRPS data	-807	-
Excluding financial firms (SIC-codes 6000-6999)	- 1441	-750
Excluding firms without sufficient data prior and post adoption	-1258	-1147
Excluding firms with missing data	-76	-
Total observations	3.643	3.554
Merging with ISS data	-2793	-2660
Total observations including ISS data	850	894

This table presents the sample selection process for the first hypothesis, for both conservatism measures. The sample consists of listed US firms and the sample period starts in 2002, respectively in 2007 for the second regression, and ends in 2016. I only allow firms in the sample with sufficient data availability in all data bases.

Panel B: Compensation Sensitivity	
<i>Data Source</i>	<i>Firm observations</i>
Initial Clawback Sample: Russell 3000 Index	4870
Merging with Compustat data	-1034
Extending sample period to 2002	+2599
Merging with Non-GAAP data	- 3714
Merging with Execom data	- 1139
Excluding financial firms (SIC-codes 6000-6999)	- 266
Excluding firms without sufficient data prior and post adoption	-870
Total observations	446

This table presents the sample selection process for the second hypothesis. The sample consists of listed US firms and the sample period starts in 2002 and ends in 2016. I only allow firms in the sample with sufficient data availability in all data bases.

Table 3: Clawback Adoption

<i>Clawback Adoption</i>	<i>AT Measure</i>		<i>ACC Measure</i>	
	<i>Year</i>	<i>Observations</i>	<i>Mean</i>	<i>Observations</i>
2002	33	0.000	-	-
2003	231	0.000	232	0.000
2004	241	0.000	238	0.000
2005	248	0.000	246	0.000
2006	263	0.000	257	0.000
2007	271	0.137	271	0.137
2008	276	0.188	278	0.183
2009	282	0.252	279	0.254
2010	283	0.357	279	0.355
2011	280	0.357	273	0.359
2012	276	0.435	270	0.433
2013	270	0.515	263	0.513
2014	260	0.565	255	0.557
2015	211	0.583	203	0.586
2016	218	0.587	210	0.586

This tables gives an overview of the average clawback adoption frequency of the main regression sample firms over the sample period for both conservatism measures. Column 1 shows the results for the AT measure, column 2 for the ACC measure.

Table 4: Descriptive Statistics – Conservatism AT Measure

Panel A: Total Sample							
<i>Variables</i>	<i>Observations</i>	<i>Mean</i>	<i>P25</i>	<i>P50</i>	<i>P75</i>	<i>SD</i>	<i>Welch T-Test</i>
<i>EP</i>	3643	0.063	0.012	0.049	0.073	2.855	0.550
<i>Returns</i>	3643	0.079	0.030	0.114	0.136	0.163	0.939
<i>Size</i>	3643	7.230	5.939	7.170	8.443	1.731	0.000 ***
<i>Return on Assets</i>	3643	0.023	0.010	0.047	0.086	0.138	0.000 ***
<i>Loss</i>	3643	0.214	0.000	0.000	0.000	0.410	0.000 ***
<i>Leverage</i>	3643	0.215	0.039	0.190	0.326	0.192	0.596
<i>Market-to-Book</i>	3643	3.245	1.456	2.315	3.862	3.913	0.134
<i>Tech</i>	3643	0.302	0	0	1	0.459	0.647

Panel B: Clawback Adopters							
<i>Variables</i>	<i>Observations</i>	<i>Mean</i>	<i>P25</i>	<i>P50</i>	<i>P75</i>	<i>SD</i>	
<i>EP</i>	2244	0.034	0.026	0.054	0.074	0.222	
<i>Returns</i>	2244	0.079	0.030	0.114	0.136	0.163	
<i>Size</i>	2244	7.785	6.554	7.834	8.903	1.666	
<i>Return on Assets</i>	2244	0.043	0.022	0.054	0.090	0.105	
<i>Loss</i>	2244	0.155	0.000	0.000	0.000	0.363	
<i>Leverage</i>	2244	0.214	0.070	0.198	0.316	0.172	
<i>Market-to-Book</i>	2244	3.323	1.571	2.396	3.860	3.823	
<i>Tech</i>	2244	0.299	0.000	0.000	1.000	0.458	

Panel C: Non-Adopters							
<i>Variables</i>	<i>Observations</i>	<i>Mean</i>	<i>P25</i>	<i>P50</i>	<i>P75</i>	<i>SD</i>	
<i>EP</i>	1399	0.108	-0.024	0.038	0.070	4.599	
<i>Returns</i>	1399	0.080	0.030	0.114	0.136	0.165	
<i>Size</i>	1399	6.341	5.340	6.280	7.446	1.437	
<i>Return on Assets</i>	1399	0.007	0.021	0.031	0.076	0.174	
<i>Loss</i>	1399	0.308	0.000	0.000	1.000	0.462	
<i>Leverage</i>	1399	0.217	0.006	0.171	0.345	0.220	
<i>Market-to-Book</i>	1399	3.121	1.287	2.154	3.871	4.053	
<i>Tech</i>	1399	0.307	0.000	0.000	1.000	0.461	

This table reports the descriptive statistics of the key variables used in the AT conservatism regression. The sample consists of listed US firms and the sample period starts in 2002 and ends in 2016. I show the main descriptive statistics: mean, standard deviation, 25th percentile, 50th percentile and 75th percentile. Additionally, Panel A shows the p-value of the two-tailed Welch difference of means test. The variables are defined in the Appendix in table 1. ***, **, * displays significance at the 1%, 5%, and 10% level.

Table 5: Descriptive Statistics – Conservatism ACC Measure

Panel A: Total Sample							
<i>Variables</i>	<i>Observations</i>	<i>Mean</i>	<i>P25</i>	<i>P50</i>	<i>P75</i>	<i>SD</i>	<i>Welch T-Test</i>
<i>Accruals</i>	3554	-0.082	-0.094	-0.053	-0.023	0.557	0.268
<i>CFO</i>	3554	0.087	0.058	0.101	0.156	0.878	0.011**
<i>Size</i>	3554	7.238	5.980	7.153	8.456	1.735	0.000***
<i>Return on Assets</i>	3554	0.021	0.012	0.048	0.087	0.150	0.000***
<i>Loss</i>	3554	0.212	0.000	0.000	0.000	0.409	0.000***
<i>Leverage</i>	3554	0.217	0.043	0.192	0.326	0.193	0.809
<i>Market-to-Book</i>	3554	3.298	1.455	2.327	3.902	4.252	0.890
<i>Tech</i>	3554	0.327	0.000	0.000	1.000	0.469	0.034**

Panel B: Clawback Adopters							
<i>Variables</i>	<i>Observations</i>	<i>Mean</i>	<i>P25</i>	<i>P50</i>	<i>P75</i>	<i>SD</i>	
<i>Accruals</i>	2186	0.073	-0.089	-0.051	-0.024	0.537	
<i>CFO</i>	2186	0.122	0.067	0.107	0.161	0.487	
<i>Size</i>	2186	7.819	6.585	7.877	8.912	1.648	
<i>Return on Assets</i>	2186	0.042	0.023	0.054	0.090	0.108	
<i>Loss</i>	2186	0.155	0.000	0.000	0.000	0.362	
<i>Leverage</i>	2186	0.217	0.075	0.202	0.319	0.173	
<i>Market-to-Book</i>	2186	3.306	1.566	2.382	3.824	3.996	
<i>Tech</i>	2186	0.340	0.000	0.000	1.000	0.474	

Panel C: Non-Adopters							
<i>Variables</i>	<i>Observations</i>	<i>Mean</i>	<i>P25</i>	<i>P50</i>	<i>P75</i>	<i>SD</i>	
<i>Accruals</i>	1368	0.095	-0.104	-0.057	-0.020	0.588	
<i>CFO</i>	1368	0.030	0.032	0.089	0.149	1.272	
<i>Size</i>	1368	6.311	5.281	6.326	7.364	1.442	
<i>Return on Assets</i>	1368	-0.014	-0.022	0.037	0.078	0.196	
<i>Loss</i>	1368	0.303	0.000	0.000	1.000	0.460	
<i>Leverage</i>	1368	0.218	0.009	0.168	0.342	0.221	
<i>Market-to-Book</i>	1368	3.285	1.264	2.206	4.017	4.634	
<i>Tech</i>	1368	0.306	0.000	0.000	1.000	0.461	

This table reports the descriptive statistics of the key variables used in the ACC conservatism regression. The sample consists of listed US firms and the sample period starts in 2002 and ends in 2016. I show the main descriptive statistics: mean, standard deviation, 25th percentile, 50th percentile and 75th percentile. Additionally, Panel A shows the p- value of the Welch difference of means test. The variables are defined in the Appendix in table 1. ***, **, * displays significance at the 1%, 5%, and 10% level.

Table 6: Descriptive Statistics – Compensation Sensitivity

Panel A: Total Sample							
<i>Variables</i>	<i>Observations</i>	<i>Mean</i>	<i>P25</i>	<i>P50</i>	<i>P75</i>	<i>SD</i>	<i>Welch T-Test</i>
<i>LogCashpay</i>	446	7.342	6.856	7.295	7.845	0.820	0.000***
<i>EPS_NonGAAP</i>	446	0.702	0.270	0.470	0.930	0.723	0.000***
<i>EPS_GAAP</i>	446	1.795	0.520	1.415	2.900	3.617	0.003***
<i>Size</i>	446	7.977	6.992	7.907	8.814	1.418	0.000***
<i>Return on Assets</i>	446	0.047	0.026	0.048	0.081	0.089	0.007***
<i>Loss</i>	446	0.137	0.000	0.000	0.000	0.344	0.728
<i>Leverage</i>	446	0.233	0.095	0.214	0.329	0.185	0.020**
<i>Market-to-Book</i>	446	5.013	1.556	2.369	4.080	1.774	0.002***
<i>Sales Growth</i>	446	0.131	0.015	0.088	0.214	0.241	0.751
<i>Intangibles</i>	446	0.266	0.104	0.201	0.390	0.224	0.000***

Panel B: Clawback Adopters						
<i>Variables</i>	<i>Observations</i>	<i>Mean</i>	<i>P25</i>	<i>P50</i>	<i>P75</i>	<i>SD</i>
<i>LogCashpay</i>	330	7.435	6.913	7.411	7.959	0.854
<i>EPS_NonGAAP</i>	330	0.775	0.290	0.537	4.334	0.768
<i>EPS_GAAP</i>	330	2.038	0.650	1.655	4.608	3.930
<i>Size</i>	330	8.190	7.240	8.158	8.921	1.390
<i>Return on Assets</i>	330	0.054	0.026	0.052	0.091	0.087
<i>Loss</i>	330	0.133	0.000	0.000	0.000	0.340
<i>Leverage</i>	330	0.219	0.094	0.207	0.309	0.166
<i>Market-to-Book</i>	330	5.987	1.636	2.480	4.530	2.037
<i>Sales Growth</i>	330	0.133	0.011	0.088	0.215	0.250
<i>Intangibles</i>	330	0.221	0.103	0.187	0.333	0.168

Panel C: Non-Adopters						
<i>Variables</i>	<i>Observations</i>	<i>Mean</i>	<i>P25</i>	<i>P50</i>	<i>P75</i>	<i>SD</i>
<i>LogCashpay</i>	116	7.078	6.754	7.097	7.397	0.651
<i>EPS_NonGAAP</i>	116	0.494	0.228	0.360	0.626	0.523
<i>EPS_GAAP</i>	116	1.106	0.380	1.005	4.334	2.405
<i>Size</i>	116	7.370	6.575	7.466	8.046	1.324
<i>Return on Assets</i>	116	0.027	0.024	0.043	0.058	0.091
<i>Loss</i>	116	0.147	0.000	0.000	0.000	0.355
<i>Leverage</i>	116	0.027	0.099	0.254	0.367	0.227
<i>Market-to-Book</i>	116	2.242	1.248	2.159	3.497	4.439
<i>Sales Growth</i>	116	0.126	0.021	0.088	0.213	0.217
<i>Intangibles</i>	116	0.393	0.110	0.360	0.713	0.302

This table reports the descriptive statistics of the key variables used in the compensation sensitivity regression. The sample consists of listed US firms and the sample period starts in 2002 and ends in 2016. I show the main descriptive statistics: mean, standard deviation, 25th percentile, 50th percentile and 75th percentile. Additionally, Panel A shows the p-value of the Welch difference of means test. The variables are defined in the Appendix in table 1. ***, **, * displays significance at the 1%, 5%, and 10% level.

Table 7: Correlation Matrix – Conservatism AT Measure

	<i>EP</i>	<i>Returns</i>	<i>Clawback</i>	<i>Size</i>	<i>Return on Assets</i>	<i>Loss</i>	<i>Leverage</i>	<i>Market-to-Book</i>	<i>Tech</i>
<i>EP</i>	1	0.083***	0.087***	0.226***	0.688***	-0.700***	0.074***	0.044***	-0.164***
<i>Returns</i>	0.004	1	0.015	-0.015	-0.005	-0.011	-0.031*	0.069***	0.000
<i>Clawback</i>	-0.007	0.057***	1	0.391***	0.078***	-0.101***	0.120***	0.060***	-0.030*
<i>Size</i>	0.002	0.008	0.396***	1	0.093***	-0.212***	0.434***	-0.024	-0.142***
<i>Return on Assets</i>	0.079***	0.072***	0.095***	0.248***	1	-0.704***	-0.189***	0.393***	0.001
<i>Loss</i>	-0.047***	-0.046***	-0.101***	-0.227***	-0.681***	1	-0.005	-0.154***	0.117***
<i>Leverage</i>	0.023	-0.023	0.081***	0.321***	-0.037**	0.045***	1	-0.118***	-0.302***
<i>Market-to-Book</i>	0.002	0.074***	0.053***	-0.034**	0.021	-0.032*	-0.027	1	0.128***
<i>Tech</i>	-0.019	-0.004	-0.030*	-0.148***	-0.010***	0.117***	-0.272***	0.075***	1

The table shows the correlations among the key variables used in the AT regression. Pearson and Spearman correlations are found, respectively, above and below the diagonal. The sample consists of listed US firms and the sample period starts in 2002 and ends in 2016. ***, **, * displays significance at the 1%, 5%, and 10% level.

Table 8: Correlation Matrix – Conservatism ACC Measure

	<i>Accruals</i>	<i>CFO</i>	<i>Claw-back</i>	<i>Size</i>	<i>Return on Assets</i>	<i>Loss</i>	<i>Leverage</i>	<i>Market-to-Book</i>	<i>Tech</i>
<i>Accruals</i>	1	-0.346***	0.032*	0.046***	0.315***	-0.336***	-0.020	0.020	-0.171***
<i>CFO</i>	-0.428***	1	0.041**	0.097***	0.670***	-0.463***	-0.102***	0.318***	0.065***
<i>Claw-back</i>	0.026	0.018	1	0.396***	0.072***	-0.100***	0.115***	0.056***	-0.018
<i>Size</i>	0.054***	0.082***	0.401***	1	0.093***	-0.215***	0.418***	-0.031*	-0.124***
<i>Return on Assets</i>	0.169***	0.274***	0.099***	0.272***	1	-0.702***	-0.195***	0.387***	-0.016
<i>Loss</i>	-0.124***	-0.121***	-0.100***	-0.229***	-0.674***	1	-0.002	-0.149***	0.148***
<i>Leverage</i>	0.031*	-0.009	0.075***	0.303***	-0.032*	0.050***	1	-0.122***	-0.277***
<i>Market-to-Book</i>	-0.022	-0.006	0.048***	-0.048***	-0.023	-0.013	-0.029*	1	0.188***
<i>Tech</i>	-0.032*	-0.024	-0.018	-0.131***	-0.154***	0.148***	-0.233***	0.150***	1

The table provides the correlations among the key variables used in the ACC measure regression. Pearson and Spearman correlations are found, respectively, above and below the diagonal. The sample consists of listed US firms and the sample period starts in 2002 and ends in 2016. ***, **, * display significance at the 1%, 5%, and 10% level.

Table 9: Correlation Matrix – Compensation Sensitivity

	<i>Log-Cash-pay</i>	<i>EPS Non-GAAP</i>	<i>EPS GAAP</i>	<i>Claw-back</i>	<i>Size</i>	<i>Return on Assets</i>	<i>Loss</i>	<i>Lever-age</i>	<i>Market-to-Book</i>	<i>Sales Growth</i>	<i>Intan-gibles</i>
<i>LogCash-pay</i>	1	0.408***	0.444***	0.376***	0.510***	0.199***	-0.179***	0.158***	0.123***	0.088*	-0.122***
<i>EPS Non-GAAP</i>	0.330***	1	0.809***	0.275***	0.509***	0.356***	-0.344***	0.206***	0.254***	0.152***	0.079 *
<i>EPS GAAP</i>	0.267***	0.675***	1	0.259***	0.447***	0.609***	-0.594***	0.129***	0.262***	0.128***	0.014
<i>Claw-back</i>	0.340***	0.258***	0.177***	1	0.354***	0.124***	-0.077	0.041	0.133***	-0.196***	-0.148***
<i>Size</i>	0.478***	0.422***	0.240***	0.337***	1	0.048	-0.056	0.290***	0.008	-0.074	-0.071
<i>Return on Assets</i>	0.191***	0.319***	0.635***	0.106**	0.106**	1	-0.594***	-0.307***	0.473***	0.300***	-0.049
<i>Loss</i>	-0.204***	-0.292***	-0.538***	-0.077	-0.053	-0.660***	1	0.108**	-0.162***	-0.201***	-0.139***
<i>Leverage</i>	0.070	0.252***	0.070	0.032	0.242***	-0.198***	0.074	1	-0.027	-0.122***	0.208***
<i>Market-to-Book</i>	0.073	0.084*	0.106**	0.125***	0.027	0.097**	-0.065	0.165***	1	0.360***	-0.028
<i>Sales Growth</i>	0.040	0.151***	0.109**	-0.161***	-0.053	0.273***	-0.126***	-0.051	0.055	1	0.020
<i>Intan-gibles</i>	-0.112**	0.030	0.001	-0.200***	-0.046	-0.050	-0.107**	0.310***	-0.061	0.050	1

The table provides the correlations among the key variables used in the pay-for-performance regression. Pearson and Spearman correlations are found, respectively, above and below the diagonal. The sample consists of listed US firms and the sample period starts in 2002 and ends in 2016. ***, **, * display significance at the 1%, 5%, and 10% level.

Table 10: Main Regressions – Conservatism

<i>Variables</i>	<i>AT Measure</i>		<i>ACC Measure</i>	
	<i>Coefficient</i>		<i>Variables</i>	<i>Coefficient</i>
<i>D</i>	-0.083*** (-2.66)		<i>D</i>	0.245*** (2.87)
<i>Returns</i>	-0.928*** (-2.99)		<i>CFO</i>	-0.458*** (-150.14)
<i>D*Returns</i>	0.818*** (2.61)		<i>D*CFO</i>	0.670*** (10.06)
<i>Clawback</i>	-0.012* (-1.65)		<i>Clawback</i>	0.118*** (7.01)
<i>Clawback*Returns</i>	0.076 (1.56)		<i>Clawback*CFO</i>	-0.745*** (-61.95)
<i>Clawback*D</i>	0.011 (0.98)		<i>Clawback*D</i>	-0.224*** (-2.76)
<i>Clawback*D*Returns</i>	-0.043 (-0.72)		<i>Claw*D*CFO</i>	0.415*** (6.14)
<i>After</i>	0.018** (2.35)		<i>After</i>	0.037 (1.57)
<i>Clawback*After</i>	-0.018* (-1.67)		<i>Clawback*After</i>	-0.091** (-2.67)
<i>Claw*Returns*After</i>	0.053 (0.96)		<i>Claw*CFO*After</i>	0.422*** (3.19)
<i>Claw*D*After</i>	-0.000 (-0.00)		<i>Claw*D*After</i>	0.047 (1.28)
<i>Claw*Returns*D*After</i>	-0.019 (-0.24)		<i>Claw*CFO*D*After</i>	-0.566*** (-2.80)
<i>Size</i>	-0.000 (-0.22)		<i>Size</i>	-0.010 (-1.50)
<i>Return on Assets</i>	0.450*** (13.55)		<i>Return on Assets</i>	0.920*** (9.52)
<i>Market-to-Book</i>	0.000 (0.04)		<i>Market-to-Book</i>	0.003 (1.26)
<i>Leverage</i>	-0.023* (-1.94)		<i>Leverage</i>	0.083 (0.90)
<i>Loss</i>	-0.113*** (-14.38)		<i>Loss</i>	-0.030 (-0.91)
<i>Tech</i>	-0.010 (-1.19)		<i>Tech</i>	0.019** (2.27)
<i>Intercept</i>	0.153*** (4.69)		<i>Intercept</i>	-0.079* (-1.71)
<i>Year&Industry fixed effects</i>	Yes		<i>Year&Industry fixed effects</i>	Yes
<i>Observations</i>	3642		<i>Observations</i>	3554
<i>Adjusted R²</i>	0.620		<i>Adjusted R²</i>	0.842

This table presents the main timely loss recognition regression results of the first hypothesis for both conservatism measures. Column 1 shows the results for the AT measure, column 2 for the ACC measure. Year and Industry fixed effects are included for both regressions. All variables are as defined in table 1 in the Appendix. ***, **, * display significance at the 1%, 5%, and 10% level.

Table 11: Main Regression – Compensation

<i>Variables</i>	<i>Baseline Regression</i>	<i>Regression with Controls</i>
	<i>Coefficient</i>	<i>Coefficient</i>
<i>EPS_NonGAAP</i>	0.811** (2.10)	-0.076 (-0.31)
<i>EPS_GAAP</i>	0.101 (1.34)	0.002 (0.02)
<i>Clawback</i>	0.230 (0.81)	-0.279 (-1.62)
<i>Claw*EPS_NonGAAP</i>	-0.697* (-1.84)	0.013 (0.05)
<i>Claw*EPS_GAAP</i>	-0.083 (-1.08)	0.004 (0.07)
<i>After</i>	0.310 (1.19)	0.000 (0.00)
<i>Claw*After</i>	-0.193 (-1.07)	-0.144 (-0.67)
<i>EPS_NonGAAP*After</i>	-0.406 (-1.19)	-0.024 (-0.09)
<i>Claw*EPS_NonGAAP*After</i>	0.329 (0.98)	0.047 (0.16)
<i>EPS_GAAP*After</i>	-0.139 (-1.38)	-0.069 (-1.04)
<i>Claw*EPS_GAAP*After</i>	0.192* (1.78)	0.101 (1.38)
<i>Size</i>		0.343*** (6.85)
<i>Return on Assets</i>		-0.136 (-0.20)
<i>Market-to-Book</i>		0.002 (0.86)
<i>Leverage</i>		-0.318 (-1.06)
<i>Loss</i>		-0.364** (-2.02)
<i>Intangibles</i>		-0.747*** (-2.80)
<i>Sales Growth</i>		0.172 (1.34)
<i>Interception</i>	6.452*** (19.74)	5.019*** (12.51)
<i>Year&Industry fixed effects</i>	Yes	Yes
<i>Observations</i>	446	446
<i>Adjusted R²</i>	0.443	0.533

This table reports the main regression results of the second hypothesis about compensation sensitivity. Column 1 presents the baseline regression and column 2 the results of the extended regression with controls. Year and Industry fixed effects are included. All variables used are defined table 1 in the Appendix. ***, **, * display significance at the 1%, 5%, and 10% level.

Table 12: Regressions with additional Controls – Conservatism

<i>Variables</i>	<i>AT Measure</i>		<i>ACC Measure</i>	
	<i>Coefficient</i>		<i>Variables</i>	<i>Coefficient</i>
<i>D</i>	-0.080*** (-4.34)		<i>D</i>	0.005 (0.81)
<i>Returns</i>	-2.232*** (-4.82)		<i>CFO</i>	-0.852*** (-13.18)
<i>D*Returns</i>	2.410 (1.59)		<i>D*CFO</i>	-0.393** (-2.50)
<i>Clawback</i>	0.013 (1.11)		<i>Clawback</i>	0.003 (0.25)
<i>Clawback*D</i>	0.008 (0.62)		<i>Clawback*D</i>	0.058 (1.45)
<i>Clawback*Returns</i>	-0.015 (-0.23)		<i>Clawback*Returns</i>	-0.032 (-0.37)
<i>Clawback*D*Returns</i>	0.066 (1.05)		<i>Clawback*D*CFO</i>	0.828** (2.23)
<i>After</i>	0.012 (1.00)		<i>After</i>	-0.001 (-0.32)
<i>Clawback*After</i>	0.004 (0.21)		<i>Clawback*After</i>	-0.011 (-1.02)
<i>Clawback*D*After</i>	-0.019 (-0.81)		<i>Clawback*D*After</i>	-0.065 (-1.58)
<i>Claw*Returns*After</i>	-0.026 (-0.33)		<i>Claw*CFO*After</i>	0.089 (1.14)
<i>Claw*D*Returns*After</i>	3.627 (1.24)		<i>Claw*D*CFO*After</i>	-1.449*** (-3.10)
<i>Size</i>	0.004 (1.51)		<i>Size</i>	0.000 (0.16)
<i>Return on Assets</i>	0.676*** (5.24)		<i>Return on Assets</i>	0.951*** (17.24)
<i>Market-to-Book</i>	-0.004* (-1.97)		<i>Market-to-Book</i>	0.000 (0.53)
<i>Leverage</i>	-0.007 (-0.17)		<i>Leverage</i>	-0.002 (-0.15)
<i>Loss</i>	-0.089*** (-6.51)		<i>Loss</i>	-0.002 (-0.31)
<i>Tech</i>	-0.006 (-0.32)		<i>Tech</i>	-0.004 (-0.78)
<i>Independent</i>	0.034 (0.90)		<i>Independent</i>	0.017 (1.16)
<i>CEOChair</i>	-0.008 (-1.07)		<i>CEOChair</i>	0.001 (0.32)
<i>Intercept</i>	0.050 (1.36)		<i>Intercept</i>	-0.014 (-0.70)
<i>Year&Industry fixed effects</i>	Yes		<i>Year&Industry fixed effects</i>	Yes

	<i>AT Measure</i>		<i>ACC Measure</i>
<i>Variables</i>	<i>Coefficient</i>	<i>Variables</i>	<i>Coefficient</i>
<i>Observations</i>	850	<i>Observations</i>	824
<i>Adjusted R²</i>	0.509	<i>Adjusted R²</i>	0.874

This table presents the regression results of the first hypothesis for both conservatism measures with additional governance controls. Column 1 shows the results for the AT measure and column 2 the results for the ACC measure. Year and Industry fixed effects are included for both regressions. All variables used are defined in table 1 in the Appendix. ***, **, * display significance at the 1%, 5%, and 10% level.

Table 13: Robustness Test – Conservatism

<i>AT Measure</i>		<i>ACC Measure</i>	
<i>Variables</i>	<i>Coefficient</i>	<i>Variables</i>	<i>Coefficient</i>
<i>D</i>	-0.083*** (-2.71)	<i>D</i>	0.234*** (3.76)
<i>Returns</i>	-0.892*** (-2.96)	<i>CFO</i>	-0.458*** (-142.55)
<i>D*Returns</i>	0.848*** (2.79)	<i>D*CFO</i>	0.671*** (10.20)
<i>Clawback</i>	-0.011 (-1.37)	<i>Clawback</i>	0.072*** (2.63)
<i>Clawback*D</i>	0.008 (0.63)	<i>Clawback*D</i>	-0.187*** (-2.99)
<i>Clawback*Returns</i>	0.082 (1.58)	<i>Clawback*Returns</i>	-0.384*** (-4.63)
<i>Clawback*D*Returns</i>	-0.046 (-0.72)	<i>Clawback*D*CFO</i>	-0.055 (-0.26)
<i>After</i>	0.015* (1.86)	<i>After</i>	0.036 (1.19)
<i>Clawback*After</i>	-0.011 (-0.98)	<i>Clawback*After</i>	-0.028 (-1.41)
<i>Clawback*D*After</i>	-0.002 (-0.18)	<i>Clawback*D*After</i>	-0.021 (-1.21)
<i>Claw*Returns*After</i>	-0.010 (-0.17)	<i>Claw*CFO*After</i>	-0.062 (-0.86)
<i>Claw*D*Returns*After</i>	0.062 (0.64)	<i>Claw*D*CFO*After</i>	-0.520* (-1.96)
<i>Size</i>	-0.003 (-1.31)	<i>Size</i>	-0.014 (-1.34)
<i>Return on Assets</i>	0.480*** (12.33)	<i>Return on Assets</i>	0.880*** (4.92)
<i>Market-to-Book</i>	-0.000 (-0.62)	<i>Market-to-Book</i>	0.003 (0.82)
<i>Leverage</i>	-0.015 (-1.04)	<i>Leverage</i>	0.129 (1.01)
<i>Loss</i>	-0.108*** (-12.50)	<i>Loss</i>	-0.033 (-1.49)
<i>Tech</i>	-0.010 (-0.96)	<i>Tech</i>	0.011 (0.54)
<i>Intercept</i>	0.165*** (5.01)	<i>Intercept</i>	-0.089* (-1.71)
<i>Year&Industry fixed effects</i>	Yes	<i>Year&Industry fixed effects</i>	Yes
<i>Observations</i>	2874	<i>Observations</i>	2841
<i>Adjusted R²</i>	0.627	<i>Adjusted R²</i>	0.658

This table presents the robustness regression results of the first hypothesis for both conservatism measures with a propensity-score matched sample. Column 1 shows the results for the AT measure and column 2 the results for the ACC measure. Year and Industry fixed effects are included for both regressions. All variables used are defined in table 1 in the Appendix. ***, **, * display significance at the 1%, 5%, and 10% level.