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Reporting***

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The effect of Tournament Incentives on Conservatism in Financial Reporting

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Resumen

En esta tesina de Máster estudio la relación entre estructuras de compensación a ejecutivos que simulan torneos y la aplicación de conservadurismo contable en reportes financieros. Argumento que si bien los incentivos de tipo torneos pueden mejorar la productividad de los participantes (el grupo de ejecutivos debajo del CEO) a su vez induce respuestas que no son óptimas en términos de aversión al riesgo, y conlleva la posibilidad de reportar de manera distorsionada la performance de los participantes de dicho torneo. Midiendo los incentivos de torneo como la distancia entre la compensación total del CEO y la mediana de la compensación total de los ejecutivos debajo del CEO, documento una relación negativa entre esta brecha y el nivel de conservadurismo en los reportes financieros anuales para una muestra de firmas de los Estados Unidos para el período 1994 - 2013. Esta relación es consistente con distintas medidas de incentivos de torneos y conservadurismo. Finalmente, documento una relación positiva entre la performance de una firma e incentivos de torneos cuando la firma reporta de manera conservadora, consistente con los argumentos de que el conservadurismo en los reportes financieros evita actividades que destruyen valor en la firma.

Palabras Clave: *Compensación a Ejecutivos; Conservadurismo; Reportes Financieros; Contabilidad.*

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1. Introduction

Accounting information has the objective of alleviating information asymmetries between firm insiders, such as managers and major shareholders, and outsiders. These information asymmetries are expressed in two different ways. First, firms' insiders have better information about the current situation and prospects of the firm than outsiders. This creates an adverse selection problem, whereby one or more parties, the insiders, have an information advantage over other parties. Second, the separation between management and control on corporations creates moral hazard issues, as managers may take actions detrimental to stakeholders, such as biasing reported earnings to cover poor earnings or increase compensation linked to firm performance. To alleviate some of these issues, shareholders and creditors may demand accounting information that imposes restrictions on the insiders' discretion on the firm resources, such as providing timely information about bad news regarding the firm's operations. However, stakeholders also demand a return on their investments, and design compensation structures that aligns their wealth maximization objectives with the incentives of the managers. In this dissertation I look at the relationship between a specific property of accounting numbers that helps to mitigate information asymmetries through a timely recognition of bad news—conservatism—and executive compensation schemes characterised by a material gap between the CEO and the next level of executives' compensation, commonly known as tournament incentives.

Tournament incentives² at firm level are designed to booster performance of Senior Managers³ and the rest of firms' officials, with the objective of improving firm's performance. Vice Presidents (VPs) are not only retributed for their absolute performance, but also for their relative performance with respect to the rest of officials of the firm. Relative performance incentives are driven by the perceived distance between the Chief Executive Officer (CEO) benefits and perks with respect of those of Senior Managers. Hence, VPs effort to win the tournament, be promoted and become firm's CEO are positively related with the size of the tournament prize—the CEO's benefits and perks. In corporate finance, this tournament prize is usually estimated as the distance between the CEO's total compensation and the compensation of the next layer of Senior Executives. In line with the arguments that tournament incentives booster VPs efforts, there is evidence that tournament incentives increase firm's

² Throughout this dissertation I use the terms Tournament Incentives and Relative Performance Incentives interchangeably.

³ Throughout this dissertation I use the terms Senior Managers, Senior Executives and VPs interchangeably in this dissertation to refer to the senior members of the executive team, excluding the CEO.

performance (Kale et al., 2009). However, there is evidence that tournaments may have also negative consequences on firm's outcomes, such as dysfunctional responses by firm's officials, including cheating and misreporting performance, and increasing firm risk (Kini and Williams, 2012).

Conservatism in financial reporting is defined as the differential verifiability required for the recognition of accounting gains versus losses. In its simplest form, conservatism implies recognition of accounting losses faster than gains, conditional on the same level of information availability. In general, conservatism in financial reporting is demanded by stakeholders to avoid wealth transfers from stakeholders to firm's managers, and it is usually considered to have contracting power (Armstrong et al., 2010). In this setting, contracting power means that conservatism affects the way that the financial information of the firm is reported, and have an effect over manager's action. There is extensive evidence documenting the effect of asymmetric recognition of bad news with respect to good news imposed by conservative reporting on managerial decisions. In particular, conservatism is associated with the early abandonment by the firm of poorly performing projects, or even writing-off positive net present value, but highly risky, projects (Ball and Shivakumar, 2005; Roychowdhury, 2010; Bushman et al., 2011).

In this master dissertation I argue that firms that are engaged in tournament incentives are less likely to report conservatively, as conservatism forces the recognition and early abandonment of poorly performing projects. This, in turn, could reduce the chances of success of Senior Managers in the tournament who may have links with that project. Hence, VPs are likely to withhold negative information that may affect their chances of success in the tournament, precluding conservative reporting. However, I also argue that firms that report conservatively are more likely to force Senior Managers to pick better investment opportunities, as they may be forced to recognise and write-off loss making projects. Thus, in turn, I predict that firms with tournament incentives and conservative reporting experience positive effects on future firm performance, as only projects with positive net present value, and limited risk, would be selected by VPs engaged in the tournament.

Using a large sample of US firms for the period 1994 – 2013, I test in this dissertation the association between tournament incentives and conservatism. To measure tournament incentives, my main proxy is the distance (or gap) between the CEO's total compensation with respect to the median total compensation of the Senior Managers of the firm (Kale et al. 2009;

Kini and Williams 2012). To measure conservatism, I use C-Score from Khan and Watts (2009) as proxy for conservatism. My results are robust to different measures of conservatism and tournament incentives. I include controls to ensure that I identify the incremental consequence of tournament incentives on accounting conservatism. I also provide evidence that my results are not driven by proxies of firm reporting environment, nor other types of executives' incentives.

In this dissertation I provide the following results: first, accounting conservatism is negatively associated with Senior Managers compensation structures that includes tournament incentives. This result extends the literature on the relationship between executive compensation structures and financial reporting decisions, as documented by Bergstresser and Philippon (2006) and Armstrong et al. (2013). Namely, compensation structures that foster risk taking by firm officials are likely to have negative consequences on the attributes of financial reporting. In this sense, my paper also extends the finding of Park (2017) and Bryan and Mason (2017) that document a negative relationship between tournament incentives and financial reporting quality. Second, I extend the literature on the effect of tournament incentives on firm outcomes (Kale et al., 2009; Kini and Williams, 2012) and the contracting role of conservatism. I provide evidence that firms engaged in rank-order tournaments that reports conservatively are likely to benefit from both. Specifically, I document an increase in firm's performance due to engagement on value creating activities but mitigating potentially value destroying ones by VPs. This is in line with the positive effect of conservatism on identifying poorly performing activities and improving of the learnings process of firms officials forced to recognise earlier issues with firm's activities (Hsu et al., 2017).

My dissertation is structured as follows: Section 2 discusses relevant literature and develop the arguments behind the expected association between tournament incentives and accounting conservatism; Section 3 discusses the data used in this paper and the estimation of the relevant variables; Section 4 presents and discusses the results of my main tests, and presents additional tests where I explore potential alternative arguments to my main findings; Section 5 discusses the interaction between tournament incentives and accounting conservatism and their joint effect on firm performance. Section 6 discusses my findings, address limitations identified on my research setting and concludes.

2. Literature Review

2.1 Tournament Incentives

The literature on Tournament Incentives flourished in recent years, as a consequence of the observed increment on the gap between the compensation of Chief Executive Officers (CEOs), the next layer of Senior Management Team members (VPs) and the rest of employees. The usual reasons cited behind such increase on the gap between the CEO and the rest of firm's officials are the increased ability of CEOs to set their own pay, in light of the increasing competition for top management talent and the active role of CEOs on boards of directors (Kale et al., 2009). Understanding the consequences of disparities on executive compensation is relevant, as regulators argue that executive compensation was partly blame for excessive risk taking by firms before the financial crisis of 2007. Also, regulators and practitioners are vocally regarding the mitigation of such disparities⁴.

A typical firm's executive team is composed of a CEO and a group of VPs. To alleviate moral hazard problems associated with the separation between ownership and control, shareholders, through the board of directors, design executives' contracts that include incentives based on output or performance. Namely, these contracts include a fixed amount plus a variable component linked to firm performance. This is (mostly) the case for CEOs. However, VPs have an extra incentive, apart from their absolute output, defined as promotion or relative performance incentives (Baker et al., 1988). VPs may see the position of CEO as a reward for success on a competition against their firm's peers. In fact, Cremers and Grinstein (2013) document a 71 percent of probability of insider succession to the CEO position in the US between 1993-2005. As personal skills are unobservable, Senior Executives are judged base on their absolute and relative performance with respect to other peers. In a normal tournament, the VP with the highest output will win the tournament, get promoted and obtain the maximum prize, namely, becoming the firm's CEO. The effort exerted by Senior Executives is positively related to the perceived value of the prize. Hence, if VPs perceive that the possibility of promotion is unbiased, firms may increase the effort of the tournament participants increasing the promotion prize, i.e. increasing the gap between the CEO's compensation and the rest of the senior management team (Lazear and Rosen, 1981, Prendergast, 1999 and Bognanno, 2001). Kale et al. (2009) finds evidence consistent with this argument, as they find that there

⁴ See, for example, "Investors alert to surge in chief executive pay", Financial Times, July 12, 2016; "Theresa May's plan to expose boss-employee pay gap 'flawed'", Financial Times, 22 September 2016.

is a positive relationship between CEO's and VPs' compensation gap and firm performance, measured by Return on Assets and Tobin's Q. Ridge et al. (2015) finds similar results, but only for extreme cases of tournament incentives.

However, tournament incentives may trigger as well dysfunctional responses by Senior Managers. Goel and Thakor (2008) argue that tournament incentives lead to higher risk taking by VPs. Assuming that the probability of success on the tournament is unbiased given homogeneity on skills, participants may need to incur in riskier projects that yields higher output to increase their chances to affect the odds of promotion on their favour. Given that participants will only be rewarded based on their relative output, as the tournament incentives increase so will the willingness to undertake riskier project with higher output. This relationship between tournament incentives, output and risk produces a Nash equilibrium where every VP undertake more risk in comparison with an absence of tournament incentives. Kini and Williams (2012) find evidence consistent with these arguments, as higher levels of tournament incentives are related to higher levels of firm's risk, measured as cash flow and returns volatility.

Following evidence that tournament incentives is positively associated with higher levels of firm risk, a number of authors look whether dysfunctional responses from Senior Managers are driven by tournament incentives. In particular, a stream of literature focuses on whether tournament participants bias they reported output to affect their chances of promotion. Apart from the aforementioned risk taking (See also Knoeber and Thurman, 1994; Prendergast, 1999), tournament incentives are also likely to be associated with cheating (Berentsen, 2002) and sabotage to competitors (Lazear, 1989). Conrads et al. (2014) find a negative relationship between honesty on reporting participant's performance and tournament incentives. Overall, these studies provide robust support to the assumption that a higher level of tournament incentives is positively associated to an increase on risk taking and potential misreporting of performance.

2.2 Accounting Conservatism

Conservatism is a property of financial reporting that leads to an average understatement of the book value of assets relative to their market value. Conservatism can be divided in two types, unconditional and conditional. Unconditional conservatism is not-news based but mandated due to predetermined aspects of the accounting process; it is generally

accepted that this is a bias on the reporting process, with no information value, creating hidden reserves⁵. Under conditional conservatism, an asymmetric change in the value of assets are related to new information incorporated on the reporting process. I focus on this dissertation on the effect of conditional conservatism in the reporting process, as it is the type of conservatism valuable for contracting purposes (Beaver and Ryan, 2005). For the rest of this dissertation, conservatism implies *conditional* conservatism.

Conservatism could be summarized on the assumption of ‘anticipate not profit, but anticipate all losses’ (Watts, 2003). From a practitioner approach, profits should only be recognised when they are verifiable. Basu (1997) defines accounting conservatism as ‘the tendency to require a higher degree of verification to recognize good news as gains than to recognize bad news as losses’ (Basu, 1997 pp. 7). Conservatism is interpreted as an asymmetry on the way that information about the firm is reported. I.e. Goods news (i.e. revenues) should only be recorded when they are verifiable, but losses do not require such level of verification (i.e. bad debt allowances). The higher the asymmetry between the speed of recognition of bad news with respect to good news, the higher the conservatism in reporting. An example of conservatism in financial reporting include the asymmetry on the recognition of changes in value of assets. Reductions in the value of assets such as inventories or Goodwill are recognised in a timely manner (i.e. impairments), whereas increases in value are recognised only when they become easy to identify, such as when they are realized (i.e. exchanged for cash).

Conservatism has traditionally been associated with a reduction in information asymmetry between firms’ insiders and outsiders. From a contracting point of view, debtholders are likely to demand conservative reporting to avoid wealth transfer to shareholders, as conservatism may force early termination or reducing the number of risky projects that the firm undertakes, as they payoff structure is asymmetric with respect to the project’s returns for creditors. Debtholders base their contracts with the firm on measures of performance, such as earnings or net income, and asset values. Earnings and asset values that are reported conservatively are likely to provide a better information environment for debtholders. If conservatively reported, debtholders can estimate lower bounds for the values of assets, which are the base to repayment in case of orderly liquidation, as well as control the payment of dividends and acquisitions that may increase firm’s risk (Smith Jr and Warner, 1979; Watts, 2003; Badia et al., 2017). Also, shareholders demand conservative reporting as

⁵ Examples of unconditional conservatism includes the prohibition of recognizing internally generated intangibles and faster depreciation of fixed assets with respect to their economic life.

well. Managerial performance-related incentives may induce over optimistic reporting, i.e. increasing earnings figures. A firm's manager has incentives to use her superior knowledge about the firm financial situation to transfer wealth from stakeholders to herself. This is particularly evident from the fact that managers are net sellers of their stocks during their tenure (LaFond and Watts, 2008). Hence, shareholders may demand more conservative reporting to control for excessive optimism when the manager reports her own performance. Moreover, and similar to the argument for debtholders, conservatism on financial reporting provides timely signals to shareholders and the boards of directors about value destroying activities conducted by the manager, such as negative present value projects that could be used for empire building. Conservatism forces managers to incorporate on their performance signal (the profits made by the firm on the fiscal year) any bad news associated with the projects that they undertake.

Consistent with these arguments, the literature documents support to the different arguments on conservatism. In terms of debtholders, conservatism is positively associated with better credit rankings and lower cost of debt, and to trigger early covenants violations (Ahmed and Duellman, 2007; Zhang, 2008; Wittenberg-Moerman, 2008). Boards of directors that exert monitoring over managerial actions are more likely to demand conservative reporting, as firms with higher proportion of independent directors are positively related to conservatism (Ahmed and Duellman, 2007; García Lara et al., 2009a). Finally, there is extensive evidence of a relationship between conservatism in financial reporting and investment policies. Conservatism produces a reduction in managerial overinvestment (Francis and Martin, 2010; Bushman et al., 2011). It also discourages managerial selection of negative net present value projects, as it forces managers to recognise losses on projects conducted on their tenure (Ball and Shivakumar, 2005). Moreover, conservatism may discourage the selection of positive net present value projects, but bearing higher risk (Roychowdhury, 2010; Bushman et al., 2011). However, firms that report conservatively are likely to mitigate underinvestment when resources are scarce and reduce overinvestment on scenarios of abundant resources availability (García Lara et al., 2016).

2.3 Hypothesis development

Tournament incentives are positively associated with firm performance and value. However, these incentives may increase risk taking by Senior Managers. This increment in risk taking is accompanied by dysfunctional responses such as cheating or misrepresenting

performance. There is extensive evidence that managerial compensation linked to firm's output leads to more aggressive reporting decisions, or earnings management. Earnings management is defined as a purposeful intervention by insiders on the reporting process to obtain private gains, usually through judgements that alter the underlying economic performance of the firm to outsiders (Schipper, 1989; Healy and Wahlen, 1999). Bergstresser and Philippon (2006) document higher levels of earnings management when there is a higher sensitivity of CEO's equity portfolio to changes in stock price (the portfolio's Delta). Burns and Kedia (2006) find a positive relationship between CEOs' Delta and restatement of financial statements due to accounting irregularities. Armstrong et al. (2013) provide evidence that managers are more likely to misreport when they are less averse to risk. Armstrong et al. (2013) document that the driver of misreporting is the sensitivity of executive's wealth to changes in equity risk that drives financial misreporting (the portfolio's Vega), and not the changes in equity value.

Although these papers focus on CEOs incentive and financial misreporting, there is a growing literature on the relation of Senior Managers and financial misconduct. In particular, documents that the CFO's incentives, and not the CEO's, drives earnings management (Jiang et al., 2010). Karpoff et al. (2008) document that CEOs only accounts for 33 percent of firms' executives identified as responsible parties on 788 enforcement actions by the Security Exchange Commission (SEC) and the Department of Justice of the United States. In relation to tournament incentives and misreporting, Haß et al. (2015) find a positive relationship between relative performance and corporate fraud. Park (2017) documents that firms engaged in tournament incentives are likely to engage in earnings management through real activities manipulation. Real activities manipulation includes actions such as offering aggressive sales tactics, reduce/increase abnormally expenses such as advertisement or administrative expenses and cost of sales to boost earnings. Bryan and Mason (2017) find that auditors are likely to charge higher audit fees on firms engaged in tournament incentives, as auditors perceive that the risk of misreporting in these firms is higher.

As discussed previously, accounting conservatism imposes a higher level of verification for bad news with respect to good news. Senior Managers who recognise impairment of their projects could perceive that they relative performance is affected, biasing against them the odds of succeed on a tournament. Hence, they have incentives to withhold such information (Haß et al., 2015). This is not possible, or very difficult to achieve, on firms that reports conservatively (Bushman et al., 2011). Hence, I hypothesize that firms engaged on

tournaments incentives are likely to suffer from an information asymmetry in terms of reporting, as Senior Managers may limit the recognition of bad news or requiring higher standards for the verification for losses. Therefore, I state my main hypothesis for this dissertation as follows:

H: Firms with higher levels of tournament incentives are less likely to have conservative reporting

Notice, however, that there is a tension in the argument. Conservatism is a mechanism used by boards of directors and shareholders to monitor the firm's portfolio of projects (Ahmed and Duellman, 2007; García Lara et al., 2009a), and to demand early termination of projects with negative net present value (Ball and Shivakumar, 2005). Hence, firm's stakeholders may impose more conservative reporting, as a counterbalance for the negative externalities of tournament incentives. Moreover, in firms where shareholders may impose conservative reporting there could be a positively externality in terms of a more careful selection of projects by Senior Managers, leading to better future performance. I do not rule out the possibility of these alternative results, which are a valid empirical question. I explore the implications of these arguments in Section 5.

3. Data and operationalization of variables

3.1 Sample

The data used in this dissertation comes from three sources. Stock data is obtained from The Center for Research in Security Prices, (CRSP). Firms' financial information is downloaded from Compustat, and executive compensation variables is obtained from Execucomp. My sample consists of US companies firm-year observations that has non-missing information on the variables included on the main model. All the data was retrieved from WRDS. Following prior research in conservatism in particular, and financial reporting in general, I exclude from my sample firms utilities and financial industries (SIC 4900-5000 and SIC 6000-6999) and firms with missing information in tournament incentives, conservatism and control variables. All continuous variables are winsorized at 1st and 99th percentiles. Following the changes in reporting of executives' compensation due to the passage of Financial Accounting Standard (FAS) 123R on December 2004, the value of total compensation of executives is re-estimated to be comparable across the sample. Hence, executive compensation

for the period 2006 – 2013 reported in Execucomp is recalculated to be comparable across the full sample⁶. After these adjustments, my total sample comprises 17,120 observations ranging from 1994 to 2013.

3.2 Tournament incentives

Following previous literature, I use three measures to capture tournament incentives. My main measure is the difference between CEO's total compensation and median salary of the Senior Managers team, excluding the CEO (Kale et al., 2009, Kini and Williams, 2012, Ridge et al., 2015; Haß et al., 2015; Park 2017). I identify the CEO in Execucomp using the provided identifier (CEOANN=CEO) and include in my sample only firms with five or more reporting executives. Consistent with previous studies (Kini and Williams, 2012; Park, 2017) I do not include the remuneration of CEOs who remains in the management team after resignation when estimating the median VP compensation, and firms where the pay gap is negative⁷. I also use a second set of proxies for tournament incentives: first, the ratio of the CEO's compensation to the VP median compensation (Kale et al., 2009; Park, 2017); secondly, I use the Pay Slice, or the fraction of the aggregate compensation of the Senior Executives paid to the CEO (Bebchuk et al., 2011). This measure captures how much of the total compensation paid to all members of the Executive Team is paid to the CEO.

3.3 Conservatism

As a proxy for firm level conditional conservatism I use the Khan and Watts (2009) C-Score measure. The C-Score draws from the Basu (1997) model, to estimate a proxy for timeliness of good news (the G-Score) and timeliness for bad news (C-Score). Khan and Watts (2009) conservatism measure links firm reported performance with market reactions to available information, including reported performance. If the firm is asymmetric on the recognition of bad news relative to good news, accounting earnings should have a more positive

⁶ Kini and Williams (2012), based on the works of Coles et al. (2006) and Core and Guay (2002) provide a detailed step by step approach to the estimation of post 2006 compensation and executives Delta and Vega. SAS codes to re-estimate these variables are publicly available on Naveen's webpage. The correlation between compensation between 1993-2005 and the re-calculated executive compensation for the same time period is 96 percent, ensuring consistency on the re-estimated data for the period 2006-2013.

⁷ Kini and Williams (2012) describe that these are firms where CEOs, after retiring as CEOs and staying as VP, may still receive higher contributions than the current CEO. Moreover, negative gaps are associated with firms where the CEO is a founder and receives a nominal or no compensation.

association with market returns in bad times than in good times. Namely, accounting information should incorporate bad news faster (that are also captured by the market if semi-strong efficient) than good news. Following Ettredge et al. (2012), Jayaraman (2012) and Tan (2013), who provide evidence that the Khan and Watts (2009) measure captures variation in conservatism at firm's level, I measure conservatism using the C-Score in year t .

Khan and Watts (2009) measure is based on the cross-sectional specification of Basu (1997) model, which is as follows:

$$Earn_j = \beta_0 + \beta_1 Neg_j + \beta_2 Ret_j + \beta_3 Neg_j Ret_j + e_j \quad (2)$$

Where j indexes the firm, $Earn$ is earnings, Ret is market returns and Neg is a dummy variable that equals 1 when Ret is negative. β_2 is the good news timeliness measure, and β_3 is the incremental timeliness of earnings to bad news over good news. Hence, the total timeliness of bad news is $(\beta_2 + \beta_3)$. Khan and Watts (2009) modify this model to obtain a firm-level proxy of conservatism. They do so by adding up an annual measure of the timeliness of earnings to good news (the G-Score) and a measure of the incremental timeliness of bad news with respect to good news (the C-Score), which they define as follows:

$$G-Score = \beta_2 = \mu_1 + \mu_2 Size_j + \mu_3 MTB_j + \mu_4 Leverage_j \quad (3)$$

$$C-Score = \beta_3 = \lambda_1 + \lambda_2 Size_j + \lambda_3 MTB_j + \lambda_4 Leverage_j \quad (4)$$

Where μ_i and λ_i are estimated using annual-cross sectional regressions by substituting β_2 and β_3 on (2), being constant across firms but varying over time. However, G-Score and C-Score vary across firms through cross-sectional variation in the firm's characteristics (Size, MTB and Leverage). The annual cross section model is as follows:

$$\begin{aligned} Earn_j = & \beta_0 + \beta_1 Neg_j + Ret_j (\mu_1 + \mu_2 Size_j + \mu_3 MTB_j + \mu_4 Leverage_j) \\ & + Neg_j Ret_j (\lambda_1 + \lambda_2 Size_j + \lambda_3 MTB_j + \lambda_4 Leverage_j) \\ & + (\delta_1 Size_j + \delta_2 MTB_j + \delta_3 Leverage_j + \delta_4 Neg_j Size_j + \delta_5 Neg_j MTB_j + \delta_6 Neg_j Leverage_j) + \varepsilon_j \quad (5) \end{aligned}$$

Where $Earn_j$ is net income before extraordinary items, scaled by the lagged market value of equity; Ret_j is the annual stock rate of return of the firm, measured by compounding 12-monthly CRSP returns ending at fiscal-year end; Neg_j is a dummy variable equal to 1 if Ret_j is less than zero; $Size_j$ is the log of the market value of equity; MTB_j is the market-to-book ratio; $Leverage_j$ equals short-term plus long-term debt scaled by the market value of equity. Following Khan and Watts (2009), I winsorize all observations at 1st and 99th percentiles and drop firms with

stock prices below 1 USD and with negative or missing values of total assets or book value of equity.

Variations in C-Score captures variation in conservatism. I.e. assume a conservative decision, such a firm that conduct an asset impairment. This has a negative effect on size, as assets reduce. It also has a negative effect on the growth prospective of the firm, namely, a reduction on the ratio of market to book, and it also increases leverage, as the firm's assets do not adjust fast to the new situation. The effect of this conservative decision will affect the conservatism measure through negative coefficients λ_2 , λ_3 and a positive λ_4 in equation (4), increasing the C-Score (García Lara, García Osma and Penalva (2016)).

3.4 Association between tournament incentives and conservatism

My model follows previous specifications on the effect of tournament incentives and is stated as follows:

$$Conservatism_{j,t} = \beta_1 Tournament_{j,t-1} + \beta_2 Controls_{j,t} + Industry + year + \varepsilon_t \quad (6)$$

In equation (6) Conservatism is a firm level measure of conditional conservatism (C-Score); tournament is any of my three proxies for tournament incentives (Total Gap, Compensation Ratio and Pay Slice). A negative and significant coefficient β_1 implies that tournament incentives are negatively related to Conservatism; controls includes a number of controls known to affect conservatism such as market-to-book ratio, that captures growth opportunities; leverage (ratio of total debt over assets) as higher levels of debtholders/shareholders conflicts are likely to increase the demand for conservatism; size (natural log of total assets) as bigger firms have lower asymmetric timelines of earnings, and measures of performance (ratio of net income over assets), sales growth and cash flow volatility. I also include a Litigation dummy to identify industries where higher levels of litigation may increase the use of conservative reporting⁸ (García Lara et al., 2009b). I also include controls for CEO characteristics (natural log of CEO age and tenure) and executives' incentives (natural log of CEO's Delta and Vega; and horizontal pay dispersion among VPs, defined as the ratio of the standard deviation of Senior Managers total compensation over mean compensation of the team). All the specification includes industry (Fama-French 48 industries)

⁸ Litigation is a dummy variable equal to 1 if firm belongs to industries with SIC codes 2833–2836, 3570–3577, 3600–3674, 5200–5961, and 7370—and zero otherwise (LaFond and Roychowdhury 2008).

fixed effects and year dummies. Errors are clustered at firm level. To alleviate endogeneity concerns, all the tournament and executive incentives variables are lagged one period with respect to the conservatism measure (Kini and Williams 2012; Park 2017).

3.5 Descriptive statistics

Table 1 presents the descriptive statistics for the variable of interest, and Table 2 presents correlations between variables of interest. All compensation variables are in line with previous studies on the topic. Specially, the differences between CEO's total compensation and median compensation for the rest of the executive team is consistent with the existence of tournament incentives. Also, C-Score and Total Score measures of conservatism are very similar to those reported by Khan and Watts (2009).

4. Results

Table 3 presents the results from my baseline specification. The three proxies for tournament incentives are significant and negatively related to my proxy of firm level conservatism. When adding controls for CEO's incentives (columns (4) to (6)) results continue to be significant. Also, the coefficients of controls are in line with previous studies. The effect is also economically significant: an increase in one standard deviation of the natural log of Total Compensation Gap reduces firm level conservatism by 6 percent. For Total Ratio and Slice the effect is 3 percent.

To further analyse whether my results are consistent, I provide a set of alternative tests. First, I use different measures of conservatism. I present the results of including these alternative measures for firm level conservatism in Table 4. My alternative measures of firm level conservatism are the total score (C-Score + G-Score) estimated from Khan and Watts (2009) (García Lara et al., 2016) and the revised C-Score from Collins et al. (2014). The Total Score from Khan and Watts is a noisier measure of conservatism, as it includes the timeliness of good news, to construct a total timeliness measure. The revised Collins et al. (2014) adjust potential bias due to cash flows asymmetries in the C-Score by replacing accruals instead of earnings on the estimation of the C-Score. Using these two alternatives proxies for conservatism, results still holds for my main tournament incentive proxy, Pay Gap. Overall,

results presented in Table 3 and 4 are consistent with the hypothesis that tournament incentives are negatively related to firm level conditional conservatism.

4.1 The role of Senior Managers incentives

As a robustness test, following Kini and Williams (2012) I include controls for additional incentives for Senior Managers unrelated to the tournament, namely, the median VPs' Delta and Vega. I include these controls to rule out competitive arguments such as the effect of risk and absolute performance on Senior Manager incentives and financial reporting through compensation. The results of this test are presented in Table 5. The inclusion of these variables does not affect our baseline results, implying the is the tournament incentive that is associated with a reduction in conservatism.

4.2 The role of firm level information asymmetry

To complete my previous discussion, and to provide more robustness to my results, I study the role of firm level information asymmetry on conservatism. In particular, firms with higher levels of information asymmetry could potentially implement less conservative accounting reporting (García Lara et al., 2005). This could affect the documented association between tournament incentives and conservatism. To capture firm level information asymmetry, I use two proxies. The first one is the standard deviation of Abnormal Accruals from $t-5$ to t . Abnormal accruals are the unexplained portion of accruals⁹ that a firm report in a year, estimated using the modified Dechow and Dichev (2002) model including change in revenues and property plant and equipment for long term accruals, as in Biddle et al. (2009). These models estimated a 'predicted' firm level of accruals for year t , whereas the 'abnormal' component of accruals is the difference between the 'observed' and 'predicted' accruals. As the estimation of accruals involve higher levels of judgement by the management team, it is assumed that higher levels of 'abnormal' accruals mean more information asymmetry at firm level. I also include the number of analysts issuing an earnings estimation for the firm in each year. The higher the number of earnings estimation is interpreted as more attention over the reporting process. Table 6 presents the results of including these extra controls into my baseline

⁹ Accruals are recognised as the effects of transactions and other events when they occur, rather than when cash or its equivalent is received or paid. Examples of accruals are depreciation, bad debt allowances and sales on credits.

equation (6). My proxies for tournament incentives remain negatively related to my main conservatism proxy. Hence, I can safely assume that firm level conservatism is associated with tournament incentives independently of firm level information asymmetry.

5. The role of conservatism on improving performance

The literature on tournament incentives has systematically documented that these incentives increase firm performance, but on the expense of increasing risk taking by the firm officials. As discussed before, conservatism is a property of financial reporting that has contracting power, in the sense that it could be demanded by stakeholders to mitigate information asymmetries between principals and the agent (Ahmed and Duellman 2007; García Lara, García Osma and Penalva 2009), forcing the early termination of negative NPV projects and avoid highly risky ones (Roychowdury 2010; Bushman, Piotroski and Smith 2011). In this section I explore whether firms that are engaged in relative performance incentives and report conservatively are likely to benefit of the positive aspects of the compensation incentives. The intuition behind this test is that Senior Managers engaged in tournament incentives are likely to perform corrective actions earlier in the tournament if the firm is conservative in terms of reporting. I.e. a project that is risky could be either scraped earlier or be modified to solve potential issues if the firm is conservative. Otherwise, Senior Managers may not necessarily disclose or modify their projects when facing difficulties. This has a negative effect in terms of exploring alternative options, as well as impairs learning from failure (Hsu et al., 2017). To this end, I test whether firms that are engaged in tournament incentives and conservatism on financial reporting to reduce information asymmetries, are likely to increase firm performance.

To this end, I use the average future cash flows from operations. I focus on cash flows from operations as these are central for the long-term survival of the firm. Cash flows from operations are use not only for the acquisition of fixed assets, but also to repay loans, distribute dividends, and attend the daily expenses of the firm, such as salaries and suppliers. Also, cash flows from operations is very unlikely to be manipulated by managers, which is potentially the case with Return over Assets (ROA). Table 7 presents the results for my model studying the relationship between conservatism, tournament incentives and firm performance.

Consistent with the contracting role of conservatism, forcing the early termination of negative value projects or highly risky ones, I find that firms engaged in tournament incentives, and implementing more conservative reporting, have positive future cash flows. The results

hold for the different measures of conservatism, including C-Score, Total Score and Revise C-Score. In unreported test, I perform the same analysis for my other proxies for tournament incentives, Total Ratio and Total Slice, and results remain qualitative similar. These results are in line, again, with the argument that if conservatism in financial reporting is applied, it leads to a better selection of projects by Senior Managers engaged in tournament incentives, affecting positively firm's performance.

A similar argument with respect to the effect of applying conservative reporting on firms that use tournament incentives and firm risk could be argued, as riskier projects are more likely to be written off with respect to less risky projects with similar NPV. However, in unreported results, I repeat the tests presented in Table 7 using the volatility of firm's monthly returns over the next 24 months, and results are mixed. Although the coefficients are as expected negative, most of the interaction terms are not statistically significant at traditional levels.

6. Discussion and conclusion

In this dissertation I study the relationship between tournament incentives and conservatism in financial reporting. I hypothesize that firms engaged in tournament incentives are less likely to apply conditional conservatism. As Senior Managers perceive that the benefits of winning the tournament are high, they are likely to undertake more risky projects to boost their chances to succeed in the tournament and have incentives to overstate their performance relative to their peers. This goes against the objective of conservatism on financial reporting, which requires an asymmetric recognition of profits and losses.

Consistent with these arguments, I document a negative and significant relationship between tournament incentives and firm-level conservatism. This result is consistent across different types of tournament incentives and conservatism measures. In a set of robustness tests, I analyse whether the results could be driven by compensation incentives of Senior Managers (excluding the CEO), or firm's level of information asymmetry. Finally, I test whether firms that implement simultaneously more conservative reporting practices and tournament incentives are likely to benefit from both. In particular, I assume that VPs are likely to avoid value destroying activities and are able to make changes to poorly performing projects on more conservative financial reporting environments, which, in turns, improve firm performance.

Consistent with previous evidence, there is a positive relationship between the interaction of conservatism and tournament incentives with future firm performance.

There are, however, some limitations on my dissertation. Although I include fixed effects to control for industry and year wide effects, and lagged variables for executive incentives on my main tests, I cannot rule out endogeneity concerns. In particular, more ‘aggressive’ Senior Managers are likely to join firms that offers tournament incentives and low levels of conservatism. Although I include controls for this, I could not rule out the presence of an omitted variable driven this relationship. Also, my results could also be driven by powerful, overconfident CEOs that impose higher levels of compensation for themselves, pushing upwards the tournament incentives. This type of CEO is less likely to report conservatively (Ahmed and Duellman, 2013). In unreported results, I include to my baseline equation (6) a proxy for CEO power, measured as the aggregate distance between the CEO and each Senior Manager on the ownership level. Results remind qualitative unchanged. Another potential argument is that the CEO may be playing a tournament herself with her industry peers. In unreported results, I could not find evidence of this, as an Industry gap variable does not affect my main results. However, these are still proxies for directors’ characteristics that could only be measured indirectly.

Overall, I document in this dissertation an association between conservatism and tournament incentives. These results are particularly important for a better understanding of the relationship between executives’ compensation structure and financial reporting, and for a broader understanding of the consequences in firm outcomes of implementing tournament incentives at firm level.

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Tables

Table 1
Descriptive Statistics

<i>Variable</i>	P25	Median	Mean	P75	S.D.
<i>Conservatism proxies</i>					
C-Score	0.003	0.061	0.060	0.123	0.113
Total Score	0.052	0.099	0.105	0.151	0.079
Revised C-Score	-0.041	0.001	0.010	0.046	0.116
<i>Managerial Compensation ('000)</i>					
CEO total compensation	1,354.84	2,681.84	4,419.05	5,335.60	5,063.17
VPs median total compensation	536.12	924.84	1,384.56	1,671.70	1,369.15
Total Gap	727.38	1,645.58	3,005.87	3,585.14	3,930.74
<i>Managerial incentives</i>					
Total Ratio	1.952	2.548	2.888	3.315	1.588
Total Slice	0.318	0.383	0.390	0.450	0.109
Horizontal Gap	0.183	0.299	0.351	0.460	0.235
<i>Firm Characteristics</i>					
Size	6.291	7.269	7.403	8.392	1.535
MTB	1.517	2.291	3.150	3.610	2.964
Leverage	0.059	0.199	0.207	0.315	0.162
Sales Growth	-0.004	0.077	0.101	0.174	0.222
CFO volatility	0.020	0.033	0.043	0.055	0.035
ROA	0.020	0.054	0.045	0.091	0.092
Litigation	0	0	0.266	1	0.442

Table 1: descriptive statistics for the 17,120 firm-year observations. C-Score is the C-Score from Khan and Watts (2009); Total score is the C-Score plus G-Score from Khan and Watts (2009); Revised C-Score is the modified C-Score; CEO total compensation is the CEO total compensation for year t , in thousand dollars; VPs median compensation is the median total compensation of firm i 's Senior Managers, excluding the CEO, in thousand dollars; Total Gap is the difference between CEO total compensation and VPs median total compensation, in thousand dollars; Total Ratio is the ratio of CEO total compensation to VPs media compensation; Total Slice is the fraction of the aggregate compensation of Senior Managers paid to the firm's CEO; Horizontal Gap is the coefficient of variation in total compensation of Senior Managers (excluding the CEO); Size is the natural log of assets; MTB is the ratio of Market to Book value of equity; Leverage is total debt over assets; Sales Growth is the annual growth of sales; CFO volatility is the volatility of firm's cash flows from $t-3$ to t ; ROA is return over assets; Litigation is a dummy variable equal to 1 if the firms belongs to an industry with high levels of litigation.

Table 2
Correlations

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)
a) C-Score	1.0000																
b) Total Score	0.7809*	1.0000															
c) Mod C-Score	0.8267*	0.6374*	1.0000														
d) Ln Tot Gap	-0.1457*	-0.1858*	0.0158*	1.0000													
e) T Ratio	-0.0214*	-0.0261*	0.0105	0.5938*	1.0000												
f) T Slice	-0.0102	-0.0263*	0.0168*	0.6152*	0.8580*	1.0000											
g) CEO Delta	-0.1238*	-0.2597*	0.0568*	0.4148*	0.1295*	0.1275*	1.0000										
h) CEO Vega	-0.0963*	-0.1517*	0.0589*	0.4813*	0.1791*	0.1864*	0.5159*	1.0000									
i) Size	-0.2290*	-0.2167*	-0.0071	0.6116*	0.1208*	0.1082*	0.4718*	0.5010*	1.0000								
j) MTB	-0.1325*	-0.3328*	-0.0012	0.1664*	0.0344*	0.0360*	0.3023*	0.1749*	0.0495*	1.0000							
k) Leverage	-0.0345*	0.0885*	-0.0487*	0.1446*	0.0532*	0.0439*	-0.0096	0.0816*	0.3230*	0.0514*	1.0000						
l) Sales growth	-0.1384*	-0.2153*	-0.1300*	0.0545*	0.0081	0.0238*	0.1617*	0.0282*	-0.0173*	0.1383*	-0.0232*	1.0000					
m) CFO	0.1009*	0.0798*	0.0221*	-0.1529*	-0.0214*	-0.0286*	-0.1867*	-0.1582*	-0.3567*	0.0753*	-0.1537*	0.0521*	1.0000				
n) ROA	-0.0974*	-0.2483*	-0.0167*	0.1483*	0.0304*	0.0654*	0.3162*	0.1367*	0.1221*	0.2217*	-0.1881*	0.2048*	-0.1847*	1.0000			
o) H Gap	-0.0247*	-0.0252*	-0.0187*	0.1267*	0.0007	-0.1279*	0.1142*	0.0388*	0.0366*	0.0267*	0.0499*	0.0376*	0.0195*	-0.0451*	1		
p) CEO Tenure	0.0027	-0.0108	-0.0090	-0.0628*	-0.0469*	-0.0453*	0.3565*	-0.0152*	-0.0860*	-0.0142	-0.0342*	0.0877*	-0.0250*	0.0637*	0.0543*	1	
q) CEO age	-0.0219*	-0.0250*	-0.0136	0.0569*	0.0090	0.0031	0.1611*	-0.0164*	0.1265*	-0.0553*	0.0552*	-0.0337*	-0.0951*	0.0498*	0.0160*	0.3772*	1
r) Litigation	-0.0034	-0.0333*	0.0099	-0.002	0.0056	-0.0109	0.0419*	0.0678*	-0.0628*	0.0419*	-0.1822*	0.0283*	0.1184*	-0.0409*	0.0035	-0.0235*	-0.0694*

Table 2: pairwise correlations for the 17,198 firm-year observations. C-Score is the C-Score from Khan and Watts (2009); Total score is the C-Score plus G-Score from Khan and Watts (2009); Mod C-Score is the modified C-Score; Ln Total Gap is the natural log of Total Gap; Total Ratio is the ratio of CEO total compensation to VPs media compensation; Total Slice is the fraction of the aggregate compensation of Senior Managers paid to the firm's CEO; LN CEO's Delta is the natural log of 1 plus Delta of the CEO; LN CEO's Vega is the natural log of 1 plus Vega of the CEO; Size is the natural log of assets; MTB is the ratio of Market to Book value of equity; Leverage is total debt over assets; Sales Growth is the annual growth of sales; CFO volatility is the volatility of firm's cash flows from t-3 to t; ROA is return over assets; Horizontal Gap is the coefficient of variation in total compensation of Senior Managers (excluding the CEO); CEO Tenure is the natural log of CEO's tenure in the firm; CEO age is the natural log of CEO's age; Litigation is a dummy variable equal to 1 if the firms belongs to an industry with high levels of litigation.

Table 3: Tournament Incentives and Conservatism

Baseline Estimation						
	(1)	(2)	(3)	(4)	(5)	(6)
Total Gap	-0.003*** (0.001)	-0.003*** (0.001)				
TRatio			-0.001** (0.000)	-0.001** (0.000)		
Slice					-0.016*** (0.005)	-0.017*** (0.005)
CEO Delta		-0.002*** (0.001)		-0.002*** (0.001)		-0.002*** (0.001)
CEO Vega		0.001*** (0.000)		0.001** (0.000)		0.001** (0.000)
Size	-0.017*** (0.001)	-0.017*** (0.001)	-0.019*** (0.000)	-0.018*** (0.001)	-0.019*** (0.000)	-0.018*** (0.001)
MTB	-0.005*** (0.000)	-0.005*** (0.000)	-0.005*** (0.000)	-0.005*** (0.000)	-0.005*** (0.000)	-0.005*** (0.000)
Leverage	0.044*** (0.005)	0.042*** (0.005)	0.045*** (0.005)	0.042*** (0.005)	0.045*** (0.005)	0.043*** (0.005)
Sales Growth	-0.009*** (0.003)	-0.008*** (0.003)	-0.009*** (0.003)	-0.008*** (0.003)	-0.009*** (0.003)	-0.008*** (0.003)
σCFO	0.042** (0.019)	0.042** (0.019)	0.038** (0.018)	0.037** (0.018)	0.037** (0.018)	0.037** (0.018)
ROA	0.014 (0.010)	0.017* (0.010)	0.014 (0.010)	0.017* (0.010)	0.014 (0.010)	0.017* (0.010)
HGap	0.002 (0.002)	0.003 (0.002)	-0.000 (0.002)	0.001 (0.002)	-0.001 (0.002)	0.000 (0.002)
CEO Tenure	-0.001* (0.001)	-0.000 (0.001)	-0.001** (0.001)	-0.000 (0.001)	-0.001* (0.001)	-0.000 (0.001)
CEO Age	0.005 (0.005)	0.005 (0.005)	0.005 (0.005)	0.005 (0.005)	0.005 (0.005)	0.005 (0.005)
Litigation	0.002 (0.002)	0.002 (0.002)	0.002 (0.002)	0.002 (0.002)	0.002 (0.002)	0.002 (0.002)
Constant	0.081*** (0.019)	0.082*** (0.019)	0.074*** (0.019)	0.075*** (0.019)	0.078*** (0.019)	0.078*** (0.019)
<i>N</i>	17,120	17,120	17,120	17,120	17,120	17,120
<i>Ind. effects</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>Year effects</i>	Yes	Yes	Yes	Yes	Yes	Yes
adj. <i>R</i> ²	0.5631	0.5635	0.5627	0.5630	0.5627	0.5631

Table 3: Relationship of C-Score and Tournament incentives. C-Score is the C-Score from Khan and Watts (2009); Total Gap is the natural log of Total Gap; TRatio is the ratio of CEO total compensation to VPs media compensation; Slice is the fraction of the aggregate compensation of Senior Managers paid to the firm's CEO; LN CEO's Delta is the natural log of 1 plus Delta of the CEO; LN CEO's Vega is the natural log of 1 plus Vega of the CEO; Horizontal Gap is the coefficient of variation in total compensation of Senior Managers (excluding the CEO); Size is the natural log of assets; MTB is the ratio of Market to Book value of equity; Leverage is total debt over assets; Sales Growth is the annual growth of sales; CFO volatility is the volatility of firm's cash flows from t-3 to t; ROA is return over assets; CEO Tenure is the natural log CEO's tenure in the firm; CEO age is the natural log of CEO's age; Litigation is a dummy variable equal to 1 if the firms belongs to an industry with high levels of litigation. All executive incentives variables are lagged one period. Industry fixed effects are at Fama-French 48 industry level. Clustered at firm level standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 4: Tournament Incentives and Conservatism
Alternative Conservatism Measures

	(1)	(2)	(3)	(4)	(5)	(6)
	Total Conservatism			Mod C-Score		
Total Gap	-0.001*** (0.000)			-0.002*** (0.001)		
TRatio		-0.000 (0.000)			-0.001** (0.000)	
Slice			-0.004 (0.003)			-0.012** (0.005)
CEO Delta	-0.002*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)	0.001* (0.001)	0.001 (0.001)	0.001 (0.001)
CEO Vega	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.001*** (0.000)	0.001*** (0.000)	0.001*** (0.000)
Size	-0.012*** (0.000)	-0.013*** (0.000)	-0.013*** (0.000)	-0.001** (0.001)	-0.002*** (0.000)	-0.002*** (0.000)
MTB	-0.007*** (0.000)	-0.007*** (0.000)	-0.007*** (0.000)	-0.000 (0.000)	-0.001 (0.000)	-0.001 (0.000)
Leverage	0.091*** (0.004)	0.091*** (0.004)	0.091*** (0.004)	-0.013*** (0.005)	-0.012** (0.005)	-0.012** (0.005)
Sales Growth	-0.008*** (0.002)	-0.007*** (0.002)	-0.007*** (0.002)	-0.001 (0.003)	-0.001 (0.003)	-0.001 (0.003)
σ CFO	0.028*** (0.011)	0.026** (0.011)	0.026** (0.011)	0.017 (0.018)	0.014 (0.018)	0.014 (0.018)
ROA	-0.034*** (0.005)	-0.034*** (0.005)	-0.034*** (0.005)	0.032*** (0.010)	0.032*** (0.010)	0.032*** (0.010)
HGap	0.001 (0.001)	-0.000 (0.001)	-0.000 (0.001)	0.002 (0.003)	0.001 (0.002)	-0.000 (0.002)
CEO Tenure	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)
CEO Age	0.003 (0.003)	0.003 (0.003)	0.003 (0.003)	-0.001 (0.004)	-0.002 (0.004)	-0.002 (0.004)
Litigation	0.001 (0.002)	0.001 (0.002)	0.001 (0.002)	0.001 (0.002)	0.001 (0.002)	0.001 (0.002)
Constant	0.147*** (0.012)	0.144*** (0.012)	0.145*** (0.012)	-0.070*** (0.017)	-0.074*** (0.017)	-0.072*** (0.017)
<i>N</i>	17,120	17,120	17,120	17,120	17,120	17,120
<i>Ind. effects</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>Year effects</i>	Yes	Yes	Yes	Yes	Yes	Yes
adj. <i>R</i> ²	0.6567	0.6565	0.6565	0.5468	0.5466	0.5466

Table 4: Relationship of Total Score and Modified C-Score and Tournament incentives. Total Score is the sum of Khan and Watts (2009) G-Score and C-Score. Modified C-Score is the modified C-Score from Khan and Watts (2009); Total Gap is the natural log of Total Gap; TRatio is the ratio of CEO total compensation to VPs media compensation; Slice is the fraction of the aggregate compensation of Senior Managers paid to the firm's CEO; LN CEO's Delta is the natural log of 1 plus Delta of the CEO; LN CEO's Vega is the natural log of 1 plus Vega of the CEO; Horizontal Gap is the coefficient of variation in total compensation of Senior Managers (excluding the CEO); Size is the natural log of assets; MTB is the ratio of Market to Book value of equity; Leverage is total debt over assets; Sales Growth is the annual growth of sales; CFO volatility is the volatility of firm's cash flows from t-3 to t; ROA is return over assets; CEO Tenure is the natural log of CEO's tenure in the firm; CEO age is the natural log of CEO's age; Litigation is a dummy variable equal to 1 if the firms belongs to an industry with high levels of litigation. All executive incentives variables are lagged one period. Industry fixed effects are at Fama-French 48 industry level. Standard errors clustered at firm level in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 5: Tournament Incentives and Conservatism
Senior Managers' Incentives

	(1)	(2)	(3)
Total Gap	-0.003*** (0.001)		
TRatio		-0.001*** (0.000)	
Slice			-0.019*** (0.006)
CEO Delta	-0.001** (0.001)	-0.001* (0.001)	-0.001* (0.001)
CEO Vega	0.001* (0.001)	0.001 (0.001)	0.001 (0.001)
VPs Delta	-0.003*** (0.001)	-0.003*** (0.001)	-0.003*** (0.001)
VPs Vega	0.000 (0.001)	0.001 (0.001)	0.001 (0.001)
Size	-0.016*** (0.001)	-0.018*** (0.001)	-0.018*** (0.001)
MTB	-0.005*** (0.000)	-0.005*** (0.000)	-0.005*** (0.000)
Leverage	0.040*** (0.005)	0.040*** (0.005)	0.041*** (0.005)
Sales Growth	-0.008*** (0.003)	-0.007*** (0.003)	-0.007*** (0.003)
σ CFO	0.041** (0.019)	0.036* (0.019)	0.035* (0.019)
ROA	0.019* (0.010)	0.019* (0.010)	0.019* (0.010)
HGap	0.003 (0.002)	0.002 (0.002)	0.001 (0.002)
CEO Tenure	-0.000 (0.001)	-0.000 (0.001)	-0.000 (0.001)
CEO Age	0.005 (0.005)	0.005 (0.005)	0.005 (0.005)
Litigation	0.002 (0.002)	0.002 (0.002)	0.002 (0.002)
Constant	0.083*** (0.019)	0.076*** (0.019)	0.080*** (0.019)
<i>N</i>	17,012	17,012	17,012
<i>Ind. effects</i>	Yes	Yes	Yes
<i>Year effects</i>	Yes	Yes	Yes
<i>adj. R²</i>	0.5639	0.5635	0.5636

Table 5: Relationship of C-Score and Tournament incentives. C-Score is the C-Score from Khan and Watts (2009); Total Gap is the natural log of Total Gap; TRatio is the ratio of CEO total compensation to VPs media compensation; Slice is the fraction of the aggregate compensation of Senior Managers paid to the firm's CEO; LN CEO's Delta is the natural log of 1 plus Delta of the CEO; LN CEO's Vega is the natural log of 1 plus Vega of the CEO; VPs Delta and Vega are the natural log of 1 plus the mean Senior Manager Delta and Vega, respectively (excluding the CEO); Size is the natural log of assets; MTB is the ratio of Market to Book value of equity; Leverage is total debt over assets; Sales Growth is the annual growth of sales; CFO volatility is the volatility of firm's cash flows from t-3 to t; ROA is return over assets; Horizontal Gap is the coefficient of variation in total compensation of Senior Managers (excluding the CEO); CEO Tenure is the natural log of CEO's tenure in the firm; CEO age is the natural log of CEO's age; Litigation is a dummy variable equal to 1 if the firms belongs to an industry with high levels of litigation. All executive incentives variables are lagged one period. Industry fixed effects are at Fama-French 48 industry level. Standard errors clustered at firm level in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 6: Tournament Incentives and Conservatism
Information Asymmetry

	(1)	(2)	(3)
Total Gap	-0.002*** (0.001)		
TRatio		-0.001** (0.000)	
Slice			-0.018*** (0.006)
CEO Delta	-0.002*** (0.001)	-0.002*** (0.001)	-0.002*** (0.001)
CEO Vega	0.002*** (0.001)	0.002*** (0.000)	0.002*** (0.000)
Size	-0.014*** (0.001)	-0.015*** (0.001)	-0.015*** (0.001)
MTB	-0.004*** (0.000)	-0.004*** (0.000)	-0.004*** (0.000)
Leverage	0.026*** (0.006)	0.026*** (0.006)	0.027*** (0.006)
Sales Growth	-0.008** (0.004)	-0.007** (0.004)	-0.007** (0.004)
σCFO	0.054** (0.022)	0.051** (0.022)	0.051** (0.022)
ROA	0.016 (0.013)	0.016 (0.013)	0.016 (0.013)
HGap	0.006** (0.003)	0.005 (0.003)	0.004 (0.003)
CEO Tenure	-0.000 (0.001)	-0.000 (0.001)	0.000 (0.001)
CEO Age	0.003 (0.005)	0.003 (0.005)	0.003 (0.005)
Litigation	0.002 (0.002)	0.002 (0.002)	0.002 (0.002)
Analysts	-0.001*** (0.000)	-0.001*** (0.000)	-0.001*** (0.000)
Abn. Accruals	-0.015 (0.012)	-0.015 (0.012)	-0.016 (0.012)
Constant	0.076*** (0.021)	0.072*** (0.021)	0.076*** (0.021)
<i>N</i>	12,559	12,559	12,559
<i>Ind. effects</i>	Yes	Yes	Yes
<i>Year effects</i>	Yes	Yes	Yes
<i>adj. R²</i>	0.5823	0.5822	0.5823

Table 6: Relationship of C-Score and Tournament incentives, controlling for firm level information asymmetry. C-Score is the C-Score from Khan and Watts (2009); Total Gap is the natural log of Total Gap; TRatio is the ratio of CEO total compensation to VPs media compensation; Slice is the fraction of the aggregate compensation of Senior Managers paid to the firm's CEO; LN CEO's Delta is the natural log of 1 plus Delta of the CEO; LN CEO's Vega is the natural log of 1 plus Vega of the CEO; Horizontal Gap is the coefficient of variation in total compensation of Senior Managers (excluding the CEO); Size is the natural log of assets; MTB is the ratio of Market to Book value of equity; Leverage is total debt over assets; Sales Growth is the annual growth of sales; CFO volatility is the volatility of firm's cash flows from t-3 to t; ROA is return over assets; CEO Tenure is the natural log of CEO's tenure in the firm; CEO age is the natural log of CEO's age; Litigation is a dummy variable equal to 1 if the firms belongs to an industry with high levels of litigation. Analysts is the number of analysts following the firm; Abn. Accruals is the volatility of abnormal accruals from period t-4 to t, whereas abnormal accruals are estimated using the modified Dechow and Dichev (2001) model. All executive incentives variables are lagged one period. Industry fixed effects are at Fama-French 48 industry level. Standard errors clustered at firm level in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

**Table 7: Tournament Incentives and Conservatism
Future performance and Risk**

	(1)	(2)	(3)
	Future Cash Flows		
Total Gap	-0.025 (0.023)	-0.028 (0.024)	-0.023 (0.023)
C-Score	-0.108*** (0.031)		
C-SxTG	0.010** (0.004)		
Total Conserv.		-0.235*** (0.057)	
TCxTG		0.021*** (0.007)	
RC-Score			-0.105*** (0.029)
RC-SxTG			0.012*** (0.004)
CEO Delta	0.022*** (0.005)	0.021*** (0.005)	0.022*** (0.005)
CEO Vega	-0.006 (0.004)	-0.006* (0.004)	-0.006 (0.004)
Size	-0.003 (0.006)	-0.003 (0.006)	-0.001 (0.006)
MTB	0.006** (0.003)	0.004 (0.003)	0.006** (0.003)
Leverage	0.107*** (0.036)	0.129** (0.037)	0.102*** (0.036)
Sales Growth	-0.007 (0.024)	-0.010 (0.024)	-0.010 (0.024)
σCFO	-1.311*** (0.201)	-1.307*** (0.201)	-1.307*** (0.201)
HGap	-0.022 (0.018)	-0.022 (0.018)	-0.021 (0.018)
CEO Tenure	-0.014** (0.006)	-0.013** (0.006)	-0.015** (0.006)
CEO Age	-0.041 (0.045)	-0.043 (0.045)	-0.041 (0.045)
CEODeltaTG	-0.002*** (0.001)	-0.002*** (0.001)	-0.002*** (0.001)
CEOVegaxTG	0.001* (0.000)	0.001** (0.000)	0.001* (0.000)
SizeTG	0.000 (0.001)	0.000 (0.001)	-0.000 (0.001)
MTBxTG	0.000 (0.000)	0.000 (0.000)	-0.000 (0.000)
LeveragexTG	-0.026*** (0.005)	-0.028*** (0.005)	-0.025*** (0.005)

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SalesGxTG	0.002 (0.003)	0.002 (0.003)	0.002 (0.003)
σ CFOxTG	0.142*** (0.027)	0.142*** (0.027)	0.141*** (0.027)
HGapxTG	0.001 (0.002)	0.001 (0.002)	0.001 (0.002)
CEOTenxTG	0.002* (0.001)	0.001* (0.001)	0.002* (0.001)
CEOAgexTG	0.007 (0.006)	0.007 (0.006)	0.007 (0.006)
Constant	0.249 (0.175)	0.285 (0.176)	0.232 (0.175)
<i>N</i>	15,417	15,417	15,417
<i>Ind. effects</i>	Yes	Yes	Yes
<i>Year effects</i>	Yes	Yes	Yes
adj. R^2	0.2352	0.2363	0.2343

Table 7: Relationship of C-Score, Tournament incentives and future performance. C-Score is the C-Score from Khan and Watts (2009); Total Gap is the natural log of Total Gap; TRatio is the ratio of CEO total compensation to VPs media compensation; Slice is the fraction of the aggregate compensation of Senior Managers paid to the firm's CEO; LN CEO's Delta is the natural log of 1 plus Delta of the CEO; LN CEO's Vega is the natural log of 1 plus Vega of the CEO; Size is the natural log of assets; MTB is the ratio of Market to Book value of equity; Leverage is total debt over assets; Sales Growth is the annual growth of sales; CFO volatility is the volatility of firm's cash flows from t-3 to t; Horizontal Gap is the coefficient of variation in total compensation of Senior Managers (excluding the CEO); CEO Tenure is the natural log of CEO's tenure in the firm; CEO age is the natural log of CEO's age; Litigation is a dummy variable equal to 1 if the firms belongs to an industry with high levels of litigation. Industry fixed effects are at Fama-French 48 industry level. Standard errors clustered at firm level in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.