When Do Long-term Incentives Work? Executive Compensation Duration and Trade-offs in Permanently Reinvested Foreign Earnings

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Abstract

Theory predicts that longer compensation duration—the vesting period of compensation grants—does not always deter managerial short-termism; its effectiveness hinges on the costs and benefits of managerial myopic behaviors. This paper tests this prediction by examining how compensation duration influences the designation of permanently reinvested foreign earnings (PRE), a tax strategy that increases reported earnings but constrains domestic investment capacity. Exploiting variation in both market expectations and investment opportunities, I identify conditions under which PRE designations enhance or erode shareholder value and investigate how compensation duration affects this trade-off. Using a panel of U.S. multinational firms, I find that longer compensation duration promotes value-enhancing investment only when short-term earnings increases align with shareholder interests; otherwise, it fails to curb managerial short-termism. Additional analyses show that managers using PRE to meet market expectations receive higher compensation and face lower forced turnover risk. Moreover, extended compensation duration increases managerial exposure to firm-specific risk, resulting in earnings management that preserves reporting flexibility. These findings demonstrate both the strengths and limitations of long-term compensation structures and offer important implications for incentive design and corporate governance policies.

Keywords: compensation duration, managerial short-termism, permanently reinvested foreign earnings, market expectations

JEL Codes: H25, J33, M41, M52

I. Introduction

Regulators, practitioners, and academics have long voiced concerns about managerial short-termism (Narayanan, 1985; Bebchuk and Fried, 2004; Cadman and Sunder, 2010; Edman, Fang and Huang, 2022), the tendency of executives to prioritize short-term financial performance at the expense of long-term value creation. Executive compensation is often at the center of this debate, with critics arguing that rewarding managers based on short-term performance encourages myopic behavior (Graham, Harvey, and Rajgopal, 2005). In response, many have advocated for longer compensation duration—the vesting period of compensation grants—to promote long-term decision-making. By extending compensation duration, executives are financially motivated to ensure the firm performs well not just in the immediate term but over the long haul (Gopalan, Milbourn, Song, and Thakor, 2014). This view has gained traction among policymakers: for example, the 2018 U.K. Corporate Governance Code mandates longer vesting periods, and the U.S. Council of Institutional Investors recommends time-based vesting up to ten years.

Despite widespread support for extending compensation duration, empirical evidence on its effectiveness remains mixed. Some studies find that longer compensation duration is associated with increased investment in long-term assets (Gopalan et al., 2014) and reduced abnormal investment (Regier, 2023). Others, however, show that it can backfire—for example, Li and Peng (2020) document poorer stock market reactions to acquisitions by CEOs with longer-duration incentives. These conflicting findings raise a key question: under what conditions do long-term incentives improve managerial decision-making?

My study draws on analytical work by Narayanan (1985), who examines how compensation duration affects managerial short-termism under different scenarios. His analysis recognizes that managerial short-termism arises only when managers' short-term gains conflict with shareholder interests, and that compensation duration can curb myopic behaviors only if the long-term incentives outweigh short-term costs. While prior research has extensively explored the relationship between compensation duration and managerial short-termism, existing studies suffer from two key identification

weaknesses that may have led to incomplete conclusions. First, previous empirical studies often overlook that short-term performance improvements are not inherently value-destroying; under certain conditions, they may align with shareholder interests (Narayanan, 1985; Varas, 2017). Without distinguishing between value-enhancing and value-destroying short-term actions, prior studies may misclassify optimal behavior as myopic. Second, commonly used proxies for long-term orientation, such as R&D investment, are noisy. Previous research generally utilizes R&D investment (Gopalan et al., 2014; Edmans, Fang and Lewellen, 2017) as a proxy of long-term orientation. However, firms may reduce R&D due to negative expected returns or may opportunistically reclassify other expenses as R&D (Laplante et al., 2019), complicating interpretation.

This study addresses these challenges by examining the designation of permanently reinvested foreign earnings (PRE) as a direct measure of managerial trade-offs between value-destroying earnings management and value-enhancing investment. Under APB 23, U.S. multinational firms can defer income tax expenses by designating foreign subsidiary earnings as permanently reinvested abroad. While this strategy boosts reported income in the short term, it restricts the firm's ability to use these funds for domestic investments (Krull, 2004; Dyreng and Markle, 2016). The PRE designation thus reflects a key managerial decision: whether to manage earnings upward or preserve capital for potentially higher-return domestic opportunities (Graham, Hanlon, and Shevlin, 2011; Blouin, Krull and Robinson, 2012).

My empirical setting focuses on firms with higher domestic return on assets (ROA), where PRE designations likely indicate managerial short-termism. In these cases, the value-maximizing decision would be to repatriate foreign earnings and invest domestically. However, when firms would otherwise miss analyst earnings forecasts, managers face strong incentives to increase PRE to meet expectations—at the cost of shareholder value. Conversely, if firms have already exceeded analyst forecasts before adjusting PRE, managers may choose to reduce PRE to establish a "cookie jar," thereby preserving reporting flexibility for future periods. In this scenario, managerial incentives align with shareholder interests, as reducing PRE both enhances future

reporting flexibility and increases resources available for domestic investments. This unique setting allows me to disentangle situations in which managerial incentives either diverge from or align with shareholder interests, providing a comprehensive understanding of how compensation duration influences managerial decision-making.

Using analyst forecasts as a proxy for market expectations (Krull, 2004; Graham, Harvey, and Rajgopal, 2005), I study how CEO compensation duration shapes the decision to designate PRE across varying performance scenarios. When domestic ROA is higher, I find that longer compensation duration is associated with a reduction in PRE if firms have already exceeded analyst expectations, consistent with better investment decisions and incentive alignment. However, if firms risk missing analysts' forecast, longer compensation duration does not reduce PRE designations. These results suggest that the cost of failing to meet market expectations outweighs the benefits associated with a longer compensation duration (Narayanan, 1985; Marinovic and Varas, 2019).

The results remain robust across various model specifications, including entropy balancing, industry fixed effects, and additional control variables. To further rule out alternative explanations, I conduct two additional analyses. First, I find that the observed effect is concentrated among firms using pre-tax compensation metrics. Because PRE affects only after-tax income, this finding rules out the possibility that the results are driven by compensation benchmarks rather than by market expectations. Second, the effect persists among financially constrained firms, excluding the explanation that firms' reliance on PRE is limited due to lower external financing costs. Furthermore, I find that beating analysts' forecasts through PRE is associated with a 23.8% increase in CEO total compensation and a 54% reduction in the odds of forced turnover. These results suggest that the financial penalties for missing earnings forecasts may outweigh the value of long-term equity compensation, highlighting strong managerial incentives to meet short-term earnings benchmarks, even at the potential expense of shareholder interests.

To complement the main analysis, I finally examine scenarios in which foreign ROA exceeds domestic ROA. Since earnings not designated as permanently reinvested abroad remain available for foreign investments, a reduction in PRE under these

conditions may primarily reflect accounting choices rather than actual investment decisions. Consistent with the main findings, I continue to observe that CEOs with longer compensation duration are more likely to designate PRE when firms would have otherwise missed analyst forecasts. This strategy enables managers to allocate resources to profitable foreign projects while simultaneously enhancing reported financial performance. However, I find a significant negative association between compensation duration and PRE designation when firms have already exceeded analyst forecasts before adjusting PRE. This result suggests the negative externalities of longer compensation duration, which exposes managers to heightened wealth risks (Gopalan et al., 2014; Kubick et al., 2024). In response to these risks, managers may engage in more earnings smoothing by reducing PRE, thereby preserving reporting flexibility to meet market expectations in future periods (Titman and Trueman, 1985).

This paper makes multiple noteworthy contributions to existing literature. First, I show that the effectiveness of compensation duration depends on whether managerial short-term incentives are aligned with shareholder interests, helping reconcile mixed evidence in prior studies (Gopalan et al. 2014; Regier 2017; Li and Peng 2020; Edmans et al., 2022). The findings indicate that extending compensation duration promotes optimal investment decisions only when managerial incentives are aligned with shareholder interests. However, when incentives are misaligned, the benefits of a longer compensation duration are insufficient to counteract the advantages managers derive from myopic behavior.

Second, this study provides evidence on the negative externalities of extended compensation duration, which increases managerial exposure to risk. The substantial costs associated with missing market expectations, coupled with heightened risks to personal wealth, incentivize managers to engage in earnings smoothing practices. By preserving greater reporting flexibility, managers seek to maintain the ability to meet market expectations in future periods.

Finally, this study contributes to the corporate tax literature by showing that managerial incentives—specifically, compensation horizon—play a significant role in corporate repatriation decisions. While prior research highlights the importance of

minimizing financial accounting income tax expense when deciding whether to repatriate foreign earnings (Graham, Hanlon, and Shevlin, 2011), the designation of earnings as permanently reinvested (PRE) reflects a deeper capital friction that limits the efficient flow of funds from foreign to domestic operations (Blouin, Krull, and Robinson, 2012). My findings suggest that these frictions are not merely tax-driven but also shaped by executive incentive structures. This underscores the importance of considering managerial incentives in evaluating both tax strategies and broader firm investment behavior.

This study also offers important implications for regulators and practitioners. Despite the regulatory movement to extend compensation duration, this study provides empirical support for Varas (2017), who suggests that tolerance for failure is critical in mitigating managerial short-termism. Specifically, investors may be more willing to accept short-term performance fluctuations, as the costs and pressures associated with missing market expectations can drive managers to focus on myopic behavior.

The remainder of this paper is organized as follows. Section II reviews the theoretical background on compensation duration and managerial short-termism. Section III introduces the concept of PRE designation and its implications for managerial short-termism. Section IV outlines the empirical methods and sample construction. Section V presents the main results, along with robustness checks. Section VI includes additional tests and supplementary analyses. Section VII concludes.

II. Theoretical Background and Literature Review

2.1 Managerial Incentives for Short-term Results

As there is an on-going concern regarding short-termism, Narayanan (1985) provides a rigorous economic framework to analyze managerial incentives for short-term results. In Narayanan's (1985) two-period model, a manager has a choice between decision A or B. Decision A results in k additional dollars in period 1 but 0 dollars in period 2. However, decision B results in 0 dollars in period 1 but 1 additional dollar in period 2. After period 2, both decisions produce zero cash flow. Theoretically, decision A results in the highest net present value (NPV) if $k \geq 1$. In this case, pursuing short-

term profits maximizes shareholder's wealth.

When $k < 1$, decision B is the shareholders' dominant strategy which yields a higher NPV. In this scenario, focusing on short-term profits impairs long-term firm value. However, a manager will choose the suboptimal decision if a compensation contract rewards the manager more when he/she takes decision A. Such managerial short-termism sacrifices the long-term interests of the shareholders for short-term profits.

This pioneering model (Narayanan, 1985) identifies two necessary conditions for the occurrence of managerial short-termism. First, focusing on short-term results generates lower NPV compared with other decisions. Second, managers get more rewards when they choose to maximize short-term gains rather than long-term value. Therefore, it is important for firms to adjust managers' incentive structure based on strategies that maximize firm value.

2.2 Compensation Duration and Managerial Short-termism

Narayanan's (1985) model provides initial evidence that firms could leverage compensation duration, the length of compensation contract, to align managerial decisions to the long-term interests of stockholders. Longer compensation duration reward managers for extra future performance, mitigating managers' incentive to sacrifice long-term value.

Varas (2017) assumes a dynamic model, offering more nuanced understanding about compensation duration and its impact on managerial decisions. In Varas's (2017) model, a manager exerts unobservable effort (e) to a project, and the project outcome is proportional to the manager's total effort. Total effort (e) contributes to a cash flow in each period, but the ultimate project outcome is a cumulative result that unfolds over multiple periods. Therefore, extending compensation duration (deferring compensation) expands the length of the window during which the executive performance can be evaluated. This encourages more managers' effort because "*the future pay-off to current period decisions will be realized to a larger extent in observable performance* (Regier, 2023)". When a manager's incentive is aligned with the long-term interests of stockholders, longer compensation duration induces more managerial effort, improving

the efficiency of corporate investment.

When a manager's incentive is not aligned with stockholder interests, a manager may engage in myopic decisions to maximize their own benefits at the expense of long-term value. According to economic models (Narayanan, 1985; Marinovic and Varas, 2019), managers have to tradeoff between the costs and benefits of myopic behaviors. Extending compensation duration increases the costs of managerial short-termism because longer evaluation period is more likely to cover the negative outcomes from myopic behaviors. However, whether compensation duration could deter managerial short-termism depends on the relative magnitude of costs and benefits. If the benefits of a myopic decision are large, longer compensation duration may not be sufficient to discourage such a decision. Therefore, the effect of compensation duration on managerial short-termism remains an important empirical question which deserves in-depth investigation.

2.3 Prior Empirical Research

Managerial short-termism has been a longstanding concern, but it gained heightened prominence in recent years, particularly after the Enron scandal and the 2008 financial crisis (Marinovic and Varas, 2019). Beating market expectations, one of the most prevalent myopic behaviors, is a major problem alleged by academics, practitioners, and policy makers. In a survey research, Graham, Harvey, and Rajgopal (2005) find that 78% of U.S. CEOs are willing to sacrifice long-term value to beat market expectations. A wealth of evidence indicates that firms take actions such as reducing discretionary expenditures in order to manage reported earnings (Bushee, 1998; Roychowdhury, 2006; Mizik and Jacobson, 2007; Gunny, 2010). For example, Gunny (2010) documents that firms that marginally meet earnings benchmarks have lower SG&A and production expenditures. Bushee (1998) find that firms with more short-term investors tend to cut R&D investment to boost short-term financial performance, substantially impairing corporate innovations.

Short-termism is primarily driven by executive compensation schemes because managers are rewarded for short-term performance (Bebchuk and Fried, 2004). To constrain managerial myopic behaviors, experts propose extending compensation

vesting period to incentivize long-term value creation. Despite actions to increase executive compensation duration, empirical evidence about the effect of extended compensation duration is mixed. On the one hand, Gopalan et al. (2014) finds that longer compensation duration is associated with more long-term assets and greater research and development (R&D) intensity. In a more recent study, Regier (2023) exploits a German regulatory shock which fosters long-term orientation in executive compensation and finds a reduction in abnormal investment. These findings are consistent with predictions that longer compensation duration could alleviate managerial short-termism. On the other hand, Li and Peng (2020) argue that long compensation duration may not be effective if implemented without performance requirements. In line with their arguments, they find that mergers & acquisitions (M&A) made by CEOs with long compensation duration are associated with lower announcement stock returns as well as long-term stock returns.

However, these studies have two key weaknesses in their identification strategies, potentially leading to incomplete conclusions. First, prior research fails to differentiate cases where a focus on short-term profits undermines shareholder value creation. The conceptual framework (Narayanan, 1985; Varas, 2017) suggests that managerial short-termism arises from incentive misalignment between managers and shareholders. Previous empirical findings may instead capture scenarios where prioritizing short-term gains is actually optimal, resulting in an inaccurate depiction of managerial short-termism. Second, assessing whether managerial decisions erode long-term value is challenging. Prior studies typically use R&D investment (Gopalan et al., 2014; Edmans et al., 2017) as a proxy for long-term orientation. However, firms may reduce R&D spending due to negative NPV or reclassify indirect expenses as R&D investment (Laplante et al., 2019). Consequently, relying on R&D as a measure of long-term orientation introduces significant bias.

III. Empirical Setting: Designation of Permanently Reinvested Foreign Earnings

3.1 Permanently Reinvested Foreign Earnings and Managerial Short-termism

To address identification limitations in prior research, I leverage a novel setting,

permanently reinvested foreign earnings (Krull, 2004; Blouin et al., 2012), to provide a comprehensive analysis regarding the relationship between compensation duration and managerial short-termism. This setting offers a framework to isolates managerial actions that prioritize short-term accounting performance at the cost of shareholder value.

Accounting Principles Board Opinion Number 23 (APB 23) defines permanently reinvested foreign earnings (PRE) as the earnings of foreign subsidiaries that have been invested abroad indefinitely or that will be remitted in a tax-free liquidation. U.S. multinational corporations (MNCs) should recognize the income tax expense for U.S. taxes on foreign subsidiary earnings when they earn the income, regardless of whether they repatriate the earnings (Krull, 2004; Blouin et al., 2012). MNCs receive foreign tax credit (FTC) on income earned outside U.S. to avoid double taxation. Specifically, MNCs operating in jurisdictions with foreign tax rates lower than the U.S. tax rate (non-binding MNCs) incur higher tax expenses due to the differential between the foreign and domestic tax rates. In contrast, MNCs operating in jurisdictions with foreign tax rates equal to or exceeding the U.S. tax rate (binding MNCs) do not experience additional tax liabilities, as their foreign tax obligations offset potential U.S. tax expenses.

However, APB 23 permits MNCs to designate certain foreign earnings as permanently reinvested abroad. This designation allows companies to defer the recognition of U.S. tax expenses on those earnings, as they are not anticipated to be repatriated to the U.S. parent company. As a result, non-binding MNCs can strategically designate foreign subsidiary earnings as permanently reinvested to postpone the recognition of U.S. tax expenses in their financial statements, thereby increasing after-tax income by avoiding the immediate recognition of income tax expenses.

Such a strategy could significantly enhance short-term accounting performance (Krull, 2004) but may be detrimental to shareholder value creation. PRE represents a valuable funding source for U.S. MNCs (Dyreng and Markle, 2016). However, because these funds cannot be used for domestic investments, increases in PRE reduce capital available for domestic projects. This could undermine shareholder interests when

domestic projects yield higher returns. Prior studies extensively examine the investment implication of PRE designation. Edwards, Kravet, and Wilson (2015) show that PRE reflects substantial cash trapped overseas, often leading to less profitable foreign acquisitions. Using confidential affiliate-level data, Blouin, Krull, and Robinson (2018) finds that MNCs with higher level of PRE are less responsive to domestic investment opportunities. These findings suggest that PRE designations are associated with internal capital market frictions that impair shareholder value.

Because repatriating earnings immediately reduces domestic financial slack but increases tax expense, PRE allows us to observe whether managers are willing to defer short-term gains for shareholder value. This context provides a unique opportunity to examine how managers navigate the tradeoff between boosting annual earnings and fostering long-term value creation. The designation of PRE offers a more precise identification of managerial myopic behavior, facilitating a cleaner examination of how executive compensation duration influences managerial short-termism.

3.2 Beating Market Expectations vs. Long-term Value Creation

I employ analyst consensus forecasts as a proxy for market expectations because managers are highly motivated to meet these forecasts (Burgstahler and Eames, 2002; Brown, 2001). Following Krull (2004), I examine whether managers use PRE to improve after-tax income (upward earnings management) when pre-managed earnings are lower than analysts' forecasts. Also, managers could reduce PRE (downward earnings management) when they have beaten the analyst forecast to create a cookie jar. However, only non-binding MNCs have discretion to manipulate after-tax income through PRE, so we first estimate firms' foreign tax rates as follows:

$$FTR = foreign\ tax\ expense / foreign\ earnings\ before\ tax$$

To avoid the influence of the Tax Cut and Jobs Act in 2017 which introduced a one-time transition tax on foreign earnings, I restricted my sample to firms whose fiscal year ends before December 31st, 2017. *Nonbind*, a proxy for firms' foreign tax position, is hence a dummy variable equal to 1 if the average of *FTR* over the previous five years (*AvgFTR*) is smaller than 35%, and 0 otherwise (Krull, 2004). To estimate earnings before the tax expense of PRE, I calculate the difference between the actual earnings

(*Act_Earnings*) and the changes in the estimate of taxes on PRE (*ΔTax*). I estimate *ΔTax* with the number reported in the notes to the financial statements if the firm discloses such an estimate. If a firm does not provide a *ΔTax* estimate, I follow Krull (2004) to calculate *ΔTax* as the change in reported PRE times the difference between 0.35 and *AvgFTR*. If the MNC is in a binding position, then *ΔTax* equals zero. Therefore, firms that miss analyst forecasts before the designation of PRE could be estimated as follows:

Miss = 1, if *Analyst_Forecast - (Act_Earnings - ΔTax)* > 0, and 0 otherwise.

To assess decisions that promote long-term value creation, I compare firms' foreign and domestic investment opportunities. I estimate the expected after-tax returns for both foreign and domestic investments at t-1 to control for the positive correlation between ROA difference induced by deductible repatriations (Krull, 2004), defined as follows:

FROA = foreign earnings after taxes/foreign identifiable assets.

DROA = domestic earnings after taxes/domestic identifiable assets.

Therefore, it is optimal to allocate more resources to domestic projects if *DROA* > *FROA* or to foreign projects if *FROA* > *DROA*. This innovative setting thus permits us to observe whether managers designate more PRE to meet analyst forecasts when foreign projects are less profitable (*DROA* > *FROA*), a scenario where managers engage in myopic behaviors, prioritizing short-term performance over long-term firm value.

3.3 **Identification of Managerial Short-termism with PRE**

In the main analysis, I concentrate on a scenario where *DROA* exceeds *FROA*. Since PRE is prohibited for domestic investments, an increase in PRE when *DROA* > *FROA* serves as a clear indication of myopic behavior. However, earnings not designated as permanently reinvested abroad remain available for use in foreign investments. Consequently, a decrease in PRE when *FROA* exceeds *DROA* may primarily reflect the firm's accounting choices rather than actual investment outcomes. Additional analysis (Section VI) is conducted to further investigate this scenario.

My primary research question relates to the association between compensation duration and managerial short-termism. Exploiting the novel setting of PRE designation, I construct four subgroups based on two dimensions: FTC conditions (binding or non-

binding) and incentives to meet analyst forecast (Miss or Meet). These subgroups are illustrated in Figure 1. My interest is in the subgroup of non-binding firms that would have missed analyst consensus forecast without increasing PRE (*NonBind_Miss*). This subgroup (Incentive Misaligned) reflects the managers' tradeoff between increasing PRE to boost after-tax income and allocating resources to more profitable domestic projects (cell 1 in Figure 1). I compare this subgroup to binding firms that met analyst consensus forecast without designating PRE (cell 4). For firms in cell 4, the incentive to manipulate PRE is minimal since their foreign tax credit can offset U.S. tax liabilities.

Additionally, both cell 3 (*Bind_Miss*) and 4 (*Bind_Meet*) are binding firms, so I do not expect a significant difference in their PRE designation decisions. Finally, firms in cell 2 have met analyst consensus forecast (*NonBind_Meet*). These firms have incentive to manipulate earnings downwards by reducing PRE designation to create "cookie jar" (Krull, 2004; Beardsley et al., 2021). Simultaneously, reducing PRE to invest in domestic projects generates higher returns. Cell 2 therefore reflects firms where managers' short-term interests are aligned with long-term value creation (Incentive Aligned). By comparing different subgroups with cell 4, I isolate instances of managerial short-termism, where the pursuit of short-term profits comes at the expense of shareholder interests.

[Insert Figure 1 Here]

IV. Data and Methods

4.1. Sample

To economize hand-collection effort of PRE information, I start from firms in Compustat during fiscal year 2010 and 2017 to avoid potential influence of Financial Crisis and Tax Cuts and Job Act. I follow Krull (2004) and limit to firms with necessary data to compute the mean foreign tax rate over the prior five years (*AvgFTR*), foreign and domestic ROA (*FROA* and *DROA*), changes in foreign assets (*Chg_FAssets*), and leverage (*Lev*). This initial screening yields 8,556 firm-year observations. Table 1 details my sample selection process. From the initial sample, I exclude 2,706 observations with missing analyst forecasts from IBES and 1,005 observations lacking

CEO compensation data in Execucomp. Additionally, I remove 81 observations with fiscal years ending after December 31, 2017. Subsequently, I manually collect PRE information from tax footnote disclosures in 10-K filings, reducing the sample to 2,433 observations.

I then hand collected compensation information and vesting schedules from annual proxy statements (Form DEF 14A) filed on the SEC's EDGAR platform, excluding 44 observations due to missing DEF 14A filings. Finally, I truncate *DiffROA* (the difference between *DROA* and *FROA*), *FTR* (foreign tax rate), and *Chg_PRE* (changes in PRE) at the 1% level, consistent with Krull (2004). The final sample comprises 2,295 observations across 609 firms, of which 1,026 observations feature *DROA* greater than *FROA*.

[Insert Table 1 Here]

4.2. CEO Compensation Duration

I estimate compensation duration following Gopalan et al., (2014) and Kubick, Robinson and Starks (2024), which equals the weighted average of the vesting periods of different components of executive pay (salary, bonus, deferred bonus, restricted stock, and stock options):

$$Duration = \frac{(Salary + Bonus) * 0 + \sum_{i=1}^{n} G_i * t_i}{Salary + Bonus + \sum_{i=1}^{n} G_i}$$

where G_i denotes the dollar value of the *i*th compensation grant (e.g., restricted stock, option, deferred bonus) that vests over t years, and *Salary* and *Bonus* represent the dollar values of annual salary and bonus, respectively. The vesting period of salary and bonus is zero because I calculate a firm-year duration. CEOs might receive multiple grants within each year, so *n* represent the total number of long-term compensation plans granted in a fiscal year.

4.3 Regression Model

I analyze how compensation duration relates to the change in PRE (*Chg_PRE*) under different scenarios when *DROA* > *FROA*, as illustrated in Figure 1, using the following regression model:

$$
\begin{aligned}
Chg_PRE_{i,t} = {} & \beta_0 + \beta_1 NonBind_Miss_{i,t} * Duration_{i,t} + \beta_2 NonBind_Meet_{i,t} \\
& * Duration_{i,t} + \beta_3 Bind_Miss_{i,t} * Duration_{i,t} + \beta_4 Duration_{i,t} \\
& + \beta_5 NonBind_Miss_{i,t} + \beta_6 NonBind_Meet_{i,t} + \beta_7 Bind_Miss_{i,t} \\
& + \beta_8 FTR_{i,t} + \beta_9 Chg_FAssets_{i,t} + \beta_{10} Lev_{i,t} + \beta_{11} DivYield_{i,t} \\
& + YearFixed + \varepsilon \quad (1)
\end{aligned}
$$

My primary focus is on the *NonBind_Miss* subgroup (cell 1). In this scenario, CEOs face conflicts of interest between short-term benefits and long-term value creation. They are incentivized to designate more PRE to meet analyst forecasts, even though this decision undermines long-term firm value, as it is optimal to repatriate more foreign earnings to fund domestic projects. Consequently, whether compensation duration can effectively deter managerial short-termism depends on the cost of missing market expectations. Theory (Narayan, 1985; Marinovic and Varas, 2019) predicts a negative and significant β_1 if the benefits of longer compensation duration outweigh the cost of missing analyst forecasts. However, a significant effect may not be observed if the cost of missing market expectations exceeds the benefits provided by longer compensation duration.

For firm-years in *NonBind_Meet* subgroup (cell 2), both earnings management and investment opportunity lead to the same direction in *Chg_PRE*. CEOs have incentives to manage earnings downward to create cookie jar and repatriate more foreign earnings to make domestic investment. I expect a negative and significant β_2 because longer compensation duration allows more outcomes to be included in the evaluation period.

Finally, firms-years in the *Bind_Miss* subgroup (cell 3) are unable to manipulate PRE to meet analysts' forecasts, as binding firms fully offset their domestic tax liabilities with FTC. Therefore, I do not anticipate a significant β_3 since the designation decisions in the *Bind_Miss* and *Bind_Meet* subgroups are expected to be similar.

Following Krull (2004), I incorporate several characteristics of the consolidated entity that may influence the reinvestment decisions of foreign subsidiaries. To account for the predicted changes in permanently reinvested earnings associated with the growth of foreign operations, I include the change in identifiable foreign assets from year t-1

to year t (*Chg_FAssets*). Dividend yield (*DivYield*) and firm leverage (*Lev*) are included to control for the cash requirements and financing preferences of the U.S. entity. Lastly, I include the foreign tax rate (*FTR*) to capture the tax benefits of deductible repatriations, as well as year fixed effects to control for macroeconomic factors that may vary across years. I winsorize continuous control variables at 1% level. Standard errors are clustered at firm level.

V. Empirical Results

5.1 Descriptive and Univariate Analyses

Table 2, Panel A presents summary statistics for the regression sample. The average value of *Duration* is 1.557, aligning with findings from previous studies (Gopalan et al., 2014; Kubick et al., 2024). Interestingly, the mean value of *Miss* is 0.56, indicating that 56% of firms would miss consensus analyst forecast without changing their PRE. The average foreign tax rate (*FTR*) is 0.227 in our sample, consistent with a widespread corporate tax reduction in foreign countries after the 2008 financial crisis (Avi-Yonah et al., 2012, Farah et al., 2021).

Table 2 Panel B presents the means of the variables in our analysis for firm-years within the subgroups outlined in Figure 1. I include a Scheffe (1999) post hoc test to control for over rejection of differences in model covariates between the four groups. Consistent with the argument that binding MNCs have little incentive to manipulate earnings through PRE, I find no significant difference in the level of *Chg_PRE* between the *Bind_Meet* and *Bind_Miss* groups. However, the mean *Chg_PRE* in the *NonBind_Meet* group is significantly lower than that of the benchmark group (*Bind_Meet*), supporting the view that both earnings management and investment opportunities contribute to reductions in PRE designation. Furthermore, I observe a significant difference in the average *Chg_PRE* between the *NonBind_Miss* and *Bind_Meet* groups, aligning with the notion that managers use PRE to boost after-tax earnings (Krull, 2004) when pre-managed earnings fall short of market expectations. Finally, I do not observe a systematic difference in the level of *Duration* across these subgroups, alleviating concerns that firms in different groups structure compensation

duration differently.

5.2 Multivariate Analyses

Table 3 Panel A presents the results of estimating Equation (1). I employ a stepwise regression approach, presenting the model without fixed effects or control variables in Column 1, the model with year fixed effect in Column 2, and the model with year fixed effect and control variables in Column 3. The coefficient on *Duration*Bind_Miss* (coefficient = -0.003, p-value > 0.1) is not significant, consistent with the expectation that PRE designation decisions in the binding subgroups are similar. Additionally, I find a significant negative coefficient on *Duration*NonBind_*Meet (coefficient = -0.012, p-value < 0.05). Therefore, managers reduce PRE designation which increases the resources available for profitable domestic investments. This aligns with the theoretical framework (Narayanan, 1985; Varas, 2017) that longer compensation duration enhances managers' efforts to make optimal investment decisions.

Further, the coefficient on *NonBind_Miss* (coefficient = 0.028, p-value < 0.01) is significantly positive, indicating that managers in the *NonBind_Miss* subgroup designate more PRE to boost after-tax income, even when domestic projects offer greater profitability. Surprisingly, the coefficient on *Duration*NonBind_Miss* is insignificant (coefficient = 0.001, p-value > 0.1). The F-test in Table 3 Panel B also indicates that I cannot reject the hypothesis that the effect of compensation duration in the *NonBind_Miss* group is equal to that in the benchmark group (*Bind_Meet*). This finding thus contradicts prior research (Gopalan et al., 2014; Edmans et al., 2017; Regier, 2023), suggesting that extending compensation duration does not, on average, mitigate managerial myopic behaviors.

[Insert Table 3 Here]

5.3 Entropy Balanced Samples

As shown in Table 2, Panel B, several firm characteristics differ across the four subgroups outlined in Figure 1. It is therefore crucial to examine whether these differences influence the results. To address this, I use entropy balancing to ensure that firm observations in each subgroup are similar across all dimensions except the variable of interest. This multivariate reweighting technique creates treatment and pseudo-

control groups that are balanced on all covariates except the variable of interest (Hainmueller, 2012). Specifically, I compare each subgroup to the *Bind_Meet* subgroup and balance all covariates of the *Bind_Meet* subgroup with those of the other subgroups across the first three moments (i.e., mean, variance, and skewness). This process generates a set of entropy weights such that the treatment group matches the *Bind_Meet* subgroup across all three moments (Hainmueller and Xu, 2013). Untabulated statistics confirm that all variables are matched on mean, variance, and skewness to at least the third decimal place between the groups. Using the entropy-balanced sample, I then estimate the following regression:

$$\begin{aligned} Chg_PRE_{i,t} = {} & \beta_0 + \beta_1 TreatmentGroup_{i,t} * Duration_{i,t} + \beta_2 Duration_{i,t} \\ & + \beta_3 TreatmentGroup_{i,t} + \beta_4 FTR_{i,t} + \beta_5 Chg_FAssets_{i,t} + \beta_6 Lev_{i,t} \\ & + \beta_7 DivYield_{i,t} + YearFixed + \varepsilon \quad (2) \end{aligned}$$

where the *TreatmentGroup* is either *NonBind_Miss*, *NonBind_Meet* or *Bind_Miss*.

Table 4 Panel A presents the results of this analysis. Consistent with the main analysis, the coefficient on *Duration*NonBind_Miss* remains insignificant (coefficient = 0.001, p-value > 0.1). Extending compensation duration reduces PRE designation only in the *NonBind_Meet* subgroup (coefficient = -0.012, p-value < 0.05). Additionally, the F-test in Table 4 Panel B aligns with the results in Table 3. Overall, the findings in Table 4 support my primary analysis and confirm that the results are not driven by differences in the covariates included in the model.

[Insert Table 4 Here]

5.4 Robustness Checks

I conduct two robust tests. First, I include three different industry fixed effect (SIC two digits Classification, Fama-French 12 Classification and Fama-French 48 Classification) because investment opportunities could vary across industries. Table 5 shows the results after adding the industry fixed effect. Consistent with previous results, I continue to find the coefficients of *Duration*NonBind_Miss* to be insignificant. In addition, the coefficients of *Duration*NonBind_Meet* are negative and significant, consistent with results in Table 3.

[Insert Table 5 Here]

Second, I include additional firm and executive characteristics because corporate governance quality could be correlated with managerial short-termism (Dechow and Sloan, 1991). I include firm size (*Size*) which influences firms' visibility and capital structure. To control for corporate governance quality, I retrieve information from ISS Directors and add CEO tenure (*CEOTenure*), number of board members (*BoardSize*), CEO Duality (*CEOChair*) and the ratio of independent board members (*Independence*). Finally, I include the number of analysts following (*Analyst_Coverage*) because a higher number of analysts increases pressure on managers to meet market expectations (Huang, Pereira, and Wang, 2017). Table 6 shows the results after adding the additional control variables, which remain consistent with those in Table 3.

[Insert Table 6]

VI. Additional Analyses

6.1 Alternative Explanations

I now investigate two alternative explanations for the observed effect of compensation duration on PRE designation: Longer duration does not reduce PRE because (1) boards reward foreign and domestic incomes differently, or (2) firms could raise external fundings at lower cost.

During the pre-TCJA periods, executives received significantly higher rewards for foreign income, reducing their incentives to repatriate foreign incomes (Boylen, Gaertner, and Martin, 2023). To rule out the explanation, I investigate a subsample of firms without after-tax incentives in their executive compensation contracts. PRE designation only influences tax expenses which are orthogonal to pre-tax incomes. Boylen et al. (2023) finds that firms without after-tax metrics reward domestic and foreign incomes in a similar way. Therefore, focusing exclusively on firms without after-tax metrics mitigates the concern that (1) compensation benchmark rather than market expectations drives the results, and (2) differing pay-performance sensitivities associated with domestic and foreign incomes inhibit repatriation. I manually collect CEO bonus incentive data from DEF 14A filings and compare two subsamples based on whether firms incorporate after-tax incentives in executive compensation contracts.

Table 7 reports the results.

[Insert Table 7 Here]

Columns (1) present estimates for firms that evaluate CEO performance without after-tax metrics, while columns (2) present estimates for firms that evaluate CEO performance on an after-tax basis. While the coefficient on *Duration*NonBind_Miss* remains insignificant in both groups, the coefficient on *Duration*NonBind_Meet* is only significantly negative if firms do not use after-tax metrics (*AfTax* = 0) in CEO compensation contracts. This analysis also employs the subset of firms evaluating CEO compensation on after-tax basis effectively acts as a placebo test. Overall, the results help confirm that the patterns I document in Table 3 are not driven by the difference in pay-for-performance sensitivity between domestic and foreign incomes.

To examine the second alternative explanation, I follow Farre-Mensa and Ljungqvist (2016) to directly capture firms' ability to raise external funding using credit ratings. I create a dummy variable *Inv_Grade* which equals to 1 if a firm's credit rating is above the investment grade, as 0 otherwise. Firms with lower credit ratings have higher external financing costs and are more likely to rely on internal capital. Therefore, the trapped cash associated with PRE is more valuable among those firms. Table 8 reports the results.

[Insert Table 8 Here]

Columns (1) present estimates for firms with a credit rating below investment grade, while columns (2) present estimates for firms with a credit rating above investment grade. Consistent with the main analysis, I fail to document a significant coefficient on *Duration*NonBind_Miss* in both groups. However, the coefficient estimate of *Duration*NonBind_Meet* is significantly negative when the credit ratings are lower than the investment grade (Column 1). This supports the argument that firms with lower credit ratings rely more on internal financing. Nonetheless, extended compensation duration does not reduce PRE designation even though domestic investment returns are higher. This analysis mitigates the concern that my main results are driven by lower external financing costs.

6.2 The Cost of Missing Market Expectations

Theory (Narayanan, 1985; Varas, 2017) predicts that compensation duration could mitigate managerial short-termism only if the benefits of deferred compensation exceed the costs of missing short-term market expectations. However, empirical evidence indicates severe adverse consequences when a firm's reported earnings fall short of analyst earnings forecasts. For example, Skinner and Sloan (2002) find that the negative consequences of failing to meet analyst earnings forecasts are disproportionately greater than the benefits of meeting them. Similarly, Kasznik and McNichols (2002) show that market valuations are higher for firms that meet or exceed analyst forecasts. Additionally, Lopez and Rees (2002) and Jiang (2008) demonstrate that meeting or beating analyst forecasts is associated with higher earnings response coefficients and a lower cost of debt, respectively.

Besides capital market consequences, missing the analysts' forecasts could also negatively influence a CEO's personal wealth and career. Matsunaga and Park (2001) find that missing analysts' forecast leads to lower CEO cash bonuses. Mergenthaler, Rajgopal and Srinivasan (2012) further find that CEOs are more likely to be dismissed if firm performance is below analysts' forecasts. The above studies thus lend support to explanation that the substantial costs of missing market expectations outweigh the benefits of extending compensation duration.

To investigate the potential costs associated with missing market expectations, I examine the outcome for beating the forecast with PRE designation. Following Gleason and Mills (2008), I use the full sample but restrict my analysis to non-binding firms (*Non_Bind* = 1) that would miss analysts' consensus forecast without changing their PRE (*Miss* = 1). I create a dummy variable, $Beat\ w/\ PRE$, which equals to 1 if *Act_Earnings* ≥ *Analyst_Forecast*, and 0 otherwise. Specifically, I estimate the following regression:

$$CEOBenefit_{i,t} = f(\beta_0 + \beta_1 Beat\ w/\ PRE_{i,t} + \beta_2 LogSale_{i,t} + \beta_3 MTB_{i,t} + \beta_4 BoardSize_{i,t} + \beta_5 Independence_{i,t} + \beta_6 CEOTenure_{i,t} + \beta_7 CEOChair_{i,t} + \beta_8 Analyst_Coverage_{i,t} + IndustryFixed + YearFixed + \varepsilon) \quad (3)$$

I examine four outcomes that are related to CEO personal benefits (*CEOBenefit*), including bonus compensation (*BonusComp*), equity compensation (*EqtComp*), total

compensation (*TotComp*) and forced turnover (*Forced_Turnover*). Control variables are consistent with Mergenthaler et al. (2012). I also include industry (Fama-French 48 Classification) and year fixed effect to control for unobservable heterogeneities. Table 9 presents my results.

[Insert Table 9 Here]

Consistent with the notion that CEOs are confronted with substantial costs when missing market expectations, $Beat\ w/\ PRE$ is positively associated with different types of CEO compensation while negatively associated with forced turnover. Regarding the economic magnitude, beating analyst forecasts is associated with a 23.8% increase in CEO total compensation (about $1.9 million in my sample). In addition, the average marginal effect (AME) of $Beat\ w/\ PRE$ is -0.024 (p-value < 0.1), suggesting an on-average 2.4% reduction in the probability of forced turnover when firms beat analysts' consensus forecasts after PRE designation. Furthermore, the odds of forced turnover (odds ratio = 0.46) are 54% lower for firms which beat analysts' forecast after PRE designation compared to those who did not. Forced turnover, which results in the forfeiture of unvested compensation grants and significant career penalties (Yermack, 2006; Dahiya and Yermack, 2008), imposes substantial costs on CEOs who fail to meet market expectations.

In contrast, the overall compensation subject to vesting schedules amounts to $4.4 million in my sample. Given the relatively short compensation duration (mean = 1.56), managers are generally better off unless a suboptimal PRE decision causes a drastic decline in stock prices within a short period. The above analyses hence support the explanation that the significant costs of missing market expectations reduce the effectiveness of compensation duration. My results are also consistent with prior empirical research, which suggests that managers have strong incentives to consistently beat market expectations (Bartov et al., 2002).

6.3 Compensation Duration and PRE Designation when DROA < FROA

Finally, I examine the scenario where DROA is less than FROA. In this case, the optimal strategy involves allocating more resources to foreign investments. I categorize firms into four subgroups following the approach described in Section 4.3, though the

implications of these subgroups differ. Figure 2 illustrates these subgroups when DROA < FROA.

[Insert Figure 2 Here]

In this scenario, firms in cell 1 (*NonBind_Miss*) optimize long-term firm value by investing in foreign projects. Additionally, managers can enhance after-tax income by designating more earnings as permanently reinvested (PRE). This aligns their short-term incentives with long-term value creation (Incentive Aligned). In contrast, firms in cell 2 (*NonBind_Meet*) have incentives to reduce PRE, creating a "cookie jar" for future earnings management (Krull, 2004; Beardsley et al., 2021), leading to a misalignment of incentives (Incentive Misaligned). Nevertheless, reducing PRE may not impact real investment decisions when DROA < FROA. While these firms must recognize tax liabilities, they can still use non-permanently reinvested foreign earnings to fund foreign projects without triggering U.S. repatriation taxes. As a result, reducing PRE does not constrain the actual resources available for foreign investments. For firms in *NonBind_Meet* subgroup, the designation of PRE is more likely to reflect their accounting choices.

There is limited evidence on the effect of compensation duration on accounting choices. Theoretically, while longer compensation durations help reduce managerial short-termism, they also introduce significant risks for executives (Gopalan et al., 2014). Empirical research (Kubick et al., 2024) shows that boards extend the horizon of new compensation grants when there is greater sensitivity to stock return volatility (vega), particularly when left-tail risk is higher. Since distant cash flows tend to be more volatile than near-term cash flows, this heightened uncertainty may increase managers' demand for reporting flexibility (Titman and Trueman, 1986). When DROA < FROA, how compensation duration shapes PRE designation remains an empirical question.

Table 10 presents the comparison for firm-years within the subgroups where DROA < FROA (Figure 2). I consistently find no significant difference in the level of *Chg_PRE* between the *Bind_Meet* and *Bind_Miss* groups, both of which have limited discretion to manipulate PRE. However, firms in the *NonBind_Miss* subgroup designate more PRE, which boosts annual incomes and enhances profitability through foreign

investments. In contrast, firms in the *NonBind_Meet* subgroup significantly reduce their PRE, increasing their flexibility to manipulate future earnings. Similarly, there is no systematic difference in the level of *Duration* across these subgroups.

[Insert Table 10 Here]

To further investigate the effect of compensation duration, I re-estimate Equation (1) with firm-years whose FROA exceeds DROA (Figure 2). Table 11 reports the results.

[Insert Table 11 Here]

Table 11 Panel A presents the multivariate analysis. First, I find a significant positive association between *Duration* and *Chg_PRE* (coefficient = 0.016, p-value < 0.05) for the benchmark group (*Bind_Meet*). Additionally, the F-test for *Duration*Bind_Miss + Duration* in Table 11 Panel B shows a positive and significant result (coefficient = 0.015, p-value < 0.05). These findings suggest that extending compensation duration encourages binding firms to fund profitable foreign projects. Furthermore, the F-test for *Duration*NonBind_Miss + Duration* is also positive and significant (coefficient = 0.07, p-value < 0.1), supporting the idea that longer compensation durations promote more optimal investment decisions when managers' incentives are aligned with shareholders' interests.

However, the effect of compensation duration is significantly different for observations in the *NonBind_Meet* subgroup (coefficient = -0.032, p-value < 0.01). F-test in Panel B suggests a strong negative association between *Duration* and *Chg_PRE* (coefficient = -0.016, p-value < 0.05). When non-binding firms have beaten analysts' forecast before changing PRE, managers with longer compensation duration tend to reduce PRE to a greater extent. This could shift current income into future periods, creating larger future reporting flexibility.

Above all, my analysis provides initial evidence about the effect of compensation duration on managers' demand for reporting flexibility, which aligns with the theoretical predictions of Titman and Trueman (1986). As compensation duration increases, managers face greater risk, which in turn heightens their demand for more discretion in financial reporting. Since managers have less control over long-term outcomes compared to short-term results, current decisions may take time to unfold and could be

influenced by external factors like market trends or unexpected events. Longer compensation durations thus expose managers to higher financial and reputational risks due to the extended evaluation period and the uncertainty surrounding long-term outcomes. When faced with greater risks, managers seek more reporting flexibility to enhance their ability to meet future analyst forecasts. This also aligns with experimental evidence that risk increases managers' likelihood of hiring a low-quality auditor (Hurley, Mayhew, Obermire and Tegeler, 2021), reflecting the substantial costs associated with missing market expectations.

VII. Conclusion

In this study, I utilize the context of permanently reinvested foreign earnings (Krull, 2004; Blouin et al., 2018) to explore how compensation duration influences managerial short-termism. Previous studies (Gopalan et al., 2014; Regier, 2023; Li and Peng, 2020) produced mixed findings, as traditional empirical settings fail to identify situations where conflicts of interest between managers and shareholders exist, which are essential for managerial short-termism to arise. The PRE context provides an opportunity to observe situations where prioritizing short-term earnings undermines shareholder interests. This novel approach enhances empirical analysis by offering a cleaner identification of managerial myopic behaviors.

APB 23 allows MNCs to designate foreign earnings as indefinitely reinvested abroad, thereby avoiding the accounting recognition of U.S. tax expenses on those earnings. Managers have incentives to increase PRE designations to enhance after-tax income, beating market expectations (Krull, 2004). However, this strategic PRE designation limits firms' ability to repatriate foreign earnings for profitable domestic investments, ultimately harming long-term firm value. I capture managerial short-termism by identifying instances where managers designate more PRE to meet analyst forecasts, despite domestic projects being more profitable than foreign ones. Distinct from prior studies, I find that extending compensation duration alone is insufficient to curb managerial short-termism. This finding aligns with theoretical frameworks (Narayanan, 1985; Varas, 2017; Marinovic and Varas, 2019), which suggest that the

effectiveness of compensation duration depends on the costs associated with missing market expectations.

Additionally, my analysis suggests that compensation duration promotes optimal investment decisions when managerial incentives align with shareholder interests, as longer compensation duration encourages greater managerial effort, enhancing corporate investment efficiency (Narayanan, 1985; Varas, 2017; Regier, 2023). When domestic ROA is higher, managers could reduce PRE to finance domestic projects while simultaneously managing earnings downward to increase future reporting flexibility (Krull, 2004; Beardsley et al., 2021). I find that extending compensation duration prompts managers to decrease PRE in such scenarios, but only if the firm has already met analyst forecasts without adjusting PRE. My results remain robust under different specifications, including entropy balancing, industry fixed effect and additional control variables.

To further examine the impact of compensation duration, I conducted several additional analyses. First, my results remain held when I examine two subsamples: firms without after-tax executive incentives and firms without investment-grade ratings. This rule out alternative explanations that my main results are driven by differential pay-for-performance sensitivities and external financial costs. Second, I find that using PRE to meet market expectations yields significant benefits for managers. On average, CEOs who beat analyst forecasts see a 23.8% increase in total compensation ($1.9 million in my sample) and a 54% reduction in the odds of forced turnover. In my sample, the average compensation subject to vesting schedules is approximately $4.4 million, with a mean compensation duration of 1.55 years, which is relatively short. The immediate loss from missing analyst forecasts is at least half of the deferred compensation. This finding supports the argument that the cost of failing to meet market expectations outweighs the benefits of a longer compensation duration.

Finally, I examine how compensation duration influences PRE designation when foreign ROA is higher. In this scenario, reducing PRE may not affect real investment decisions, as firms can still use non-permanently reinvested foreign earnings to finance foreign projects without incurring U.S. repatriation taxes. Consequently, a reduction in

PRE is more likely to reflect accounting choices rather than investment constraints. Beyond facilitating optimal investment decisions, longer compensation duration also exposes managers to greater cash flow risks (Gopalan et al., 2014; Kubick et al., 2024), increasing earnings uncertainty. My analysis indicates that longer compensation duration leads to greater PRE reduction (accumulate more "cookie jar") when managers have already surpassed market expectations. This is consistent with theoretical predictions that heightened risk motivates managers to seek greater reporting flexibility (Titman and Trueman, 1986), enhancing their ability to meet future analyst forecasts. This result further supports my primary analysis, indicating that, beyond meeting current analyst forecasts, managers seek greater discretion to mitigate the risk of missing future forecasts.

Collectively, this study contributes to existing literature in several important ways. First, I improve the empirical test of compensation duration and its impact on managerial short-termism (Gopalan et al., 2014; Edmans et al., 2022; Regier, 2023; Li and Peng, 2020). This novel setting allows me to capture the incentive misalignment between managers and shareholders, thus significantly improving the test power. Distinct from previous studies, I untangle a scenario where increasing current earnings impairs shareholders' interests. This cleaner setting provides robust evidence that existing compensation duration is, on average, insufficient to deter managerial short-termism. Second, my evidence also suggests that longer compensation duration exposes managers to substantial risks. This inversely increases their demand for reporting flexibility, aggravating earnings manipulation to create "cookie jar". This study hence highlights the unintended consequences of extending compensation duration, an effect overlooked in prior literature. Finally, this study contributes to the tax literature by showing that managerial incentives significantly influence repatriation decisions. While prior research attributes PRE-related frictions primarily to tax considerations (Graham, Hanlon, and Shevlin, 2011; Blouin, Krull, and Robinson, 2012), my findings highlight that executive incentives also play a critical role in shaping these capital allocation choices.

This research also carries important implications for practitioners and regulators.

Despite efforts to extend mandatory minimum equity vesting periods (e.g., the 2018 revision of the U.K. Corporate Governance Code), the significant costs of missing market expectations may still drive managers to prioritize short-term gains. My findings align with prior research (Baranchuk, Kieschnick, and Moussawi, 2014; Varas, 2017), highlighting that tolerance for failure is a key factor in mitigating managerial short-termism.

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Appendix A: Variable Definition

Variable	Definition
Chg_PRE	The change in cumulative PRE from year t-1 to year t; hand collected from firm 10-K filings, scaled by total assets.
Duration	Weighted-average duration of all primary components of compensation during the year, including any separately disclosed grants that have a predetermined vesting period.
Miss	1 if the pre-managed earnings is below the mean analyst forecast of after-tax income (NET from the I/B/E/S detail history file) outstanding at the earnings announcement date, 0 otherwise. Pre-managed earnings equal actual earnings (ACT from the I/B/E/S actual history file) less *ΔTAX*.
NonBind	An indicator variable equal to 1 when the MNC's *AvgFTR* is less than the U.S. statutory rate of 35 percent, 0 otherwise.
AvgFTR	The average foreign tax rate (current foreign taxes divided by foreign earnings before taxes) from year t-5 to year t-1, requiring a minimum of three years.
ΔTAX	The change in tax on PRE. When firms disclose the off-balance-sheet liability associated with PRE, I use their disclosures to calculate *ΔTAX*. Otherwise, for binding firms, *ΔTAX* is 0, and for nonbinding firms, *ΔTAX* is estimated using the *Chg_PRE* and the difference between the U.S. statutory rate of 0.35 and *AvgFTR*.
FROA	Foreign earnings after taxes (PIFO-TXFO from Compustat) scaled by foreign identifiable assets. To determine foreign and domestic identifiable assets in the post-ASC 280 regulatory environment, I utilize methodology in Oler et al. (2007). Specifically, ROA ((PI - SPI)/AT from Compustat) is decomposed into the asset turnover ratio times profit margin (((PI - SPI)/SALE) * (SALE/AT)) from Compustat. We have foreign sales (the sum of SALE for all foreign segments listed in Compustat Segment database) and domestic sales (SALE from Compustat less foreign sales) information and foreign and domestic after-tax income information. If we assume the asset turnover ratio is approximately the same for domestic and foreign, then we can convert the profit margin to an ROA measure for both domestic and foreign operations using the aggregate asset turnover ratio (Oler et al. 2007). The aggregate asset turnover is SALE/AT from Compustat. The foreign profit margin is foreign after-tax earnings scaled by foreign sales (see above). The domestic profit margin is domestic after-tax earnings scaled by domestic sales (see above). FROA is therefore the product of the asset turnover ratio and the foreign profit margin. DROA is the product of the asset turnover ratio and the domestic profit margin.
DROA	Domestic earnings after taxes (IB - (PIFO - TXFO)) from Compustat scaled by domestic identifiable assets from the Compustat Segment database. If such information is missing, I use methodology in Oler et al. (2007) to estimate domestic indentifiable assets (see above).
FTR	Current foreign taxes divided by foreign earnings before taxes.
Chg_Fassets	The change in identifiable foreign assets between year t-1 and year t from the Compustat segment database. Foreign assets are calculated as the sum of assets for all foreign segments.
Lev	Total debt divided by total asset
DivYield	The ratio of dividends paid to market value of equity. When dividends paid is missing, I assign a value of 0.
Size	Natual log of total assets.
Analyst_Coverage	The arithmetic mean number of unique monthly earnings forecasts during each calendar year for each firm extracted from the I/B/E/S summary file

Beat w/ PRE	If *Miss* = 1 and if actual earnings is greater than or equal to mean analyst forecast, then *Beat w/ Tax* = 1, zero otherwise.
LogSale	Natual log of total sales.
MTB	Market to book ratio
CEOTenure	The number of years in CEO position
BoardSize	The number of board members
CEOChair	1 if the CEO is the chair of the board
Independence	The ratio of independent directors on the board
BonusComp	The natural log of total bonus compensation (BONUS + NONEQ_INCENT) from Execucomp. I exculde observations with zero bonus compensation because the log transformation of zero outcomes could not be interpreted as approximating a percentage effect (Chen and Roth, 2024).
EqtComp	The natural log of total equity compensation (OPTION_AWARDS_FV + STOCK_AWARDS_FV) from Execucomp. I exclude observations with zero bonus compensation because the log transformation of zero outcomes could not be interpreted as approximating a percentage effect (Chen and Roth, 2024).
TotComp	The natural log of total compensation (TDC1) from Execucomp.
Foreced_Turnover	1 if a CEO experiences forced turnover, following Gentry et al. (2021)
AfTax	An indicator variable that takes on the value of one if the CEO bonus contract uses at least one performance metric based on after-tax earnings and no performance metrics based on pre-tax earnings, and zero otherwise.
Inv_Grade	An indicator variable that takes on the value of one if a firm's credit rating is above the investment grade.

Figure 1: Designation of PRE when DROA > FROA

	Miss	***Meet***
NonBind	**Cell 1 (Incentive Misaligned)** Earnings Management: + Investment Opportunity: -	**Cell 2 (Incentive Aligned)** Earnings Management: - Investment Opportunity: -
Bind	**Cell 3** No Earnings Management Investment Opportunity: -	**Cell 4** No Earnings Management Investment Opportunity: -

+ and – indicate the predicted direction of *Chg_PRE* compared with benchmark group.

Figure 2: Designation of PRE when DROA < FROA

	Miss	***Meet***
NonBind	**Cell 1 (Incentive Aligned)** Earnings Management: + Investment Opportunity: +	**Cell 2 (Incentive Misaligned)** Earnings Management: - Investment Opportunity: +
Bind	**Cell 3** No Earnings Management Investment Opportunity: +	**Cell 4** No Earnings Management Investment Opportunity: +

+ and – indicate the predicted direction of *Chg_PRE* compared with benchmark group.

Table 1: Sample Construction

Number of firm-year observations listed on Compustat from fiscal year 2010 through fiscal year 2017 with all required data available	8556
Require non-missing information in IBES	(2706)
Require non-missing compensation information in Execucomp	(1005)
Require fiscal year end before Dec 31st, 2017	(81)
Require non-missing *Chg_PRE* in 10K	(2331)
Require non-missing compensation vesting period data from DEF 14A	(44)
Truncate *ROADiff, FTR*, and *Chg_PRE* at 1%	(94)
Final Full Sample	**2295**
Sample when DROA > FROA	1026
Sample when DROA < FROA	1269

Notes: This table provides details about the sample construction. We begin with Compustat firm-year observations from 2010 through 2017. We require that each observation has non-missing analyst forecast in IBES and executive compensation information in Execucomp.

Table 2: Descriptive Analysis

Panel A: Summary Statistics

Variable	N	Mean	Median	SD	p25	p75
Chg_PRE	2295	0.016	0.013	0.076	0.000	0.038
Duration	2295	1.557	1.651	0.751	1.160	2.014
Miss	2295	0.560	1.000	0.496	0.000	1.000
NonBind	2295	0.806	1.000	0.396	1.000	1.000
FTR	2295	0.227	0.227	0.301	0.124	0.316
Chg_FAssets	2295	0.021	0.013	0.117	-0.015	0.056
Lev	2295	0.234	0.221	0.170	0.106	0.334
DivYield	2295	0.012	0.010	0.013	0.000	0.020
Size	2295	8.330	8.216	1.521	7.269	9.254
Analyst_Coverage	2295	15.510	14.000	9.604	7.000	22.000
Beat w/ PRE	2295	0.315	0.000	0.465	0.000	1.000
LogSale	2295	8.118	7.983	1.495	7.080	8.990
MTB	2295	1.830	1.540	1.179	1.089	2.228
CEOTenure	2295	7.946	6.085	7.127	2.748	11.000
BoardSize	2284	9.288	9.000	2.123	8.000	11.000
CEOChair	2284	0.406	0.000	0.491	0.000	1.000
Independence	2284	0.825	0.857	0.109	0.750	0.900
Inv_Grade	2295	0.370	0.000	0.483	0.000	1.000
AfTax	2295	0.291	0.000	0.454	0.000	1.000

Panel B: Subgroups Analysis when DROA > FROA (N = 1026)

	(1)	(2)	(3)	(4)	Scheffe's Test					
	Bind_Meet	*Bind_Miss*	*NonBind_Meet*	*NonBind_Miss*	(1) vs (2)	(1) vs (3)	(1) vs (4)	(2) vs (3)	(2) vs (4)	(3) vs (4)
Chg_PRE	0.005	-0.004	-0.014	0.035		*	*		*	*
Duration	1.488	1.598	1.485	1.515						
FTR	0.378	0.361	0.211	0.205		*	*	*	*	
Chg_FAssets	0.015	0.031	0.007	0.036						*
Lev	0.217	0.197	0.217	0.240						
DivYield	0.013	0.015	0.013	0.013						

I winsorize continuous variables at the 1st and 99th percentiles. * indicates that the difference in means is statistically different at p-value < 0.05 based on Scheffe's Test (Scheffe 1999). I define all variables in Appendix A.

Table 3: Main Regression

Panel A: *DROA > FROA*

	(1)	(2)	(3)
VARIABLES	*Chg_PRE*	*Chg_PRE*	*Chg_PRE*
*Duration*NonBind_Miss*	0.001	0.001	0.001
	(0.13)	(0.12)	(0.20)
*Duration*NonBind_Meet*	-0.012**	-0.012**	-0.011**
	(-2.52)	(-2.44)	(-2.35)
*Duration*Bind_Miss*	-0.006	-0.005	-0.003
	(-0.91)	(-0.75)	(-0.47)
Duration	0.003	0.003	0.003
	(1.03)	(0.93)	(1.00)
NonBind_Miss	0.029***	0.029***	0.028***
	(3.33)	(3.29)	(3.18)
NonBind_Meet	-0.001	-0.001	-0.001
	(-0.06)	(-0.09)	(-0.17)
Bind_Miss	0.000	-0.002	-0.005
	(0.04)	(-0.19)	(-0.55)
FTR			0.000
			(0.08)
Chg_FAsset			0.034**
			(2.44)
Lev			-0.013
			(-1.23)
DivYield			-0.094
			(-0.47)
Constant	0.001	0.001	0.004
	(0.11)	(0.22)	(0.71)
Observations	1,026	1,026	1,026
R-squared	0.163	0.171	0.178
Year FE	No	Yes	Yes

Panel B: F Test

F Test of	**Column (1)**	**Column (2)**	**Column (3)**
*Duration*NonBind_Miss + Duration*	0.004	0.004	0.004
	(0.77)	(0.65)	(0.98)
*Duration*NonBind_Meet + Duration*	-0.009**	-0.009**	-0.008**
	(5.40)	(5.54)	(4.76)
*Duration*Bind_Miss + Duration*	-0.003	-0.002	0.000
	(0.29)	(0.16)	(0.00)

Notes: This table presents the results of the OLS regression of Equation (1) where the dependent variable is *Chg_PRE*. t-statistics are reported under the coefficient estimates. I use cluster-robust standard errors that are clustered by Firm. Variable definitions are provided in Appendix A. ***, **, and * indicate significance at the 1, 5, and 10 percent levels, respectively, using a two-tailed test.

Table 4: Entropy-Balanced Sample

Panel A: *DROA > FROA*

	(1)	*(2)*	*(3)*
	NonBind_Miss	***NonBind_Meet***	***Bind_Miss***
VARIABLES	*Chg_PRE*	*Chg_PRE*	*Chg_PRE*
*Duration*NonBind_Miss*	0.001		
	(0.21)		
*Duration*NonBind_Meet*		-0.012**	
		(-2.42)	
*Duration*Bind_Miss*			-0.006
			(-0.88)
Duration	0.002	0.004	0.002
	(0.98)	(1.34)	(0.83)
NonBind_Miss	0.028***		
	(3.51)		
NonBind_Meet		0.001	
		(0.06)	
Bind_Miss			-0.000
			(-0.02)
Constant	0.003	0.001	-0.006
	(0.51)	(0.24)	(-0.85)
Observations	620	518	278
R-squared	0.156	0.068	0.053
Control Variables	Yes	Yes	Yes
Year FE	Yes	Yes	Yes

Panel B: F Test

F Test of	**Column (1)**	**Column (2)**	**Column (3)**
*Duration*NonBind_Miss + Duration*	0.003		
	(0.80)		
*Duration*NonBind_Meet + Duration*		-0.008**	
		(4.23)	
*Duration*Bind_Miss + Duration*			-0.004
			(0.31)

Notes: This table presents the results of the entropy balanced sample where the dependent variable is *Chg_PRE*. t-statistics are reported under the coefficient estimates. I use cluster-robust standard errors that are clustered by Firm. Variable definitions are provided in Appendix A. ***, **, and * indicate significance at the 1, 5, and 10 percent levels, respectively, using a two-tailed test.

Table 5: Including Industry Fixed Effect

Panel A: *DROA > FROA*

VARIABLES	(1) SIC 2 Digits *Chg_PRE*	(2) Fama-French 12 *Chg_PRE*	(3) Fama-French 48 *Chg_PRE*
*Duration*NonBind_Miss*	0.001	-0.001	0.000
	(0.20)	(-0.13)	(0.09)
*Duration*NonBind_Meet*	-0.011**	-0.012**	-0.012**
	(-2.01)	(-2.46)	(-2.15)
*Duration*Bind_Miss*	-0.001	-0.004	-0.003
	(-0.17)	(-0.57)	(-0.38)
Duration	0.003	0.004	0.003
	(0.85)	(1.34)	(0.85)
NonBind_Miss	0.028***	0.029***	0.028***
	(3.08)	(3.21)	(3.01)
NonBind_Meet	-0.000	-0.000	-0.000
	(-0.05)	(-0.01)	(-0.04)
Bind_Miss	-0.009	-0.004	-0.007
	(-0.79)	(-0.43)	(-0.61)
Constant	0.021*	0.020*	0.024*
	(1.79)	(1.70)	(1.94)
Observations	1,026	1,026	1,026
R-squared	0.217	0.203	0.218
Control Variables	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes

Panel B: F Test

F Test of	**Column (1)**	**Column (2)**	**Column (3)**
*Duration*NonBind_Miss + Duration*	0.004	0.003	0.003
	(1.06)	(0.81)	(0.80)
*Duration*NonBind_Meet + Duration*	-0.008*	-0.008**	-0.009**
	(3.42)	(4.29)	(4.28)
*Duration*Bind_Miss + Duration*	0.002	0.000	0.000
	(0.04)	(0.00)	(0.00)

Notes: This table presents the results of the OLS regression of Equation (1) with industry fixed effect. The dependent variable is *Chg_PRE*. t-statistics are reported under the coefficient estimates. I use cluster-robust standard errors that are clustered by Firm. Variable definitions are provided in Appendix A. ***, **, and * indicate significance at the 1, 5, and 10 percent levels, respectively, using a two-tailed test.

Table 6: Additional Control Variables

Panel A: *DROA > FROA*		
	(1)	(2)
VARIABLES	*Chg_PRE*	*Chg_PRE*
*Duration*NonBind_Miss*	0.001	0.001
	(0.16)	(0.14)
*Duration*NonBind_Meet*	-0.012**	-0.012**
	(-2.48)	(-2.40)
*Duration*Bind_Miss*	-0.004	-0.002
	(-0.51)	(-0.33)
Duration	0.005	0.004
	(1.47)	(1.44)
NonBind_Miss	0.030***	0.029***
	(3.43)	(3.40)
NonBind_Meet	0.000	-0.000
	(0.01)	(-0.04)
Bind_Miss	-0.004	-0.007
	(-0.44)	(-0.70)
FTR	0.001	0.001
	(0.25)	(0.14)
Chg_FAsset	0.034**	0.033**
	(2.45)	(2.40)
Lev	-0.012	-0.010
	(-1.25)	(-1.08)
DivYield	-0.070	-0.090
	(-0.32)	(-0.41)
Size	0.001	0.001
	(0.79)	(0.90)
CEOTenure	0.000	0.000
	(1.26)	(1.31)
BoardSize	-0.000	-0.000
	(-0.48)	(-0.51)
CEOChair	0.002	0.002
	(0.71)	(0.57)
Independence	-0.012	-0.011
	(-0.69)	(-0.67)
Analyst_Coverage	-0.000	-0.000
	(-0.65)	(-0.85)
Constant	0.003	0.004
	(0.18)	(0.19)
Observations	1,022	1,022
R-squared	0.179	0.186
Year FE	No	Yes

Panel B: F Test

F Test of	Column (1)	Column (2)
*Duration*NonBind_Miss + Duration*	0.006	0.005
	(2.07)	(1.92)
*Duration*NonBind_Meet + Duration*	-0.007*	-0.008*
	(2.98)	(2.96)
*Duration*Bind_Miss + Duration*	0.001	0.002
	(0.02)	(0.12)

Notes: This table presents the results of the OLS regression of Equation (1) with additional control variables. The dependent variable is *Chg_PRE*. t-statistics are reported under the coefficient estimates. I use cluster-robust standard errors that are clustered by Firm. Variable definitions are provided in Appendix A. ***, **, and * indicate significance at the 1, 5, and 10 percent levels, respectively, using a two-tailed test.

Table 7: After-Tax incentives in Executive Compensation Contract

Panel A: *DROA > FROA*

VARIABLES	(1) *AfTax* = 0 *Chg_PRE*	(2) *AfTax* = 1 *Chg_PRE*
*Duration*NonBind_Miss*	0.003	-0.013
	(0.48)	(-0.99)
*Duration*NonBind_Meet*	-0.012***	-0.008
	(-2.66)	(-0.46)
*Duration*Bind_Miss*	0.003	-0.024
	(0.49)	(-1.51)
Duration	0.002	0.009
	(0.74)	(0.95)
NonBind_Miss	0.025***	0.049*
	(2.79)	(1.96)
NonBind_Meet	0.003	-0.019
	(0.52)	(-0.54)
Bind_Miss	-0.010	0.015
	(-0.99)	(0.62)
Constant	0.006	-0.009
	(1.19)	(-0.43)
Observations	701	325
R-squared	0.190	0.211
Control Variables	Yes	Yes
Year FE	Yes	Yes

Panel B: F Test

F Test	Column (1)	Column (2)
*Duration*NonBind_Miss + Duration*	0.005	-0.004
	(0.91)	(0.30)
*Duration*NonBind_Meet + Duration*	-0.010***	0.001
	(8.12)	(0.00)
*Duration*Bind_Miss + Duration*	0.005	-0.015
	(0.71)	(1.48)

Notes: This table presents the results of the OLS regression of Equation (1) where the dependent variable is *Chg_PRE*. t-statistics are reported under the coefficient estimates. I use cluster-robust standard errors that are clustered by Firm. Variable definitions are provided in Appendix A. ***, **, and * indicate significance at the 1, 5, and 10 percent levels, respectively, using a two-tailed test.

Table 8: Credit Rating Status

Panel A: *DROA > FROA*

VARIABLES	(1) *Inv_Grade* = 0 *Chg_PRE*	(2) *Inv_Grade* = 1 *Chg_PRE*
*Duration*NonBind_Miss*	0.004	-0.014
	(0.69)	(-1.02)
*Duration*NonBind_Meet*	-0.008	-0.023
	(-1.26)	(-1.58)
*Duration*Bind_Miss*	0.007	-0.034*
	(1.09)	(-1.68)
Duration	-0.001	0.016
	(-0.45)	(1.22)
NonBind_Miss	0.021**	0.056**
	(2.13)	(2.28)
NonBind_Meet	-0.004	0.012
	(-0.42)	(0.47)
Bind_Miss	-0.016*	0.043
	(-1.78)	(1.50)
Constant	0.012**	-0.029
	(2.02)	(-1.24)
Observations	630	396
R-squared	0.166	0.233
Control Variables	Yes	Yes
Year FE	Yes	Yes

Panel B: F Test

F Test	Column (1)	Column (2)
*Duration*NonBind_Miss + Duration*	0.003	0.002
	(0.33)	(0.19)
*Duration*NonBind_Meet + Duration*	-0.007*	-0.007
	(2.77)	(1.58)
*Duration*Bind_Miss + Duration*	0.008	-0.018
	(0.92)	(1.17)

Notes: This table presents the results of the OLS regression of Equation (1) where the dependent variable is Chg_PRE. t-statistics are reported under the coefficient estimates. I use cluster-robust standard errors that are clustered by Firm. Variable definitions are provided in Appendix A. ***, **, and * indicate significance at the 1, 5, and 10 percent levels, respectively, using a two-tailed test.

Table 9: Outcomes of Beating Market Expectations with PRE

VARIABLES	(1) *BonusComp*	(2) *EqtComp*	(3) *TotComp*	(4) *Forced_Turnover*
Beat w/ PRE	0.231***	0.141**	0.238**	-0.786*
	(3.39)	(2.55)	(2.17)	(-1.77)
LogSale	0.393***	0.287***	0.161*	-0.334
	(7.88)	(6.68)	(1.90)	(-1.19)
MTB	0.086***	0.078**	0.015	-1.485***
	(2.71)	(2.40)	(0.34)	(-3.30)
BoardSize	0.061**	0.024	0.132***	0.039
	(2.16)	(1.11)	(3.29)	(0.28)
Independence	0.588	1.320***	2.245***	-0.160
	(1.44)	(3.34)	(2.86)	(-0.08)
CEOTenure	0.008	0.006	-0.032	0.033
	(1.16)	(1.07)	(-1.02)	(1.29)
CEOChair	0.043	-0.059	-0.071	-0.787*
	(0.46)	(-0.86)	(-0.62)	(-1.86)
Analyst_Coverage	-0.006	0.021***	0.003	0.102***
	(-0.97)	(3.82)	(0.22)	(2.71)
Constant	2.348***	3.500***	4.525***	3.066
	(3.93)	(5.80)	(8.24)	(0.90)
Observations	1,049	1,046	1,138	1,138
R-squared/Pseudo R-squared	0.366	0.482	0.223	0.214
Fama French 48 FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes

Notes: This table presents the results of the Equation (2) where the dependent variable is bonus compensation, equity compensation, total compensation and CEO forced turnover respectively. T(Z)-statistics are reported under the coefficient estimates. I use cluster-robust standard errors that are clustered by firm. Variable definitions are provided in Appendix A. ***, **, and * indicate significance at the 1, 5, and 10 percent levels, respectively, using a two-tailed test.

Table 10: Subgroups Analysis when DROA < FROA (N = 1269)

	(1)	(2)	(3)	(4)	Scheffe's Test					
	Bind_Meet	*Bind_Miss*	*NonBind_Meet*	*NonBind_Miss*	(1) vs (2)	(1) vs (3)	(1) vs (4)	(2) vs (3)	(2) vs (4)	(3) vs (4)
Chg_PRE	0.002	0.017	-0.036	0.053		*	*	*	*	*
Duration	1.567	1.707	1.533	1.627						
FTR	0.300	0.258	0.214	0.183		*	*			
Chg_FAsset	0.014	0.037	0.011	0.024						
Lev	0.237	0.211	0.236	0.247						
DivYield	0.012	0.010	0.011	0.011						

I winsorize continuous variables at the 1st and 99th percentiles. *indicates that the difference in means is statistically different at p-value < 0.05 based on Scheffe's Test (Scheffe 1999). I define all variables in Appendix A.

Table 11: Multivariate Analysis when DROA < FROA (N = 1269)

Panel A: F*ROA > DROA*

VARIABLES	(1) *Chg_PRE*	(2) *Chg_PRE*	(3) *Chg_PRE*
*Duration*NonBind_Miss*	-0.007	-0.007	-0.009
	(-0.91)	(-0.96)	(-1.11)
*Duration*NonBind_Meet*	-0.030***	-0.030***	-0.032***
	(-3.35)	(-3.28)	(-3.14)
*Duration*Bind_Miss*	0.002	0.001	-0.001
	(0.16)	(0.07)	(-0.08)
Duration	0.013*	0.013**	0.016**
	(1.91)	(1.97)	(2.02)
NonBind_Miss	0.062***	0.061***	0.065***
	(4.18)	(4.04)	(3.93)
NonBind_Meet	0.014	0.012	0.014
	(0.82)	(0.71)	(0.74)
Bind_Miss	0.015	0.015	0.019
	(0.69)	(0.69)	(0.83)
FTR		-0.012	-0.013
		(-1.58)	(-1.59)
Chg_FAsset		0.021	0.019
		(0.72)	(0.62)
Lev		-0.005	-0.001
		(-0.39)	(-0.05)
DivYield		-0.198	-0.122
		(-1.11)	(-0.66)
Constant	-0.020	-0.014	0.021
	(-1.45)	(-0.94)	(0.61)
Observations	1,269	1,269	1,269
R-squared	0.237	0.240	0.256
Fama French 48 FE	No	No	Yes
Year FE	Yes	Yes	Yes

Panel B: F Test

F Test	**Column (1)**	**Column (2)**	**Column (3)**
*Duration*NonBind_Miss + Duration*	0.006*	0.006*	0.007*
	(3.43)	(3.31)	(3.32)
*Duration*NonBind_Meet + Duration*	-0.017***	-0.017***	-0.016**
	(8.02)	(6.96)	(6.05)
*Duration*Bind_Miss + Duration*	0.015*	0.014*	0.015**
	(3.44)	(3.62)	(4.42)

Notes: This table presents the results of the OLS regression of Equation (1) where the dependent variable is *Chg_PRE*. t-statistics are reported under the coefficient estimates. I use cluster-robust standard errors that are clustered by Firm. Variable definitions are provided in Appendix A. ***, **, and * indicate significance at the 1, 5, and 10 percent levels, respectively, using a two-tailed test.