

A High Salary for Integrity? — Examining the Impact of the New Securities Law on A-Share Listed Companies

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Abstract: This research utilizes the Propensity Score Matching-Difference-in-Differences (PSM-DID) approach to investigate the impact of the new Securities Law on executive compensation within A-share listed companies, drawing on a decade-long panel dataset spanning from 2013 to 2023. The findings indicate that following the implementation of the new Securities Law, there was a notable enhancement in the congruence between executive decision-making and corporate objectives, evidenced by a decrease in executive salaries and a shift from base salary to equity compensation. Mechanism analysis reveals that the law reduces executives' incentives to engage in financial fraud by lowering equity concentration and management shareholding, leading to a decrease in executive pay. Specifically, the law achieves this by strengthening equity management regulations and imposing stricter restrictions on executive shareholding reductions, thereby weakening managerial incentives for financial misconduct. The implications of this study are multifaceted. For regulators, optimizing executive compensation structures can enhance financial fraud oversight. For firms, adopting equity-based incentives better align managerial interests with long-term corporate development. For investors, analyzing executive compensation structures offers insights into corporate governance quality and helps mitigate investment risks.

Keywords: securities law, financial fraud, management salary

1. Introduction

In recent years, growing concerns among investors regarding financial fraud have led to increased demands for stricter prevention and enforcement measures. In response, the Chinese government has implemented a range of policies and regulations designed to enhance the prevention and control of financial fraud.

On December 28, 2019, the 15th meeting of the Standing Committee of the 13th National People's Congress (NPC) engaged in a thorough examination and subsequently approved the Securities Law of the People's Republic of China (the “new Securities Law”). This legislation became effective on March 1, 2020, following a series of amendments. A major revision in this new law is the enhancement of information disclosure requirements. It introduces new disclosure obligations beyond those set forth in the previous law, increases administrative penalties, and clarifies the legal liabilities of information disclosure obligors who harm investors, with a stronger emphasis on protecting small and medium-sized investors. These changes, within the context of the full implementation of a registration-based bond issuance system, represent a significant step toward the standardization and refinement of China’s securities market.

The potential contribution of this study lies in challenging the conventional view that executive compensation is solely influenced by a company's operational performance—specifically, that better growth prospects and higher managerial efficiency naturally lead to higher executive pay. In recent years, scholars have explored the determinants of executive compensation and identified its strong correlation with various external factors, such as financial flexibility [1], discrimination [2], and Confucian cultural influence [3]. The existing research in this area is limited. To fill this gap, this study incorporates the new Securities Law as an external determinant in the analysis of executive compensation, expanding the scope of research on the factors influencing executive pay.

2. Theoretical analysis and research hypotheses

2.1. Hypothesis 1a

The enactment of the new Securities Law did not result in an increase in the compensation level of executives in listed companies.

From the standpoint of agency theory, a fundamental divergence exists between the goals of shareholders (principals) and those of executives (agents). The new Securities Law introduces more uniform governance frameworks, elucidating the roles and responsibilities of the board of directors, shareholders, and management. This could result in executives concentrating on their specific responsibilities, possibly overlooking the broader, long-term growth of the organization. To address such challenges, companies may opt to replace a portion of executive compensation with equity, thus aligning executives' interests with those of the firm's long-term goals.

From the perspective of market competition theory, the new Securities Law has improved market transparency, reducing information asymmetry. As a result, high-performing executives become more visible and can be easily recruited by other companies. To retain top talent, firms may opt to convert part of their salary into equity compensation, increasing the costs associated with executive turnover.

When a company's financial fraud is exposed by the media, it often faces immense public pressure. Investors, upon receiving such negative information, tend to question the firm's future prospects, leading to lower expectations and greater stock price volatility [4]. Statistical evidence indicates that companies initially exposed for financial fraud experience an average stock price drop of 16.7%, and 47% of such companies are eventually delisted. Therefore, after the implementation of the new Securities Law, companies may reduce executives' base salaries by substituting them with equity holdings to mitigate executives' incentives for fraud, ultimately lowering overall executive compensation.

2.2. Hypothesis 1b

The promulgation of the new Securities Law increased the compensation level of executives in listed companies.

From the perspective of agency theory, the objectives of shareholders and executives often conflict, and executives may engage in financial fraud—such as manipulating profits or stock prices—to pursue short-term gains. The implementation of the new Securities Law has significantly strengthened the disclosure mechanisms, requiring firms to provide more timely and detailed information, while also increasing penalties for financial misconduct. These measures make it more difficult and costly for executives to achieve short-term gains through fraudulent practices. To avoid greater losses resulting from executive misconduct, shareholders may raise executive compensation to deter fraudulent behavior, effectively playing a “high pay to curb corruption” role. Additionally, to better align the goals of executives and shareholders, some firms may increase long-term compensation (i.e.,

compensation that can only be claimed after a specified time), thus encouraging executives to focus more on the company's long-term objectives.

From the perspective of contract theory, executive compensation functions as a crucial contractual incentive mechanism. The new Securities Law, through its enhancements to information disclosure and market oversight, has notably increased the efficiency of contract enforcement and may potentially reshape the design of such contracts. As compensation contracts become more transparent, shareholders are less inclined to withhold or reduce executive pay, leading to an overall increase in compensation levels.

3. Research design

3.1. Sample selection and data source

This study uses data from all A-share listed companies between 2013 and 2023 as the initial sample, sourced from the Cathay Pacific CSMAR database.

To ensure sample accuracy and validity, the following criteria are applied: (1) To maintain data reliability, companies with abnormal financial data, including those designated as ST, *ST, or PT, are excluded; (2) To account for industry-specific differences, firms in the financial and insurance sectors are excluded; (3) Observations with missing or abnormal values for key variables are also excluded.

3.2. Measurement and definition of variables

3.2.1. Explained variable

This study evaluates the impact of the new Securities Law on executive compensation. The explained variable is the measure of executive compensation. Executive compensation typically consists of two components: cash compensation and equity-based rewards. However, according to management shareholding data from the Cathay Pacific CSMAR database, most executives in China's A-share listed companies hold less than 1% equity, with many owning no shares at all. Therefore, following prior studies such as Fang Junxion [5], this study defines executive compensation (*Pay*) as the logarithm of executives' cash compensation, which reflects changes in executive pay.

3.2.2. Core explanatory variables

This research utilizes a difference-in-differences (DID) model to evaluate the effects of the new Securities Law on executive compensation. The primary explanatory variable in this model is $year \times treat$, which represents the interaction term between the policy enactment dummy variable (*time*) and the treatment group dummy variable (*treat*).

Since the new Securities Law was enacted on December 28, 2019, and came into effect on March 1, 2020, this study defines *time* = 0 for observations in or before 2019 and *time* = 1 for those after 2019, capturing the anticipated effects of the policy. The law introduces stricter penalties for financial fraud in listed companies, significantly impacting firms that often engage in fraudulent practices to maximize returns, while having minimal or no effect on firms with no history of financial fraud.

The dummy variable *Fidum* is constructed based on violation data from the CSMAR database. If a firm commits financial fraud in a given year, *Fidum* is assigned a value of 1; otherwise, it is 0. Firms with a *Fidum* value of 0 throughout 2013–2019 are considered to have no history of financial fraud, and *treat* = 0. If *Fidum* is nonzero at any point during this period, *treat* is assigned a value of 1.

3.2.3. Control variables

Expanding upon previous studies, the determinants of executive compensation are shaped by various elements, such as the financial health of the firm, the structure of ownership, and the mechanisms of corporate governance. Key variables in corporate governance encompass the shareholding ratio of the largest shareholder (*Top1*), the shareholding ratio of the top ten shareholders (*Top10*), board size (*Board*), CEO duality (*Duality*), and the proportion of shares held by management (*Marshal*).

Financial condition variables include firm size (*Size*), leverage ratio (*Lev*), total revenue growth rate (*Growth*), net profit (*R*), fixed asset ratio (*FIXED*), quick ratio (*QUICK*), debt-to-equity ratio (*DER*), compensation of the top three executives (*Pay3*), and whether the firm is audited by one of the Big Four accounting firms (*Big4*). Ownership-related variables include state ownership (*SOE*). To account for industry-wide compensation variations and temporal fluctuations in executive pay, the regressions control for industry (*INDUSTRY*), region, and year (*YEAR*).

3.3. Model design

This study investigates the impact of the new Securities Law on executive compensation in A-share listed companies. The DID approach, a widely used method for evaluating policy effects, is employed in this analysis. Consequently, the following DID baseline model is constructed:

$$Pay_{it} = \beta_0 + \beta_1 time_t \times treat_i + Control_{it} + \mu_k + \eta_t + \lambda_p + \varepsilon_{it} \quad (1)$$

where *i* denotes the firm, *t* represents the year, *k* indicates the industry, and *p* refers to the region. *Control* represents the set of control variables, while fixed effects for industry, year, and region are included to account for unobserved heterogeneity. The error term captures unexplained variations. When the coefficient of the interaction term is observed to be both positive and statistically significant, it indicates that the new Securities Law exerts a notable positive influence on executive compensation. In contrast, a negative and statistically significant coefficient suggests a suppressive influence on executive compensation. If the coefficient lacks statistical significance, it suggests that the new Securities Law does not exert a meaningful influence on executive compensation.

4. Empirical process and analysis

4.1. PSM matching treatment

Due to firm-level heterogeneity, the trend in executive compensation over time differs between the treatment and control groups. Parallel trend tests reveal that this assumption is not fully satisfied. Moreover, although the extent to which a firm is affected by the new Securities Law depends on its historical engagement in financial fraud, firms that frequently engage in fraudulent activities may systematically differ from those that do not. These systematic differences may influence executive compensation, leading to potential self-selection bias. To address this, this study first applies propensity score matching (PSM) to preprocess the original sample.

Existing research suggests that direct PSM matching may cause time mismatches, so this study performs PSM matching on a period-by-period basis. Specifically, a 1:3 nearest-neighbor matching with replacement is used, resulting in a final sample of 26,144 firm-year observations. Figure 1 shows the kernel density plots of propensity score values before and after matching. The pre-matching kernel density curves exhibit substantial deviation, whereas the post-matching curves are closely aligned, indicating that the PSM procedure has been effective. The balance test results for the selected covariates are presented in Figure 2, where the standardized deviation for most covariates is below 10%.

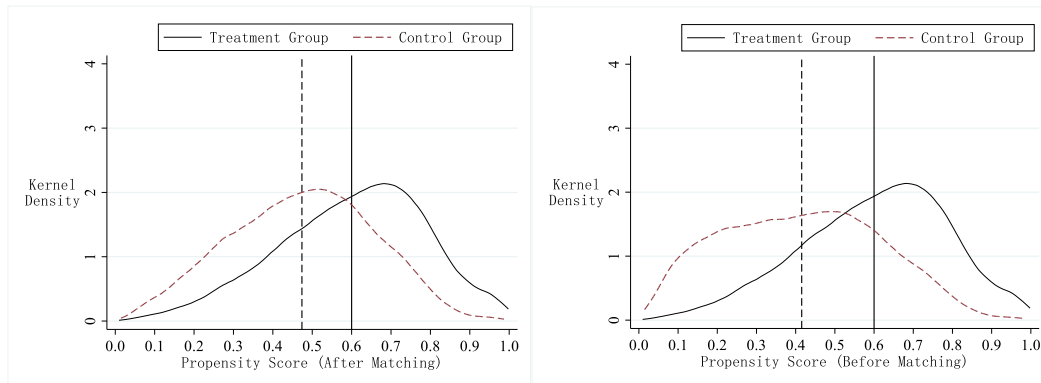


Figure 1: Kernel density

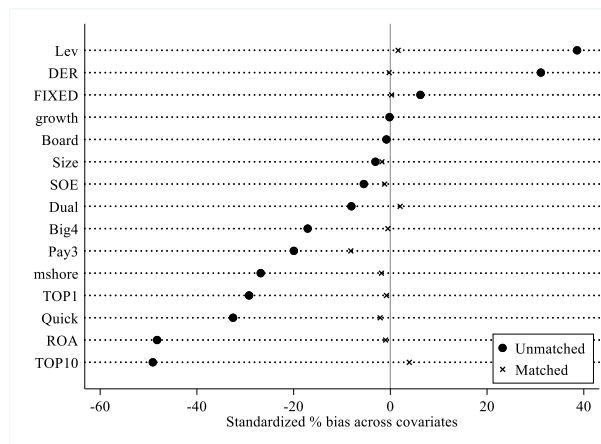


Figure 2: Covariate bias

4.2. Benchmark regression analysis

The findings from the benchmark regression, as outlined in model (1), are displayed in Table 1. Columns (1) and (2) reveal that the coefficient of the interaction term (time $\times$ treat) exhibits a significantly negative value at the 1% level prior to PSM matching, irrespective of the inclusion of control variables. Column (3) shows the regression results for the sample where weights are nonzero after PSM matching. Since control group observations with varying weights contribute differently to the overall control sample, a frequency-weighted regression is performed, with results presented in Column (4). Table 3 further shows that the interaction term remains significantly negative at the 1% level in both Column (3) and Column (4).

Table 1: Benchmark regression

	(1)	(2)	(3)	(4)
	pay	pay	pay	pay
time*treat	-0.1484*** (-8.1746)	-0.0774*** (-5.9193)	-0.0786*** (-5.1825)	-0.0828*** (-4.2834)
cons	15.7365*** (4.2e+03)	8.2944*** (25.1248)	8.3228*** (24.0432)	8.1414*** (19.7481)
Fixed Effects	Control	Control	Control	Control
N	37781	34915	26184	66205
Adj. R ²	0.1641	0.4400	0.4294	0.4621

4.3. Robustness test

4.3.1. Parallel trend test

The parallel trend assumption is a fundamental requirement for the DID model. As shown in Figure 2, both the treatment and control groups exhibit similar trends throughout the sample period, indicating that the parallel trend assumption is generally met.

To further validate this assumption, an event study analysis is conducted. Following standard practices in the literature, interaction terms between time dummy variables and the treatment group dummy variable are added to the baseline regression model, with the pre-policy period (2019) serving as the reference period:

$$Pay_{it} = \beta_0 + \sum_{t=2013}^{2018} \beta_t year_t \times treat_i + \sum_{t=2020}^{2023} \beta_t year_t \times treat_i + Control_{it} + \mu_k + \eta_t + \lambda_p + \varepsilon_{it} \quad (2)$$

The regression results from model (2) reveal that the interaction term for the dummy variable is statistically insignificant in the periods prior to the enactment of the new Securities Law but becomes significant after its implementation.

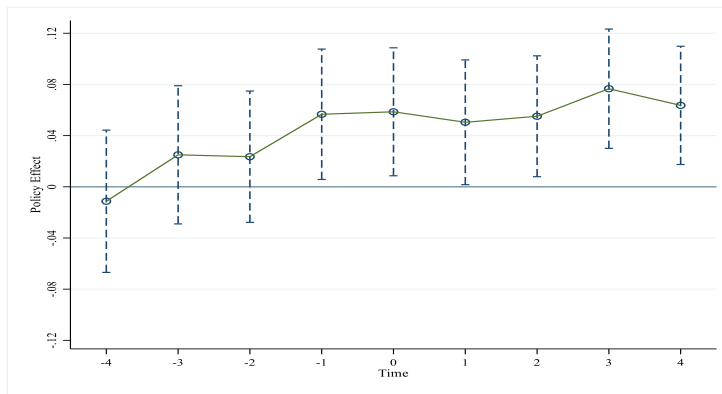


Figure 3: Parallel trend test

4.3.2. Expanding the sample

The original dataset consists of 38,068 firm-year observations, forming an unbalanced panel of listed company data. In the initial regression analysis without period-by-period PSM matching, 34,915 observations were used. However, the PSM procedure led to a reduction of nearly one-third in the sample size. To ensure the robustness of the model, the regression sample is expanded to include all observations that satisfy the common support assumption. The results, presented in Column (1) of Table 2, show that the interaction term of the dummy variable remains negative and statistically significant at the 1% level.

4.3.3. Reduced time window

Given the long time span of the original dataset, executive compensation may be influenced by several external shocks beyond the implementation of the new Securities Law. Over an extended period, other legislative or economic changes may introduce confounding effects, potentially biasing the results. To enhance robustness, the sample period is limited to a five-year window from 2018 to 2022. The regression results, presented in Column (2) of Table 2, indicate that the interaction term of the policy shock remains significantly negative at the 1% level, further reinforcing the robustness of the findings.

Table 2: Robustness test regression

	(1) pay	(2) pay
time*treat	-0.1292*** (-6.9080)	-0.1066*** (-5.0870)
cons	15.7326*** (1.7e+03)	15.8805*** (1.3e+03)
N	34687	13615
Adj. R ²	0.1670	0.0934

5. Conclusion and recommendations

This study employs the PSM-DID method to investigate the effects of the new Securities Law on executive compensation within A-share listed companies from 2013 to 2023, with the law's enactment in 2020 acting as a significant policy event. Furthermore, the research investigates the impact of executive equity holdings on compensation levels. The results indicate that following the enactment of the new Securities Law, companies enhanced the congruence between executive decision-making and corporate objectives, while concurrently decreasing executive remuneration by replacing a portion of the base salary with equity-based compensation. This strategy serves as an effective measure to curb financial fraud. By linking executive compensation more closely to long-term company development, this approach not only reduces fixed salaries but also incentivizes executives to prioritize sustainable growth over short-term profit-driven behavior.

The results of this study have important implications for regulators, corporations, and investors. For regulators, executive compensation structures can serve as a focal point for oversight. Authorities should monitor listed companies where executive pay is not tied to equity incentives, enforce financial and accounting supervision according to the law, strengthen oversight of financial management and internal controls, and guide firms toward standardized financial governance. For companies, implementing equity incentive mechanisms can reduce short-term profit-driven behavior by aligning executive interests with long-term corporate growth. For investors, the composition of executive compensation structures can act as a critical indicator when assessing a company's future prospects, thus helping to mitigate investment risks associated with financial fraud perpetrated by senior management.

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