A Study of the Impact of Equity Incentives on Pricing Efficiency in Capital Markets

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Abstract. Equity incentives are crucial for talent acquisition and fostering corporate innovation; yet, the current literature predominantly focuses on the business level, with less research on the correlation between equity incentives and the capital market. This study empirically investigates the influence of equity incentive schemes on capital market pricing efficiency, utilizing data from Chinese A-share listed businesses between 2010 and 2023, focusing on stock price synchronization and post-surplus announcement drift as analytical viewpoints. The findings indicate that the execution of corporate stock incentive plans can significantly enhance the price efficiency of capital markets. The mechanism test indicates that corporate stock incentive plans enhance the efficiency of capital market pricing. Regarding various incentive mechanisms, both stock options and restricted shares influence capital market pricing efficiency. However, when the share price approaches the exercise price (grant price), restricted shares adversely affect pricing efficiency, whereas stock options positively impact it. Subsequent research indicates that the beneficial impact of equity incentives on capital market pricing efficiency is more pronounced in enterprises with high stock price information content and in those where incentive recipients comprise key technical people. The study's results elucidate the theoretical debate over the practical effects of equity incentive schemes and offer recommendations on the appropriate types of equity incentives for various enterprises to enhance capital market pricing efficiency.

Keywords: Equity incentives; Share price synchronisation; Capital market pricing efficiency.

1. Introduction

The capital market is crucial for financial operations, serving as the cornerstone for the stable development of the national economy. [1]Effective information disclosure is essential for the capital market to allocate resources and support the real economy, playing a direct and significant role in mitigating information asymmetry and facilitating securities price discovery. Capital market pricing efficiency pertains to the stock price's ability to respond promptly, adequately, and accurately to information within the capital market, primarily reflecting the market's informational efficiency. Capital market pricing efficiency is indicated by stock price synchronization, which assesses the correlation between individual stocks and market returns. This phenomenon of simultaneous price movements among stocks primarily arises from the insufficient information regarding company characteristics among market participants, leading to information asymmetry between investors and companies. [2]The substantial investment, extended duration, and unpredictability of innovation, coupled with the insufficiency of securities analysts as the informational conduit in the capital market, exacerbate information asymmetry and are more prone to generate 'irrational noise', resulting in increased stock price synchronization and consequently impacting the pricing efficiency of the capital market.

An equity incentive plan, or equity award plan, motivates employees or management to engage in the attainment of the firm's objectives by offering them shares or equity derivatives of the company. The definition of equity incentive encompasses three fundamental aspects: An equity incentive constitutes a component of the company's comprehensive compensation framework; it is intricately linked to the architecture of the enterprise's governance system, thereby enhancing the company's governance structure; furthermore, the rights and obligations of the parties engaged in the equity incentive must be mutually balanced. Rights and obligations ought to be balanced[3]. Equity incentive plans can adopt diverse forms to enhance performance and foster long-term employee commitment; various types of equity incentive plans may be chosen and tailored to meet the requirements of the

company and its employees; through judicious management of these plans, the company can more effectively facilitate its long-term success. A substantial body of research exists on equity incentive schemes in both domestic and international literature; however, there is a deficiency in studies regarding equity incentives and capital market pricing efficiency. Consequently, this paper will assess the practical effects of equity incentive schemes on capital market pricing efficiency.

Equity incentive systems may theoretically enhance the efficiency of capital market pricing.[4]Theoretical studies indicate that equity incentives represent an optimal incentive structure, balancing short-term risk tolerance with substantial long-term returns. This system features an asymmetric payoff curve that safeguards recipients when stock prices decline while yielding significant returns during price increases. Secondly, equity incentive schemes, often characterized by long-term validity, can effectively encourage the company's strategic and core technical personnel to engage in long-term operational development and innovative research and development. Ultimately, given equity incentive schemes are contingent upon the company's shares, correlating compensation with share price fluctuations may encourage increased risk-taking among incentive recipients. [5]In summary, elevated share price information content and diminished share price synchronization might significantly influence the pricing efficiency of capital markets. Conversely, stock incentives may also impede corporate growth. Linking management compensation to share price may excessively impact management's wealth, thereby fostering a risk-averse attitude, leading to the forfeiture of growth prospects and a preference for stability. The existing literature indicates that short-term pressures in the capital market exacerbate management's myopic behavior and hinder growth momentum. This enhances share price synchronization and diminishes capital market pricing efficiency. The correlation between equity incentive schemes and the efficiency of capital market pricing remains inconclusive and requires additional empirical investigation.

This study examines equity incentives to improve capital market price efficiency by addressing internal company governance and reducing information asymmetry, including the enhancement of analyst attention. It examines the correlation between equity incentives and the efficiency of capital market pricing, aiming to elucidate the underlying process.

This paper potentially contributes by enhancing the discourse on the economic ramifications of equity incentive schemes, which remain contentious, and it further substantiates the beneficial impacts of these schemes on capital markets through the lens of pricing efficiency. Secondly, this paper enhances the investigation into the determinants of pricing efficiency within the capital market. Current research predominantly focuses on industry policy and macro-environmental factors. This study broadens the analysis of capital market pricing efficiency by incorporating the perspectives of employees and shareholders. The findings indicate that employee and management involvement in corporate governance positively influences signaling and governance, significantly contributing to the capital market's healthy development. crucial function in the robust advancement of the capital market. Thirdly, it can enhance the functionality of the capital market, wherein a crucial aspect of a robust capital market is the effective allocation of resources. The fundamental role of the stock market is to utilize stock price signals to attain optimal resource distribution within the capital market; consequently, this paper provides valuable insights for the development of a high-level capital market. II. Literature Review and Research Hypotheses[6].

2. Literature Review and Research Hypothesis

2.1. Literature Review

Stock price synchronization is a crucial indicator of pricing effectiveness in capital markets. [7]The notion of price synchronisation was initially introduced by Roll (1988), who indicated that the extent of price synchronisation is contingent upon the relative influence of firm-specific and market-wide information on share prices; specifically, as the market incorporates more firm-specific information, price synchronisation diminishes, and subsequent research has predominantly followed this rationale. [8]The economic rationales for stock price synchronization revolve around two hypotheses[9]:

'information efficiency' and 'irrationality.' From the standpoint of information quality, the disparity in stock price synchronization arises from the volume of firm-specific information; hence, reduced stock price synchronization correlates with enhanced pricing efficiency in the capital market (Morck et al., 2000). Increased quality of information disclosed by publicly traded companies results in heightened trading of firm-specific information, thereby reducing stock price synchronization. Related studies have investigated the impacts of surplus quality, accounting robustness, XBRL-formatted financial reports, and other variables on stock price synchronization. Determinants of share price synchronization (Yanyan Wang et al. 2014; Huayu Shen et al. 2017; Shi Yong and Longping Zhang 2014). The 'information efficiency' concept posits that agency conflicts and information asymmetry hinder the capital market's ability to acquire reliable firm-specific information, hence compromising its resource allocation efficacy. Current work emphasizes quantifying the incremental information inside the market to assess the extent of firm-specific information content, enabling market participants to comprehend the fundamentals of firms and so reduce information asymmetry. In contemporary capital markets, information intermediaries significantly influence market pricing efficiency. Consequently, researchers have started to examine the effect of these intermediaries on stock price synchronization, with pertinent studies encompassing institutional investors, analysts, and news media (Nianxing Xu et al. 2013; Hongjun Zhu et al. 2007; Jun Huang and Zhaorui Guo 2013; Xianjie He et al. 2018). The irrationality component is deemed irrational noisy trading by investors, resulting in diminished share price synchronization, which positively indicates capital market pricing efficiency (Yaping Wang, 2009). In emerging markets, diminished price synchronization arises from the prevalence of 'noise' in stock prices, which hampers the effective reflection of business characteristics, hence decreasing the information efficiency of the capital market (Zhou, 2014). Wang Song et al. (2018) discovered that listed companies often modify their surplus levels by categorizing and reallocating surplus management tools to align with analysts' surplus forecasts, thereby enhancing the company's efficiency to meet investor expectations; in other words, analysts' surplus forecasts improve the company's surplus management practices. The 'irrational noise' in China's capital market exacerbates surplus management behavior, heightening information asymmetry and diminishing the information efficiency of the capital market. Simultaneously, excess management results in an increased integration of firm-specific information into stock prices, hence diminishing stock price synchronization (Xia Fang, 2012).

Since the late 1980s, the incidence of stock incentive schemes has been rising among U.S. companies. China commenced the implementation of equity incentive plans in the early 21st century, coinciding with a period of significant development for its listed companies. On 31 December 2005, the China Securities Regulatory Commission (CSRC) issued the 'Administrative Measures for Equity Incentive Plans of Listed Companies (for Trial Implementation)', marking the inception of equity incentive plans for publicly listed companies in China. In 2006, the pertinent authorities issued the 'Administrative Measures for Equity Incentive Plans of Listed Companies.' In 2006, the pertinent authorities issued the Administrative Measures for Equity Incentive Plans of Listed Companies and the Measures for the Implementation of Equity Incentives for State-Holding Listed Companies (for Trial Implementation), which facilitated the enhancement and advancement of equity incentives for listed companies in China.

In the initial studies on equity incentives, researchers, notably Jensen (1976), concluded that stock incentive systems effectively motivate executives to enhance corporate performance. Kornelakis (2017) discovered that equity incentives can enhance employee motivation and productivity; Mao and Zhang (2018) identified that stock options positively influence organizational innovation capacity. Jolly et al. (2019) posited that equity incentives serve as an effective mechanism to augment a company's R&D and innovation capabilities; Chendra and Sidarto (2020) noted that employee stock options can retain and motivate personnel, thereby enhancing corporate management; Wayland (2021) asserted that utilizing equity as an incentive for employees fosters motivation among the workforce. Ma Guifen (2020) empirically demonstrated that stronger equity incentives contribute to a reduction in agency costs and decision-making risks. Xia Yongliang (2021) discovered that the implementation

of equity incentives enhances corporate business performance. Wanli Frost (2021) posited that equity incentives are positively correlated with corporate performance, asserting that their adoption can effectively diminish agency costs and elevate corporate performance levels.

Diverse experts arrive at varying study conclusions regarding the correlation between equity incentives and corporate success. Kadan et al. (2016) indicated that when a firm implements incentives, managers may prioritize their own interests by manipulating the share price, so undermining the rights and interests of ordinary shareholders, which can negatively impact the company's operations. Zili et al. (2019) discovered that managers utilizing equity incentives may prioritize their personal interests by augmenting their income via enhanced dividend distribution; Nienhaus (2021) posits that executives may pursue self-serving interests through surplus management practices, thereby jeopardizing the firm's interests. Ogbonnaya et al. (2017) discovered that executives possessing excessive shares may jeopardize the firm's overall interests for their own gain. Bratten (2017) discovered that granting additional stock to management may instigate a sense of crisis among majority shareholders, prompting them to act against the firm, which could diminish management's motivation and thus impair performance. Bachmann et al. (2018) contended that the proprietor's shareholding percentage does not influence firm performance when equity incentives are employed; Cui and Malk (2018) discovered that management shareholding does not inherently enhance firm performance, revealing a negative correlation between management shareholding and firm performance when management ownership is below 5 percent or between 25 and 50 percent. Prior research has concentrated on the correlation between equity incentives and corporate performance, with limited or nonexistent studies addressing the efficiency of capital market pricing. [10]This paper examines the influence of equity incentives on the pricing efficiency of capital markets.

2.2. Research hypothesis

Share price synchronization refers to the extent of isotropic correlation between a company's share price volatility and market volatility, serving as a critical indicator of capital market pricing efficiency. Information asymmetry is a primary factor contributing to stock price synchronization. A study by Morck (2000) demonstrates that in a fully efficient stock market, stock prices remain unaffected by noise, indicating that stock price synchronization adversely impacts the pricing efficiency of the market. [11]Substantial empirical evidence indicates that the market is not entirely efficient, particularly in China, the largest emerging capital market globally. The investor composition is predominantly comprised of small and medium-sized investors, while mechanisms for investor protection, such as lawsuits, remain underdeveloped. Additionally, the information disclosure system for listed companies is insufficiently robust. Consequently, small and medium-sized investors face inherent disadvantages in acquiring information regarding firm-specific characteristics, resulting in a significant deficiency of effective market information. This impedes the integration of firm-specific information into stock prices, leading to a heightened level of stock price synchronization in China, a conclusion also supported by Yeung's (2013) study. Excessive price synchronization has diminished the distinction between high-quality and low-quality companies, resulting in stock prices that inadequately represent true company value, thereby impairing market resource allocation efficiency. In recent years, the phenomena of widespread stock declines and the herd behavior of irrational investors have become prevalent in China's capital market. In recent years, the occurrences of 'thousands of stocks declining' and the 'herd effect' among irrational investors have been prominent in the Chinese capital market. Consequently, it is imperative to enhance the transparency of information regarding the attributes of individual stocks by corporations and to augment the informational efficiency of the Chinese market, thereby diminishing the occurrence of phenomena such as 'synchronized increases and decreases' and 'sector correlation'.[12]

Equity incentive refers to a company's stock utilized as a motivational tool, established through a defined timeframe and assessment criteria. It allows the enterprise to grant stock to exceptional employees, technical experts, and key personnel who meet the evaluation conditions. This approach encourages staff to engage in the company's decision-making and operations as shareholders,

enabling them to assume risks while reaping benefits, thereby aligning their interests with the enterprise's business performance. It facilitates the enhancement of the distribution mechanism and the establishment of a community of interests between capital owners and laborers. Equity incentives align the incentive targets with the company's interests, mitigating the principal-agent dilemma, so maximizing shareholder rights and fostering the enterprise's long-term and successful development. [13]The establishment of the share incentive plan will augment the company's information sharing and boost transparency. At the regulator's request, the execution of the equity incentive plan will reveal additional internal information regarding the company's operations to the market, and research by Li Xingyu, Luo Jin, and Luo Shougui (2017) indicates that the company's information transparency will improve. Secondly, the execution of the equity incentive plan will motivate employees to engage in corporate governance, mitigate surplus management practices, and enhance the quality of the company's information. When employees possess equity in the company, they are more likely to adopt a 'ownership' mentality, actively supervising daily operations. This involvement curtails both accrued surplus management and actual surplus management activities, enhances information quality, and improves stock pricing efficiency. The execution of the equity incentive plan can provide a 'signaling function' and enhance market attention. The execution of the equity incentive plan, as a corporate strategy to enhance governance and optimize operational methods, serves as a favorable signal to the market, attracting the attention of a diverse array of investors and intermediaries. The extensive focus of investors and intermediaries can bolster investor confidence while simultaneously increasing the availability of idiosyncratic information in the market, thereby diminishing the synchronization of the company's share price.[14]

Securities trading relies on a compilation of information, with high-quality information being crucial for the trading decisions of both parties. Fang Hongxing and Chu Youwei (2019) identified that enhancing the information quality of listed companies is fundamental to improving market efficiency. The use of equity incentive plans can significantly enhance the quality of business information. The notion of 'information efficiency' posits that stock prices in the capital market can encapsulate a company's specific information, with variations in stock price synchronization arising from the volume of such information.

The initiation of the equity incentive plan transforms numerous private details into public knowledge, including comprehensive disclosure of funding sources, participation levels, implementation scale, compensation frameworks, benefit schemes, and human resources strategies. This enhancement of individual information within stock prices diminishes extraneous noise, thereby augmenting corporate information transparency. [15]Secondly, the execution of the equity incentive plan will engender a 'supervisory effect' among employees and executives. Employees, as insiders, will gain access to more effective internal information regarding the enterprise's operations and management, thereby enhancing their understanding of the company's actual circumstances. The implementation of this plan will enable employees to act as shareholders, participating in corporate governance and overseeing management while simultaneously augmenting their voting rights. In numerous instances, employees will be able to engage in the company's management as shareholders, thereby supervising the administration of the organization. The execution of the share incentive system allows employees to engage in corporate governance as shareholders, overseeing management while enhancing their voting rights. The installation of share incentive programs substantially motivates employees, hence enhancing corporate productivity and business performance, as well as increasing the company's voluntary information sharing. Lee and Liu (2011) discovered that in conditions of low information content (high noise), share price synchronization is positively correlated with information quality, whereas in conditions of high information content (low noise), share price synchronization is negatively correlated with information quality. Hutton et al. (2009) discovered that more transparency of company information correlates with decreased stock price synchronization. Equity incentives enhance the effectiveness of capital market pricing by altering the company's internal governance structure and methodologies.

The implementation of equity incentive plans can enhance information quality, allowing individual company information to be more accurately reflected in stock prices. This reduces noise interference and diminishes heterogeneous stock price fluctuations, leading to lower stock price synchronization and improved market pricing efficiency. Consequently, information quality may serve as a mediator between equity incentive schemes and share price synchronization; specifically, the introduction of equity incentive schemes can boost market pricing efficiency by enhancing information quality.

Secondly, analysts serve as crucial information middlemen and are vital for listed companies to attract attention from the capital market. The principal role of securities analysts is to scrutinize, extract, and evaluate information disseminated by publicly traded corporations to furnish investors in the capital market with pertinent insights. Securities analysts demonstrate their skills mostly by delivering valuable additional information to investors and producing high-quality analytical reports. In contrast to regular investors, securities analysts possess a superior capacity for obtaining and evaluating information; hence, when information regarding firm characteristics is scarce, investors tend to place greater significance on the insights supplied by analysts. Current study predominantly examines analyst behavior in relation to corporate financial attributes and the quality of information. [16]In practice, employee and executive incentives, as a corporate institutional design to enhance the agency problem and governance environment, have significant external spillover effects that can substantially influence analysts' reports. Per the premise of 'irrational noise', China's capital market is classified as a developing market, typically characterized by heightened 'noise', wherein stock prices predominantly reflect market 'noise' rather than substantive information regarding firm attributes. The stock price embodies greater market 'noise' than substantive information on the company's attributes. To accommodate analysts' surplus forecasts, publicly traded companies often modify their surplus levels through classified surplus management transfers, ensuring that corporate benefits align with investor expectations; thus, analysts' surplus forecasts elevate the company's surplus management standards. [17]The presence of 'irrational noise' in China's capital market exacerbates surplus management behavior, heightening information asymmetry and diminishing the information efficiency of the capital market. Simultaneously, excess management results in a greater incorporation of firm-specific information into the stock price, hence diminishing stock price synchronization.[18]

Thirdly, Zhu Hongjun, He Xianjie, and Tao Lin (2007) assert that the execution of equity incentive plans serves as unique information to signal the sustained profitability of an enterprise to external stakeholders. This, in turn, enhances the enterprise's informational value and reputation, which analysts promptly recognize, leading to increased scrutiny and analysis of the target enterprise. Secondly, in a cacophonous market, investors find it challenging to assess and navigate the intricate information landscape, hence complicating the utilization of information for trading purposes. Conversely, analysts possess robust information acquisition and processing abilities, enabling them to do comprehensive studies and synthesize important insights from published equity incentive programs, thus delivering high-quality analytical reports to judiciously inform resource allocation. The performance-related public information in equity incentive programs disclosed by corporations can significantly lower analysts' forecasting expenses, draw in additional analysts, and enhance analysts' focus. As analysts' focus intensifies, firm-specific information in their published analysis influences the stock price, enhancing the information content of the stock price, reducing stock price synchronization, and so improving market pricing efficiency. [19]Analysts' attention may serve as a mechanism through which equity incentive schemes influence the pricing efficiency of the capital market; specifically, the implementation of these schemes may enhance pricing efficiency by augmenting analysts' attention.

Equity incentive systems positively influence firm innovation from a theoretical standpoint. Fitzgerald (2021) and Zhou, Wei, Lin, Nan, and Zhang, Xi (2021) demonstrate that, owing to the prolonged and high-risk characteristics of corporate innovation, the most efficacious contract for incentivizing innovation must accommodate the risk of short-term innovation failures while providing recipients with substantial long-term returns. Equity incentive schemes represent a superior

form of motivation that amalgamates the two, with an asymmetric payoff curve that safeguards incentive receivers during stock price declines, while yielding substantial returns when innovation succeeds and stock prices rise. [20]Secondly, equity incentive schemes typically possess a prolonged validity, thereby successfully motivating the company's strategic management and key technological personnel to engage in long-term innovation and research and development. Ultimately, given equity incentive schemes are contingent upon the company's shares, correlating compensation with share price volatility may encourage increased risk-taking among incentive recipients. In summary, elevated share price information content and diminished share price synchronization significantly influence the efficacy of equity incentives for innovation. The substantial investment, extended duration, and unpredictability of innovation intensify information asymmetry and are prone to produce 'irrational noise', leading to increased price synchronization, which facilitates the undervaluation of innovation activities, thereby impacting the pricing efficiency of the capital market.

From a value-driven perspective on innovation, high profitability typically correlates with elevated market valuation and returns. Firms that prioritize innovation tend to experience superior growth, and those with significant innovation levels often possess favorable prospects for future earnings growth. Consequently, innovation serves as an indicator of future earnings growth and provides valuable insights for assessing prospective cash flows, aiding investors in forecasting a firm's future value and enhancing stock pricing efficiency.[21]

Equity incentive schemes influence capital market pricing efficiency; [22]yet, local and international experts possess divergent perspectives on the correlation between equity incentives and pricing efficiency, encompassing positive, negative, and neutral viewpoints. Equity incentive schemes can motivate management and employees, promote technological innovation and R&D investment, improve corporate disclosure quality, reduce principal-agent costs, create managerial incentives, and enhance market perceptions of the enterprise's future growth potential, thereby improving capital market pricing efficiency. Conversely, equity incentives may adversely affect the price efficiency of the capital market, particularly when the alignment of interests between individuals and enterprises is minimal. This study further examines the affirmative correlation between equity incentive schemes and the effectiveness of capital market pricing through empirical analysis utilizing share price synchronization. Consequently, the study posits the subsequent hypotheses:

H1: Equity incentive schemes can enhance the efficiency of capital market pricing.

Chen Hanwen and Wang Yanyan (1993) demonstrate that high-quality auditors enhance the transparency of firms' accounting information and the credibility of their profits, while also diminishing firms' uncertainty. Additionally, Feng (2023) indicates that high-quality audits augment the reliability of firms' alternative performance reports and non-financial information. Hu Dan and Feng Qiaogen (2013) examined the influence of audit quality on IPO suppression and discovered that pre-IPO audit quality can elevate the rate of IPO suppression. Wang, Yonghai, and Zhang Tao (2014) examine the influence of audit quality on financial innovation risk, concluding that high-quality audits can mitigate the risk of financial innovation in banks. Bushman and Smith (2001) contend that an information asymmetry exists between management and shareholders, resulting in shareholders' inability to fully comprehend the firm's internal information. Consequently, shareholders are motivated to implement external audits to mitigate this information asymmetry. Consequently, shareholders are motivated to implement external audits to mitigate knowledge asymmetry with management. Enhanced audit quality significantly improves corporate financial reporting and information transparency, facilitating the transmission of more effective information externally. This diminishes information asymmetry between the enterprise and external stakeholders, reduces stock price synchronicity, and enhances capital market pricing efficiency. Furthermore, a high-quality audit serves as a mechanism for signal transmission; when an enterprise engages a reputable auditor, it communicates the superior quality of its financial reporting and the diligence of its management to external investors. This, in turn, bolsters investor confidence in the enterprise, encourages the utilization of corporate financial reporting information for trading, and enhances both the informational content of share prices and the pricing efficiency of the capital market. [23]

Consequently, for firms audited by reputable auditors, such as those from the 'Big 4', we anticipate that their share price synchronization is diminished, and the execution of the share incentive plan will enhance capital market pricing efficiency to a greater extent.

H2: The superior the audit quality of a company, the greater the enhancement in capital market price efficiency resulting from the implementation of an equity incentive scheme.

The geographical location of a corporation substantially influences information dissemination and investor reactions in the capital market. Research indicates that variations in economic development, market maturity, and media environment between regions significantly affect the pricing efficiency of capital markets. Zhu Hongjun, He Xianjie, and Tao Lin (2007) demonstrate that analysts enhance the quality and circulation of corporate accounting information by analyzing and monitoring it, hence increasing the efficiency of the capital market. The execution of equity incentive plans in the eastern region can markedly enhance the pricing efficiency of the capital market owing to elevated information transparency and investor focus. [24]Conversely, companies in the central area exhibit a diminished effect when executing analogous initiatives, mostly limited by the level of market development. The execution of equity incentive schemes has a minimal impact on capital market pricing efficiency in the western area, attributed to the delayed information dissemination and the poor responsiveness of investors to corporate information. [25]This indicates that variations in media focus and information distribution directly influence the efficacy of equity incentive plans for companies across different areas.

H3: The impact of equity incentive plans on capital market pricing efficiency varies significantly by region, with the eastern region exhibiting the most substantial effect, followed by the central region, and the western region demonstrating the least effect.

3. Research Design

3.1. Model Setting

This paper analyzes the impact of equity incentive plans implemented by listed companies on the pricing efficiency of the capital market, using the 'Administrative Measures for Equity Incentives of Listed Companies (Trial)' issued by the Securities and Futures Commission (SFC) in 2006 as a framework. This study develops the subsequent regression model:

$$Y_{it} = a_0 + a_1 SOG_D_{i,t} + \sum a_2 \, Control_{i,t-1} + id_i + year_t + \varepsilon_{i,t} \quad (1)$$

In the following metrics of capital market pricing, the subscripts I and t represent the company and year, respectively[26]. The primary explanatory variable, SOD_D, is a dummy variable for equity incentives, assigned a value of 1 in the year the executive equity incentive plan is implemented or the subsequent year (the equity lock-up period), and a value of 0 in the following years. Control refers to the collection of control variables, and the current model accounts for both the fixed effects of the firm's industry and the annual fixed effects of the company. To address endogeneity resulting from reverse causation, all control variables are lagged by one period.

Based on current studies, the control variables selected are: firm size (SIZE), gearing ratio (LEV), nature of enterprise (SOE), firm age (AGE), total number of employees (EMP_num), and sales ratio (Sale).

Table 1. Definition of variables

Variable Name	Notation	Variable Definition
Equity Incentive Dummy Variables	*SOD_D*	A value of 1 is assigned to the year in which the executive share incentive scheme is implemented or the year thereafter (the lock-up period), and a value of 0 is assigned to subsequent years.
Return on Total Assets	*ROA*	Net Profit/Total Assets of the Company
Return on Net Assets	*ROE*	Net profit/proposed net worth of the company
Tobin's Q	*TQ*	(Book value of corporate bonds + market value of shares)/Total assets of the company
Revenue Growth Rate	*SGR*	Current Operating Income / Previous Operating Income
Firm Size	*SIZE*	Logarithm of total assets of the company
Asset-Liability Ratio	*LEV*	Total liabilities/total assets
Nature of Business	*SOE*	State-controlled enterprises take 1, otherwise take 0
Company Age	*AGE*	Logarithm of the number of years of listing
Logarithm of Total Employees	*EMP_num*	Ln(1+total number of employees)
Sales Ratio	*Sale*	Sales/Total Assets

3.2. Calculation of stock price synchronisation

Utilizing the research technique of Morck et al. (2000), Yu Qiuling and Zhu Hongquan (2014), and other researchers, the proportion of individual stock return volatility attributable to market and industry returns serves as an indicator of stock price synchronicity. The precise calculation procedure is as follows:

$$R_{i,d,t} = \beta_0 + \beta_1 * R_{M,d,t} + \beta_2 * R_{I,d,t} + \varepsilon_{i,d,t} \tag{2}$$

$$R_{i,d,t} = \beta_0 + \beta_1 * R_{M,d,t} + \varepsilon_{i,d,t} \tag{3}$$

$$R_{i,d,t} = \beta_0 + \beta_1 * R_{M,d,t} + \beta_2 * R_{M,d,t-1} + \beta_3 * R_{I,d,t} + \beta_3 * R_{I,d,t-1} + \varepsilon_{i,d,t} \tag{4}$$

The return of stock i on day d of month t is the market return weighted by the market capitalization of all outstanding stocks on day d of month t, while the industry return is computed by weighting the market capitalization of other outstanding stocks in the industry, excluding stock i. The particular industry is derived from the 2012 SEC industry categorization, and the modified form of synchrony is acquired by computing equation (2).

Certain researchers employ the correlation between individual stock returns and market returns to assess synchronization (Morck et al., 2000; Chen, Donghua and Yao, Zhenye, 2018). Additionally, some scholars incorporate market and industry lag terms to derive the synchronization fit measure (Hu, Jun and Wang, Zhen, 2015; Wu, Wuqing et al., 2020). To assess the robustness of the research findings, stock price synchronization is calculated and represented using Equations (3) and (4), respectively. To increase the value range of R2 from (0,1) to the entire real line, a logarithmic transformation is used as follows:

$$\mathrm{SYN}(1)_{i,t} = \ln\left(\frac{R(1)_{i,t}^2}{1 - R(1)_{i,t}^2}\right) \tag{5}$$

$$\mathrm{SYN}(2)_{i,t} = \ln\left(\frac{R(2)_{i,t}^2}{1 - R(2)_{i,t}^2}\right) \tag{6}$$

$$\mathrm{SYN}(3)_{i,t} = \ln\left(\frac{R(3)_{i,t}^2}{1 - R(3)_{i,t}^2}\right) \quad (7)$$

Identify and indicate the synchronization of stock i in month t according to the three distinct measures. Lower stock price synchronization indicates greater efficiency in capital market pricing, meaning that more firm-specific information is reflected in the stock price.

3.3. Other research designs

Equity incentives can be alleviated through information asymmetry and corporate governance to address management motivations such as the trench effect and empire building, which affect the influence of equity incentives on capital market pricing efficiency.

3.3.1. Moderating Influence Information Asymmetry

This paper employs the quantity of analysts monitored and the volume of research reports disseminated by analysts as indicators of information mechanisms to examine the influence of analysts' attention on the correlation between online media coverage and firms' financialized investment behavior. The precise measures are computed as follows:

$$\mathrm{Analyst}_{\mathrm{i,t}} = \ln\left(1 + \mathrm{Analyst}_{\mathrm{Num_{i,t}}}\right)$$

$$\mathrm{Report}_{\mathrm{i,t}} = \ln(1 + \mathrm{Report}_{\mathrm{Num_{i,t}}})$$

Where is the number of tracking research analysts for stock i in period t, and is the number of analysis reports issued by the tracking analysts for stock i in period t. If the same analysts have issued multiple reports on the same listed company, the last analysis report issued in the period prevails. It is the natural logarithm of the sum of the number of tracking research analysts for stock i in period t, and the natural logarithm of the total number of company research reports issued by stock i in period t. Theoretically, more analysts follow already increases firms' information transparency.

3.3.2. Moderating Effect 2: External Governance

Shleifer and Vishny (1986) contend that foreign institutional investors can proficiently oversee the "collusive" conduct between management and substantial internal shareholders, so enhancing the governance of the target organization. Domestic research indicates that institutional investors can serve as external governance mechanisms and restrain shareholders' profit-taking behavior (Shen Huayu et al., 2017; Li Wei'an et al., 2017). This study contends that a deficient external governance environment is more likely to prompt big shareholders to utilize employee stock ownership schemes for interest appropriation, which undermines the company's long-term success. Venture capital firms typically engage with publicly traded companies prior to other external institutional investors, possess greater familiarity with the company's activities, and can enhance governance more effectively.[27]This research utilizes a venture capital dummy variable to assess the robustness of the firm's external governance.

4. Empirical Results

4.1. Descriptive statistical analysis

The results of the descriptive statistical study shown in Table 2 summarize the variables pertaining to equity incentives as follows: The cumulative excess surplus has a mean value of 0.001 and a standard deviation of 0.192, suggesting that the performance of the majority of firms regarding excess surplus is rather stable, albeit with some volatility. Innovation Output: The mean yearly figures for new patent applications and patent granted by firms are 2.68 and 2.44, respectively, signifying active

engagement in innovation by these entities. The standard deviations of patent applications and authorizations are 1.82 and 1.73, respectively, signifying considerable variability in the patenting circumstances among different firms. The mean size of the sample firms is 22.15, with a standard deviation of 1.29. The minimum and highest values are 18.59 and 28.61, respectively, indicating the concentration of size within the sample. The average leverage (Lev) is 0.42, with a standard deviation of 0.20, a minimum of 0.01, and a maximum of 1.40, indicating variations in debt financing among companies. The average share of State-Owned Enterprises (SOEs) is 27.47 percent, with a standard deviation of 44.64 percent, indicating a substantial disparity between the proportions of SOEs and non-SOEs in the sample. The average listing duration (ListAge) is 1.95 years, with a standard deviation of 0.83, suggesting that the majority of samples were freshly listed companies exhibiting significant variability in listing duration. The average number of employees is 5,618, with a standard deviation of 16,078, suggesting significant variability across the sample organizations regarding employee headcount, with some much surpassing the norm. The mean growth rate is 0.28, accompanied by a standard deviation of 2.51, indicating considerable variability in the growth performance of the sample enterprises. The average Tobin's Q ratio of the sample is 2.04, with a standard deviation of 1.40, signifying a substantial disparity between the market value and the asset value of the companies. The institutional ownership ratio (INST) averages 41.74% with a standard deviation of 25.71%, signifying varying degrees of institutional investor involvement in the sample. Only 5.65% of the enterprises in the sample are audited by Big 4 accounting firms, indicating a diversity of options.

In conclusion, the sample firms exhibit substantial disparities across various dimensions, particularly regarding innovation output, staff count, and leverage ratio, attributes that could profoundly influence the formulation and execution of equity incentives. The variables in the sample are adequately dispersed, aligning with prior research findings, and represent the typical attributes of enterprises within the industry.

Table 2. Descriptive statistical analysis of variables

Variable	Mean	SD	Min	Max
Size	22.14782	1.285598	18.59407	28.60667
Lev	.415324	.1963485	.0083591	1.402817
SOE	.2746792	.4463716	0	1
ListAge	1.947903	.8304051	0	3.465736
Employ	5618.048	16078.41	17	382492
Growth	.2808066	2.513889	-1.309156	171.7453
TobinQ	2.038743	1.404854	.63383	25.50554
INST	.4173804	.2570765	0	1.010764
Big4	.0564585	.2308149	0	1

4.2. Analysis of empirical results

4.2.1. Benchmark Regression and Robust Type Test

The subsequent regression results enable an examination of the correlation between equity incentives and the efficiency of capital market pricing. Table 2 illustrates that equity incentives exert a negative influence on share price synchronization across all models, achieving statistical significance in certain instances (e.g., -0.007 in models (1) and (2), indicating a significance threshold of 1%). This suggests that equity incentives may diminish share price synchronization to some degree, hence enhancing capital market pricing efficiency.

The insignificance of company size (Size) in the model suggests that it has a minimal impact on share price synchronization. The capital structure (Lev) exerts a negative and significant influence (-0.036 and -0.031), indicating that elevated leverage may result in diminished share price synchronization, likely due to the risks linked to substantial debt, which renders investors more

circumspect in their evaluations. Both Employee (Employ) and Growth (Growth) exhibit a negative impact, with significance levels of -0.000, adversely influencing share price synchronization. The R^2 values of the model varied from 0.286 to 0.302, signifying that the explanatory variables possess enough explanatory power for the dependent variable, while implying that additional unaccounted factors may influence market pricing efficiency.

Various methods for determining market weights are examined in the robustness test, and while the impact of equity incentives is somewhat diminished, the overarching trend persists, demonstrating the robustness of the findings.

Table 3. Benchmark regression and robust type test

	(1) SYN (Sub-market equalization)	(2) SYN (Composite market equal-weighted average method)	(3) SYN (Sub-market equalization)	(4) SYN (Composite market equal-weighted average method)
SOD_D	-0.007***	-0.007***	-0.004*	-0.004
	(-3.06)	(-3.11)	(-1.70)	(-1.60)
Size			-0.001	0.000
			(-1.01)	(0.29)
Lev			-0.036***	-0.031***
			(-5.83)	(-5.15)
SOE			0.017***	0.015***
			(6.29)	(5.70)
ListAge			0.016***	0.021***
			(9.67)	(12.98)
Employ			-0.000***	-0.000***
			(-4.37)	(-4.65)
Growth			-0.000**	-0.000**
			(-2.36)	(-2.40)
_cons	0.449***	0.446***	0.459***	0.407***
	(283.86)	(283.64)	(17.53)	(15.73)
Id			YES	
Year			YES	
N	23063	23063	24452	24452
R^2	0.286	0.292	0.287	0.302
Adj. R^2	0.28	0.29	0.28	0.30

The analysis of the relationship between equity incentives and share price synchronization, following the exclusion of the anomalous year 2020 due to the pandemic, indicates that the coefficient for equity incentives is statistically significant at -0.007 (1% significance level). This signifies a substantial inverse correlation between equity incentives and share price synchronization. This suggests that the adoption of equity incentives by companies may result in a diminished stock price reaction to alterations in firm fundamentals, hence decreasing stock price synchronization. The intercept term (_cons) of 0.455 indicates a high overall model level after accounting for other variables, suggesting the influence of additional factors on share price synchronization. The model exhibits a R^2 of 0.289 and an adjusted R^2 of 0.29, signifying that it accounts for approximately 29 percent of the variation in share price synchronization, while the remaining 71 percent is attributable to other unexamined factors. This indicates that subsequent research may incorporate more control variables to augment the model's explanatory capacity. Excluding the exceptional year of 2020, the sample size stays at 22,427, and the adverse effect of equity incentives continues to be large, hence maintaining data representativeness and analytical robustness.

In conclusion, excluding the exceptional year of 2020, equity incentives continue to exert a substantial negative influence on share price synchronization, hence enhancing capital market pricing efficiency.

Table 4. Excluding the special year

	(1) SYN
SOD_D	-0.007*** (-2.69)
_cons	0.455*** (286.72)
Id	YES
Year	YES
N	22427
R^2	0.289
Adj. R^2	0.29

Further fixing the provinces, a robust-type test with triple fixed effects is conducted, and the coefficient of equity incentives remains negative and the result is statistically significant, which represents that the robust-type test of the experimental results passes, and that equity incentives have a negative impact on equity synchronisation, and furthermore have a positive impact on the pricing efficiency of the capital market.

Table 5. Triple fixed effects

	(1) SYN
SOD_D	-0.004 (-1.62)
Size	-0.001 (-0.81)
Lev	-0.037*** (-5.94)
SOE	0.017*** (6.33)
ListAge	0.015*** (9.41)
Employ	-0.000*** (-4.45)
Growth	-0.000** (-2.33)
_cons	0.455*** (17.32)
Id	YES
Year	YES
Province	YES
N	24447
R^2	0.288
Adj. R^2	0.28

4.3. Heterogeneity analysis

4.3.1. Heterogeneity Analysis 1: Audit Quality

The influence of the Big Four audit firms on share price synchronization differs based on audit quality. The coefficient for equity incentives in firms audited by Big Four audit firms (big4=1) is -0.025 and is statistically significant at the 5% level. This indicates that equity incentives exert a more

pronounced adverse impact on share price synchronization in an environment characterized by high audit quality. This suggests that high-quality audits disclose the company's actual financial status and enhance the share price's sensitivity to fundamental data; however, equity incentives may still prompt management to engage in short-term behavior that influences the market's evaluation of its long-term worth. The coefficient of equity incentives in enterprises not audited by Big 4 audit firms (big4=0) is -0.003 and is statistically insignificant. This indicates that the influence of equity incentives on share price synchronization is less in a context of low audit quality, likely due to the lack of transparency in audit information, which results in investors being less responsive to business information.

Regarding firm size, within Big 4 audited firms, shareholder size exerts a significant negative impact on share price synchronization (-0.016), indicating that the share prices of larger firms may be more susceptible to internal factors, thereby affecting the flow of information from the external market. Conversely, within non-Big 4 audited enterprises, firm size positively influences share price synchronization (0.003), likely due to the heightened sensitivity of smaller firms to market swings. The impact of capital structure (Lev) is negligible (0.060) for Big 4 audited firms and negatively significant (-0.038) for non-Big 4 audited firms, indicating that elevated leverage may induce increased market uncertainty in a low audit quality context, thereby influencing share price synchronization. The considerable adverse impact of staff headcount in non-Big 4 audited corporations may be associated with variations in information transparency and market response among large firms. The pronounced adverse impact of growth on share price synchronization among non-Big 4 audit companies arises from the unpredictability of market expectations and the risk evaluation of high-growth enterprises.

In conclusion, audit quality significantly influences the correlation between equity incentives and share price synchronization. In a high audit quality environment, such as that provided by Big 4 firms, equity incentives exert a more pronounced adverse impact on share price synchronization due to enhanced transparency that clarifies market information, coupled with management's short-term incentives that influence investors' evaluations of the firm's long-term value.

Table 6. Results of heterogeneity analysis (Big 4 audit or not)

	big4=1	big4=0
	SYN	SYN
SOD_D	-0.025**	-0.003
	(-2.49)	(-1.38)
Size	-0.016***	0.003*
	(-2.74)	(1.79)
Lev	0.060	-0.038***
	(1.60)	(-4.93)
SOE	0.049***	0.015***
	(3.42)	(5.43)
ListAge	0.022**	0.016***
	(2.53)	(9.36)
Employ	0.000	-0.000***
	(0.90)	(-5.39)
Growth	-0.000	-0.000***
	(-0.72)	(-12.21)
_cons	0.720***	0.370***
	(5.76)	(11.67)
Id	YES	YES
Year	YES	YES
N	1340	21694
R^2	0.476	0.288
Adj. R^2	0.44	0.28

4.3.2. Heterogeneity Analysis 2: Firm Location

The heterogeneity analysis results allow for the examination of the relationship between equity incentives and share price synchronization in regard to geographical location (east, central, and west). The coefficient of equity incentives in the eastern region (EAST) is -0.004 and statistically insignificant, suggesting that equity incentives exert minimal or no influence on share price synchronization in this region. This may be attributable to the maturity of the eastern market, high information transparency, and the heightened responsiveness of market participants to the company's fundamentals. The coefficient of equity incentives in the central region (CENTRAL) is -0.016, which is statistically significant at the 5% level, indicating that equity incentives have a strong negative impact on share price synchronization in the central region. This may be attributed to the comparatively sluggish economic development in the central region and the inefficacious transmission of market information, resulting non shareholders' underreaction to alterations in firm fundamentals. The coefficient of equity incentives in the western region (WEST) is 0.007 and statistically insignificant, suggesting that equity incentives exert a minimal influence on share price synchronization, likely attributable to the region's relatively small market and inadequate information liquidity.

In the eastern region, shareholder size exerts a negative and significant influence on share price synchronization (-0.005), indicating that the internal dynamics of large enterprises in this area may more profoundly affect share price volatility. In the middle region, the size impact is positive and significant (0.012), indicating that larger enterprises may possess more benefits in disclosure and market response. Regarding capital structure (Lev), it exerts a substantial negative impact on share price synchronization in the eastern region (-0.042), whereas it remains insignificant in the central and western regions, potentially linked to risk awareness and sensitivity to leverage in the eastern market. Furthermore, listing time substantially influences share price synchronization in the East (0.021), indicating that an extended duration enhances the market's responsiveness to information, whereas in the Central and Western areas, the impact of listing time is diminished.

Table 7. Results of heterogeneity analysis (firm location)

	west	east	central
	SYN	SYN	SYN
SOD_D	0.007	-0.004	-0.016**
	(0.95)	(-1.39)	(-2.52)
Size	0.001	-0.005***	0.012***
	(0.29)	(-2.97)	(3.27)
Lev	-0.005	-0.042***	-0.003
	(-0.23)	(-5.28)	(-0.34)
SOE	0.026***	0.015***	0.018***
	(3.29)	(4.59)	(2.65)
ListAge	0.010*	0.021***	0.001
	(1.83)	(10.46)	(0.18)
Employ	-0.000**	-0.000***	-0.000
	(-2.56)	(-2.70)	(-1.16)
Growth	-0.000***	-0.001**	-0.003***
	(-15.14)	(-2.39)	(-4.14)
_cons	0.404***	0.524***	0.209***
	(4.29)	(15.72)	(2.84)
Id	YES	YES	YES
Year	YES	YES	YES
N	2512	16950	3451
R^2	0.322	0.292	0.331
Adj. R^2	0.30	0.29	0.31

4.4 Endogeneity issues

4.4.1. PSM methodology

The disparity in outcomes between companies that adopted equity incentive schemes and those that did not may merely indicate pre-existing differences between the two groups, as the implementation of such schemes may have been influenced by shared factors inherent to the equity incentive firms. A direct comparison between firms that adopted equity incentive schemes and those that did not is particularly vulnerable to the influence of the firms' inherent features, potentially affecting the study's outcomes. This work utilizes PSM's 1-to-1 closest neighbor matching method to identify a control firm from those that do not implement equity incentives for each company that successfully adopts such incentives, followed by a robustness test.

The coefficient for equity incentives is -0.008, which is statistically significant at the 5% level. This suggests that equity incentives adversely impact share price synchronization. Firms must consider the potential effects of incentive structures on share price performance and market reactions when formulating equity incentive plans. The findings of the PSM analysis demonstrate that equity incentives exert a considerable negative influence on share price synchronization, hence enhancing capital market pricing efficiency, confirming the validity of the research hypothesis.

Table 8. PSM regression results

	(1)
	SYN
SOD_D	-0.008**
	(-2.43)
Size	-0.001
	(-0.68)
Lev	-0.047***
	(-4.87)
SOE	0.017***
	(4.38)
ListAge	0.019***
	(8.21)
Employ	-0.000***
	(-3.03)
Growth	-0.004***
	(-5.45)
_cons	0.458***
	(11.68)
Id	YES
Year	YES
N	12252
R^2	0.277
Adj. R^2	0.27

5. Institutional Analysis

The coefficients of equity incentives are negative for both institutional investors and media, signifying a detrimental impact on share price synchronization and a beneficial influence on capital market pricing efficiency. The inverse correlation between equity incentives and share price synchronization is further substantiated in the context of institutional investors. The introduction of stock incentives may diminish the shareholding proportion of institutional investors, thereby undermining share price synchronization. The impact of media on share price synchronization is -0.004, approaching statistical significance at the 10% level. This indicates that the media's role in information transmission may influence share price synchronization. Media reports and analysis assist investors in comprehending a company's fundamentals, hence improving the market's response to the information.

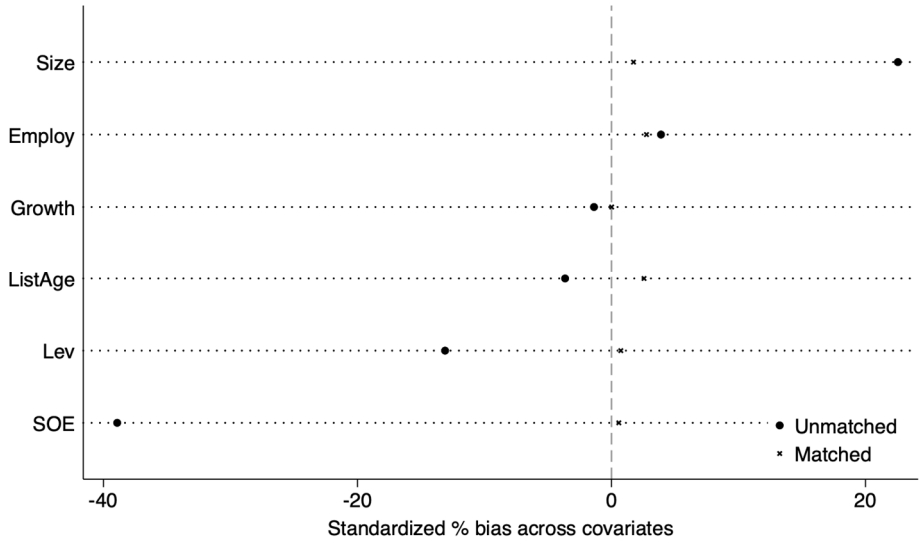


Figure 1. PSM

The mediation study results indicate that equity incentives influence stock price synchronization via institutional investors and the media. Institutional investors play a crucial role in this process, as their shareholding ratio exhibits a negative correlation with share price synchronization, indicating their responsiveness to information. Firms are advised to evaluate the effects on institutional investors when formulating equity incentive programs to guarantee that incentives foster long-term value creation. Moreover, companies should recognize the media's role in information distribution to improve market transparency and facilitate an accurate comprehension of corporate fundamentals.

Table 9. Results of mechanism analysis

	shareholding ratio of institutional investors		media	
	SYN		SYN	
SOD_D	-0.009***	-0.005**	-51.652	-0.004*
	(-2.81)	(-2.12)	(-0.84)	(-1.80)
INST		-0.078***		
		(-14.97)		
News				-0.000***
				(-4.66)
Size	-0.052***	0.004***	-121.043	-0.001
	(-3.62)	(2.67)	(-1.25)	(-0.67)
Lev	0.116***	-0.037***	-23.206	-0.035***
	(36.02)	(-4.94)	(-1.50)	(-4.85)
SOE	-0.024***	0.026***	-60.616	0.017***
	(-10.48)	(9.44)	(-1.24)	(6.22)
ListAge	0.000***	0.016***	0.002**	0.017***
	(3.03)	(9.20)	(2.18)	(10.04)
Employ	-0.000**	-0.000***	0.000	-0.000***
	(-2.56)	(-3.91)	(0.04)	(-4.11)
Growth	-1.198***	-0.000***	-1064.083***	-0.000***
	(-32.81)	(-11.51)	(-5.06)	(-11.22)
_cons	YES	0.374***	YES	0.448***
	YES	(12.83)	YES	(15.71)
Id	22893	YES	23035	YES
Year	0.339	YES	0.015	YES
N	0.34	22893	0.01	23035
R^2	(1)	0.302	(1)	0.293
Adj. R^2	INST	0.30	News	0.29

6. Research Conclusions and Recommendations

This article examines the influence of stock incentives on the efficiency of capital market pricing, primarily utilizing equity synchronization as a measure of price efficiency. Empirical evaluations reveal a substantial unfavorable correlation between equity incentives and equity synchronization. Stronger equity incentives typically result in diminished equity synchronization, aligning with the theoretical expectation that in a market characterized by clear and responsive information, reduced equity synchronization correlates with enhanced efficiency in capital market pricing.[28]

Furthermore, the article examines several determinants influencing equity synchronization, such as audit quality, the quantity of media sources, the proportion of institutional investors, and the number of analysts. Our results indicate that high-quality audits effectively boost the transparency of corporate information, hence increasing the market's responsiveness to share prices and improving equity synchronization.[29]The media is pivotal in disseminating information, with its quantity and quality directly influencing the market's comprehension of firm fundamentals. Comprehensive media coverage can enhance investors' understanding of company dynamics and promote the efficient dissemination of information. Institutional investors, owing to their responsiveness to market information, typically augment their shareholding ratio to amplify market reaction and so promote the synchronization of share prices. Furthermore, an augmentation in the number of experts can provide the market with more comprehensive information analysis and assist investors in making more precise assessments. In conclusion, audit quality, media quantity, institutional investor proportion, and analyst count are all inversely correlated with equity synchronization, hence influencing the pricing efficiency of the capital market.

In light of the study's findings, the following solutions are suggested to assist enterprises in optimizing their equity incentives and improving the price efficiency of the capital market. Initially, companies want to consider long-term success when formulating their incentive structures to guarantee that the incentives align with the organization's enduring developmental objectives, rather than concentrating solely on short-term financial metrics. It is advisable to equilibrate the relationship between short-term and long-term performance by implementing a blend of long-term incentives, such as extending the performance appraisal period or incorporating appraisal metrics aligned with the company's long-term strategic goals. This strategy will enhance management's emphasis on the company's long-term value, consequently diminishing equity synchronization to some degree and augmenting market price efficiency.

Secondly, organizations must prioritize the enhancement of audit quality. Choosing a reputable audit firm not only improves the transparency and credibility of financial data but also bolsters market participants' confidence in the company's value. By consistently providing precise and accurate financial information, firms can diminish information asymmetry, hence enhancing the market's rational response to their share prices. Consequently, firms must prioritize the audit process within their financial management to guarantee the timeliness and precision of information disclosure.

Third, firms ought to proactively engage with the media to improve both the frequency and quality of information dissemination. The media significantly impacts information transmission and can shape the market's comprehension of and response to a company's fundamentals. Organizations can develop an effective communication strategy with the media via press conferences and investor relations initiatives to guarantee the market receives timely and precise information. Thus, firms can strengthen their market image, facilitate effective information transmission, and improve the synchronization of share prices.

Fourth, firms ought to proactively engage institutional investors. Institutional investors typically boost market responsiveness through their proficiency in information analysis and market assessment. Consequently, firms must bolster the trust and engagement of institutional investors by implementing a robust corporate governance framework and a transparent information disclosure system. This not only improves the firm's equity structure but also diminishes equity synchronization and boosts market price efficiency through the influence of institutional investors.

It is advisable for corporations to develop or enhance partnerships with analysts and promote independent analysts to perform comprehensive study and coverage of the organization. Augmenting the number of analysts can furnish the market with more extensive information and assessments, so assisting investors in comprehending a company's value more effectively. [30] Companies may conduct regular analyst meetings and earnings conferences to furnish analysts with sufficient information to enhance their favorable evaluations of the company.

Future research presents numerous avenues deserving thorough exploration. Initially, concerning the correlation between equity incentives and the effectiveness of capital market pricing, subsequent study can examine various forms of equity incentives and their effects on distinct firm attributes. [31] Research might examine the varying effects of incentives such as stock options, restricted stock, and performance equity on the efficiency of capital market pricing. This would assist companies in obtaining more precise and targeted guidance when establishing incentive programs. Secondly, as the global economic landscape shifts, market structures and investor behaviors are concurrently transforming. Future research may examine the efficacy of equity incentives in global markets, analyzing how market processes across various nations and regions influence the correlation between equity incentives and equity synchronization. This will offer enhanced theoretical assistance for multinational firms in developing their worldwide strategy. Furthermore, the investigation into audit quality and media quantity warrants further exploration. Future research may investigate the distinct functions of various auditor types and media in information disclosure, as well as strategies to effectively augment information transparency and hence boost the pricing efficiency of the capital market. The rapid advancement of information technology necessitates a thorough examination of the influence of social media and internet platforms on conventional information delivery methods. The function of analysts in the capital market requires additional examination. Future research may investigate the behavioral traits of analysts, the transparency of information, and their influence on market sentiment to achieve a more thorough comprehension of analysts' roles in improving share price synchronization and market pricing efficiency. Comprehensive research can furnish policymakers and firms with a more empirical theoretical foundation for the sound advancement of the capital market.

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