# Regulatory Scrutiny and Post-IPO Performance: Evidence from IPO Comment Letters in China<sup>★</sup>

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Abstract

This study investigates the implications of comment letters on firms' post-IPO

performance in the Chinese market. By analyzing 2,423 comment letters for 1,170 IPOs from

2015 to 2020, we find that increased regulatory correspondence correlates with lower

short-term returns and long-term underperformance. Portfolio tests suggest that a strategy

based on comment letter volume could yield annualized premiums ranging from 7.2% to 12%.

Enhanced regulatory interaction may signal future competitive challenges and reduced

market informativeness, impacting stock prices post-IPO. Furthermore, a comparative

analysis between the approval and registration IPO review systems indicates that the

transition to the registration system diminishes the predictive power of comment letters on

post-IPO returns. This research contributes new insights into the implications of regulatory

transparency in the IPO review process for investors and highlights the different implications

of various regulatory frameworks.

Keywords: IPO, Comment letters, Post-IPO performance, Stock returns, Chinese market.

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#### 1. Introduction

Literature has generated intense discussions regarding the role of regulators in overseeing initial public offerings (IPO) (Lowry et al., 2020). The IPO review processes in the United States and China exhibit significant differences in regulatory philosophies and transparency levels. While the impact of regulatory correspondence in U.S. IPOs has been extensively studied, the implications of the information disclosed by regulators during China's IPO review process remain poorly understood. Our paper aims to fill this void by investigating the implications of Chinese regulatory oversight on post-IPO performance, thereby providing insights into whether different regulatory frameworks affect the informativeness of regulatory correspondence in the IPO process. Our study enriches the understanding of the effectiveness of regulatory oversight under different monitoring objectives from both the corporate finance and asset pricing perspectives.

China, the world's second-largest economy, boasts the second-largest stock market by total market capitalization, trailing only the U.S. (Allen et al., 2024). China has adopted an IPO review process that significantly differs from that of the U.S. China's IPO market had long operated under an approval system, wherein the Stock Issuance Examination and Verification Committee (hereafter referred to as the Committee) played a central role in conducting substantive reviews of applications (Chen et al., 2017; Yang, 2013). Unlike the U.S. Securities and Exchange Commission (SEC), which focuses on enhancing issuers' disclosures and ensuring compliance with disclosure requirements (Li and Liu, 2017), the China Securities Regulatory Commission (CSRC) conducts a substantive review of the filings and assesses applicants' fundamentals and prospects through the Committee. The

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<sup>&</sup>lt;sup>1</sup> China has progressively adopted a registration system across various listing boards. At the end of 2018, the STAR Market was established, initiating the registration system. In 2020, the ChiNext Board underwent reform and officially implemented the pilot registration system. In 2021, the Beijing Stock Exchange was launched, and the registration system was piloted concurrently. In 2023, China started the reform of the registration system for the Main Board. Compared with the approval system, the registration system emphasizes the principle of disclosure-based regulation. An introduction and comparison between the two systems are provided in Appendix Table A2. During the sample period of our main tests, China still employed an approval system.

CSRC has long considered its mission to be assisting investors in identifying high-quality companies.

In additional to different monitoring objectives, the transparency of comment letters also varies between the two countries. In the U.S., comment letters have been disclosed since May 12, 2005, but are not made public until several weeks after IPOs.<sup>2</sup> Lowry et al. (2020) contend that the benefits of regulator's information are diminished by delayed public access to comment letters, and urge the SEC to reconsider the balance between companies' "right of privacy" and the public interest in greater transparency. Conversely, the CSRC began disclosing IPO comment letters issued by the Committee during the review process on February 1, 2015, to enhance regulatory transparency. Unlike the U.S.'s delayed approach, the CSRC requires that a prospective issuer publish the comment letters received and their responses, along with the IPO prospectus, on the CSRC's official website prior to the Committee meeting that makes formal decisions on IPO application. Thus, in China, comment letters and corresponding firm responses are made public in a timelier manner, providing a contrast to the practices in the U.S. Analyses of the Chinese IPO market shed light on the debates regarding whether regulators' fundamental assessments and timely disclosure genuinely enhance the informativeness of the IPO process.

Using the comment letters disclosed by the CSRC over 2015–2020,<sup>3</sup> this paper investigates the implications of comment letters on post-issuance stock performance, and the underlying mechanisms. We develop four proxies to quantify the regulatory information conveyed through comment letters during the IPO review process: (1) total number of comment letters received prior to the offering, (2) number of major first-tier questions in these letters, (3) number of minor second-tier questions, and (4) total number of Chinese

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<sup>&</sup>lt;sup>2</sup> Since May 12, 2005, the SEC has publicly disclosed comment letters and responses via EDGAR. Initially, correspondence was released not less than 45 days after an IPO; this period was shortened to 20 days starting 2012 (Cunningham and Leidner, 2022)

<sup>&</sup>lt;sup>3</sup> In Section 7, we extend our sample period to 2022 and compare comment letters' implications under the approval and the registration systems.

characters in these letters. On average, each IPO in our sample received 2.07 letters, with two letters being the most common scenario (73.33% of IPOs).

We hypothesize that an increased volume of comment letters may adversely affect secondary market perceptions of firm value and dampen market sentiment. To test this, we examine the relationship between the volume of comment letters and short-term returns post-IPO, measured by underpricing and the cumulative abnormal return over the 20-, 40-, and 60-day windows post-listing. Our findings indicate that firms with more extensive regulatory correspondence during the review process tend to experience lower short-term post-IPO returns.

We further demonstrate that firms subjected to heightened regulatory scrutiny during the review process generally underperform in the long run, aligning with our expectation that comment letters indicate deficiencies in a firm's disclosures and fundamentals. These results remain robust when using buy-and-hold returns or adjusting returns for risk using various established asset pricing models. Additionally, our portfolio tests—which involve analyzing returns from a zero-investment strategy that is long on firms with low regulatory correspondence and short on firms with high levels—suggest that such a strategy could yield annualized excess returns of 7.2% to 12% over three years post-IPO.

We propose that product market competition and stock price informativeness serve as potential mechanisms through which regulatory correspondence could predict long-term performance. Increased correspondence with regulators is correlated with future competitive disadvantages and heightened market competition, potentially leading to slower market share growth and poorer long-term returns. Moreover, the low transparency in information disclosure practices signaled by extensive regulatory scrutiny may last to post-IPO market and influence stock price informativeness. Our empirical results support our expectations.

Finally, we conduct a comparative analysis of the implications of comment letters on

post-issuance returns under both the approval and registration systems in the Chinese market. Our analysis suggests that transitioning to the registration system significantly reduce the predictive power of regulatory correspondence on post-IPO returns in China. This comparison helps us understand how changes in monitoring objectives impact the influence of regulatory correspondence.

This paper makes four principal contributions to existing literature. Firstly, it enhances our understanding of the role that comment letters play in the context of IPOs by demonstrating their significant implications for firms' post-IPO performance and stock returns. While previous studies have examined the effects of comment letters in the realm of periodic disclosures (e.g., Dechow et al., 2016; Grove et al., 2016; Ryans, 2021; Baugh et al., 2022), our research extends these findings by highlighting the pronounced negative implications of comment letter on both short-term and long-term post-IPO returns.

Secondly, this study deepens our understanding of the benefits of going public by examining the impact of regulatory correspondence, particularly through comment letters, on product market competition and stock price informativeness post-IPO. This analysis not only broadens our insights into the consequences of regulatory interactions but also clarifies how such scrutiny affects traditional IPO benefits like access to stock liquidity and competitive advantages (Chemmanur et al., 2010; Bustamante and Donangelo, 2017). It reveals that the actualization of IPO benefits depends on various factors, including regulatory correspondence.

Thirdly, by focusing on the Chinese securities market, this study complements existing research on the U.S. by examining how comment letters function under a different regulatory framework (Li and Liu, 2017; Lowry et al., 2020). Moreover, the recent transition to a registration system in China offers a unique opportunity to explore how shifts in regulatory paradigms impact the influence of regulatory correspondence on market performance

post-IPO. Our study highlights how variations in regulatory frameworks can affect the implications of regulatory correspondence.

Lastly, through portfolio tests, this paper proposes a viable trading strategy that capitalizes on insights derived from comment letters. By constructing portfolios that are long on firms with fewer regulatory correspondences and short on those with more, we demonstrate the potential to achieve significant value premiums. This strategy enriches asset-pricing theory and contributes to signal theory by illustrating how the market incorporates negative signals from comment letters into stock prices.

The remainder of this paper is organized as follows: Section 2 provides a review of the institutional background of China and develops the hypotheses. Section 3 outlines the research design and describes the sample. Section 4 investigates the effect of IPO comment letters on post-IPO returns. Section 5 conducts robustness tests and portfolio analyses. Section 6 explores potential mechanisms. Section 7 compares the approval and registration systems. Finally, Section 8 concludes.

#### 2. Institutional background and hypothesis development

## 2.1. The IPO review process in China

China's IPO issuance process has undergone three distinct phases: (1) the quota system, (2) the approval system, and (3) the registration system. In the first two systems, the CSRC held absolute authority to determine whether potential issuers were qualified to enter the capital market based on their review. This reflects the Chinese IPO decision-making process's inherent "planning" aspect, characterized by centralized decision-making regarding the allocation of limited listing quotas (Fang et al., 2012). The approval system has been

operational since 1999, with notable exceptions for the new STAR Market and the ChiNext Market.<sup>4</sup>

Under the approval system, firms pursuing IPOs in China must satisfy a set of requirements, some of which are bright-line standards, such as profit and size, while others are qualitative and ambiguous criteria, such as the feasibility of the investment plan for the funds to be raised in the IPO and sound corporate governance. Since these qualitative criteria are largely subjective, the regulator can exercise considerable discretion in determining the suitability of an applicant (Li et al., 2021). The CSRC uses its discretions in IPO approvals to achieve two major objectives: investor protection and capital allocation guidance (Qian et al., 2024). Given the dominance of individual investors in the Chinese market, the CSRC is particularly concerned about exposing investors to investment risks, which may lead to "social instability." Consequently, the CSRC exerts significant efforts to protect investors. In the IPO process, investor protection has been implemented not only through disclosure requirements similar to that in the U.S., but also through evaluations of company fundamentals to ensure investment potential of the stocks. Additionally, the CSRC has imposed pricing restrictions on the offer price of IPO shares, such as capping the P/E ratio at which IPOs can be offered.<sup>5</sup> Driven by the same motivation for investor protection, the CSRC has suspended IPOs multiple times during market declines, attempting to stabilize stock prices by limiting the supply of new shares. Beyond investor protection, the CSRC has used IPO approvals to guide capital allocation in a centrally planned manner. For instance, the CSRC has favored certain industries and provinces or imposed stricter conditions across the boards to coordinate with government development plans during certain periods.

<sup>&</sup>lt;sup>4</sup> Our sample for the main analyses is conducted under the approval system. In Section 7, we further discuss the association between the comment letters and post-IPO return under the registration system as additional tests.

<sup>&</sup>lt;sup>5</sup> The pricing restrictions on the offering price have evolved over time. During our sample period of main tests, a window guidance P/E cap of 23 has been applied. For a comprehensive review of the historical pricing restrictions of Chinese IPOs, please refer to Qian et al. (2024).

The IPO issuance review process under the approval system comprises three critical steps: (1) pre-screening, (2) preliminary review, and (3) formal review (Chen et al., 2017). The issuer submits the application documents for issuance, including a preliminary prospectus, and enters the pre-screening process. The CSRC assesses the material integrity and decides whether to accept the application. Upon acceptance, the issuer's preliminary prospectus and accompanying documents are disclosed, and the issuer proceeds to the preliminary review stage. In this stage, a review team consisting of officers from the Issuance Supervision Department of the CSRC (ISD) review the submitted files and provides feedbacks to the sponsor through comment letters. The sponsor is responsible for organizing the issuer and other relevant intermediaries to respond to the review opinions in a timely manner and amend the filing materials accordingly. The inquiries and responses may undergo multiple rounds. If no further inquiries are necessary, the review team issues a review report, which, along with all response letters, is submitted to the CSRC Stock Issuance Examination and Verification Committee (the Committee). The CSRC began publishing IPO comment letters on February 1, 2015, to enhance the transparency of the IPO review process. Before entering the formal review stage, the comment letters, response letters, and amended filing materials are disclosed.

The Committee makes the final decision on whether to approve or disapprove the firm's IPO application. Many of the Committee members have backgrounds as auditors, accountants, lawyers, investment bankers, and mutual fund managers. For each IPO application, seven members are randomly selected from the pool. These Committee members are required to exercise professional judgment on the applicants' overall quality based on the review report, the response letters, and other filing materials, and make decisions on the suitability of the applicants. A minimum of five affirmative votes is required for the application to be approved (Yang, 2013). Appendix Table A2 outlines China's filing review process.

China's approval system concluded as the main boards of the Shanghai Stock Exchange (SSE) and the Shenzhen Stock Exchange (SZSE) adopted the registration system in 2023, following the STAR Market and the ChiNext.<sup>6</sup> Henceforth, the registration system has been fully implemented in the Chinese market.

#### 2.2. Literature review

The literature on the determinants and consequences of filing reviews, particularly through SEC comment letters, is expanding rapidly. The majority of studies concentrate on the reviews of periodic disclosure such as annual or quarterly filings by U.S. companies (Cunningham and Leidner, 2022). This research is broadly categorized into three main strands. The first strand of this literature explores the factors that influence the issuance and the extent of SEC comment letters. SOX Section 408 criteria are the most frequently identified factors influencing the likelihood of receiving comment letters, followed by other company characteristics such as financial constraints and corporate governance, and auditor characteristics, all of which are expected to be associated with firms' accounting and disclosure practices (Cassell et al., 2013; Heese et al., 2017; Johnston and Petacchi, 2017; Cunningham et al., 2020; Gunny and Hermis, 2020).

The second strand of literature focuses on the determinants of comment letter resolution. The remediation costs associated with responding to SEC comment letters are often quantified in terms of the number of communication rounds and the time span between the initial and final letters. Factors that can mitigate these costs include the involvement of auditors (Ballestero and Schmidt, 2024) or external legal counsel (Bozanic et al., 2019), and

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<sup>&</sup>lt;sup>6</sup> On February 17, 2023, the CSRC announced the comprehensive implementation of the regulatory framework for the stock issuance registration system. This signifies the full-scale adoption of the registration system across the entire market, following a four-year pilot phase. For further details, refer to http://www.csrc.gov.cn/csrc/c100028/c7123213/content.shtml (in Chinese). On April 10, the first batch of ten companies was listed on the main boards of the Shanghai and Shenzhen stock exchanges under the registration system.

having a CFO with expertise in accounting or finance (Kwon et al., 2019). Conversely, employing excessively complex language in responses can increase remediation costs (Cassell et al., 2019). This strand of research also explores the outcomes of these resolutions. Findings indicate that adverse outcomes are relatively infrequent—fewer than 10% of comment letter exchanges result in an amended filing (Johnston and Pettachi, 2017), and less than 3% lead to a restatement (Cassell et al., 2013; Cassell et al., 2019). The likelihood of a restatement or amendment is linked to various factors, including the clarity and scope of the initial SEC comments or referenced filings, SEC resources, and characteristics such as the size of the company and auditor, the company's financial condition and business complexity, and the readability of the responses (Baugh et al., 2022; Cassell et al., 2013; Cassell et al., 2019; Gunny and Hermis, 2020; Guo and Tian, 2024).

The third strand of literature investigates the impacts of SEC comment letter correspondence, including subsequent corporate practices and market responses. Numerous studies have documented enhancements in disclosures and accounting practices following the receipt of comment letters. Companies receiving comment letters improve disclosures (Robinson et al., 2011; Ahn et al., 2020; Bens et al., 2016; Chen et al., 2020; Hennes and Schenck, 2014; Wang, 2016; Kubick et al., 2016; Jo and Yang, 2020) and enhance earnings credibility (Johnston and Petacchi, 2017; Cunningham et al., 2020; Ryans 2021). Bozanic et al. (2017) demonstrate improvements in disclosure quality through literal characteristics of disclosures, which subsequently decrease bid-ask spreads and reduce litigation risks. However, capital markets seem fail to immediately recognize the significance of SEC comment letters, resulting in sluggish responses to pertinent information (Grove et al. 2016). According to Dechow et al. (2016), market reactions to comment letters often exhibit long delays and are typically confined to specific topics. Although there lack definitive conclusions for market reaction to comment letter issuances, the informativeness of comment

letters for market participants such as insiders (Dechow et al., 2016), sophisticated investors (Geiger et al., 2022) and private debt holders (Cunningham et al., 2017) has been documented. Moreover, the effectiveness of the SEC's review activities and the impacts of comment letters vary with the timeliness of public releases of regulatory correspondence (Duro et al., 2019; Guo and Tian, 2024). In the Chinese market, Duan et al. (2024) document a negative market reaction to the receipt of comment letters, but firms' responses do not lead to significant enhancements in the long-term information environments.

The setting of periodic disclosure review suffers a selection problem, as the probability of being reviewed in the periodic filings review process is not random. This concern is less pronounced in the context of the IPO registration process. Given the significance of IPOs, regulators allocate considerable attention to each IPO application. However, the regulatory correspondence during the IPO filing process remains underexplored. Ertimur and Nondorf (2006) explore the determinants of the comment letter process for IPO firms. In the U.S., such correspondence is not publicly released until the firm becomes listed, but its influences start before the listing. Recent research indicates that comment letters during the IPO process mitigate issuers' tendencies to hype prices (Li and Liu, 2017) and lead to enhanced prospectus disclosures (Lowry et al., 2020). Studies also investigate the link between regulatory correspondence during IPO process and post-IPO market characteristics. Ertimur and Nondorf (2006), using a relatively small sample of 95 firms, find no significant relationship between comment letters and IPO underpricing, bid-ask spreads, or market depth. Similarly, Li and Liu (2017) find no significant differences in underpricing among firms receiving more comment letters, though they noted that these firms tend to outperform in the long-term post-IPO. In contrast, Lowry et al. (2020) focus on revenue recognition issues and find that increased SEC scrutiny in this area correlates with greater secondary sales, reduced post-IPO liquidity, and lower post-IPO returns.

Unlike previous studies that focus on comment letters in the U.S. IPO setting, our research examines the impact of regulatory correspondence on post-IPO performance in the Chinese market. The Chinese IPO market operates under a review system with distinct monitoring objectives compared to the U.S., and it features more timely public releases of regulatory correspondence. Our study sheds light on the effectiveness of comment letters as an enforcement mechanism within a different IPO review framework.

### 2.3. Hypothesis development

## 2.3.1. Comment letters and post-issuance returns

Prior research emphasizes the significance of regulatory oversight through comment letters in enhancing the integrity of routine financial disclosures across both the U.S. and China (Johnston and Petacchi, 2017; Duro et al., 2019; Duan et al., 2024). Comment letters, indicative of the SEC's suspicions about financial inaccuracies, often precede future financial restatements and asset write-downs (Kubic, 2021; Ryans, 2021). Thus, the exchanges between the SEC and firms provide investors with critical insights into the quality of financial reporting (Gale, 2022). Despite initial negative market reactions to the disclosure of comment letters (Duan et al., 2024), the trustworthiness of regular financial reports is reinforced after the resolution of issues raised in these letters, as evidenced by reduced bid-ask spreads and increased earnings response coefficients (ERCs) (Johnston and Petacchi, 2017).

In the context of IPOs, there is an inherent incentive for firms to present overly optimistic information (Mahoney, 1995). Firms engage in earnings management prior to issuing stocks (Cohen and Zarowin, 2010; Allen et al., 2024), incur greater costs associated with bookbuilding in exchange for increased and more favorable analyst coverage (Degeorge et al., 2007), and hire investor relation consultants to help generate positive news coverage

preceding IPOs (Chahine et al., 2020). U.S.-based studies have shown that comment letters, although not disclosed pre-IPO, mitigate IPO hyping (Li and Liu, 2017). Moreover, when comment letters are released post-IPO, SEC concerns regarding revenue recognition still convey substantial adverse information to the market, resulting in lower abnormal returns in the days of the letters' publication (Lowry et al., 2020).

Under China's approval system, the Committee extends its oversight beyond mere compliance with disclosure regulations to a comprehensive evaluation of applicants' fundamentals, such as their business operations, risk factors, and profitability. Comment letters from the Committee underscore concerns regarding applicants' qualification for IPOs. These letters may expose deficiencies in disclosure practices and highlight negative aspects of the firm's operations, which could adversely affect investor valuation of the firm in the secondary market. Moreover, as individual investors, who often lack the expertise to independently value a company, predominate in China's stock market (Titman et al., 2022; Allen et al., 2024), the information released by the regulator serves a certifying function, similar to the certification effects provided by the underwriters or venture capital in IPOs (Blackwell et al., 1990; Barry et al., 1990; Megginson and Weiss, 1991). Investor sentiment is one of the most important drivers of short-term price fluctuation in China's IPOs (Qian et al., 2024). Comment letters can influence post-IPO short-term stock performance by dampening market sentiment. Since comment letters in China are made public prior to IPOs, the immediate post-listing stock price fluctuations are likely to reflect market reactions to these letters, due to re-valuation, diminished sentiment, or both. Therefore, we hypothesize a negative correlation between the regulator-firm correspondence during the IPO review process and the short-term stock price performance following an IPO.

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<sup>&</sup>lt;sup>7</sup> From June 2014 to 2023, excluding the STAR Market post-July 2019 and the Shenzhen ChiNext following August 2020, China implemented a window guidance policy capping the price-to-earnings (P/E) ratio at 23 for IPO offer prices. Given the cap on IPO pricing in the primary market, underwriters' valuations of companies often exceeded the regulated offer prices. According to Qian et al. (2024), this P/E cap was binding in over 50% of instances. Consequently, the negative information conveyed through comment letters did not lead to reductions in the primary market offer prices as it did in the U.S. Instead, such information was more likely to be factored into the secondary market pricing post-IPO.

H1: IPO firms with more correspondence with regulators during the IPO review process will exhibit weaker short-term post-issuance returns compared to those with less correspondence.

In the long-run, IPOs tend to face subsequent underperformance when issuers opportunistically hype their offerings (Teoh et al., 1998). Li and Liu (2017) show that comment letters mitigate issuers' hyping incentives, and IPO firms with more comment letters actually outperform in the long-run. They argue that SEC may has caused firms receiving comment letters to overcompensate in their disclosures and induce excess pessimisms in the long run. However, this scenario is unlikely in the context of China. Evidence documented by Duan et al. (2024) in regulatory reviews of periodic disclosures by Chinese firms indicates that, although these firms address issues raised in comment letters point by point, they do not experience significant improvements in their information environments afterward. Moreover, firms may engage in other value-destroying activities to address issues raised in comment letters. For instance, Cunningham et al. (2022) show that firms receiving comment letters switch from accrual-based earnings management to real-activities-based earnings management. Thus, if the regulator's concerns expressed in comment letters during the pre-IPO phase signal deficiencies in a firm's disclosures and fundamentals, and if the IPO applicants' responsive amendments do not translate into long-term improvements, these comment letters may provide insights into potential long-term underperformance. Based on these considerations, we propose the following hypotheses:

H2: IPO firms with more correspondence with regulators during the IPO review process will exhibit weaker long-term post-issuance returns compared to those with less correspondence.

The predictive effectiveness of comment letters on future long-term returns depends not only on the informativeness of these letters but also on the market's efficiency in processing this information. Therefore, analyzing both short-term and long-term stock performance helps simultaneously identify whether comment letters contain value-relevant information and the extent to which the market promptly incorporates this information. If comment letters do not carry value-relevant information, or if comment letters do contain such information but the market initially fails to fully incorporate it, long-term prices are unlikely to correlate with comment letters. Conversely, should the market initially under-react to the value-relevant information from the comment letters, long-term underperformance may be observed with subsequent information revelations, and short-term and long-term returns may move in the same direction.

#### 2.3.2. Post-IPO product market competitiveness

In the preceding discussion, we posited that regulatory concerns regarding business operations discussed in comment letters, such as earnings persistency and operational risks, could potentially predict a firm's prolonged underperformance. In this section, we aim to explore whether comment letters can indeed forecast a firm's long-term competitive inabilities in the product market.

Extant literature indicates that IPOs provide firms with competitive advantages over industry peers through enhanced investment flexibility, recent validations by investment banks, and non-financial benefits such as high-quality and knowledge capital (Hsu et al., 2010). In China, where regulators are considered more credible than sponsoring institutions, regulatory skepticism concerning the quality and information disclosures of prospective listed companies, as expressed in comment letters, could negate the certifying effect of the sponsoring institutions. Furthermore, stringent regulatory correspondence compels firms to disclose extensive details about their post-listing strategies, competitive investments, and innovations. This disclosure provides critical insights to product market rivals (Marra and

Suijs, 2004) and potentially places IPO candidates at a competitive disadvantage (Jong et al., 2012). Finally, in Chinese IPOs, the regulator is obliged to evaluate the operational quality of businesses, which involves their perspective on the industry's future outlook. Hence, regulatory skepticism about a company's growth potentially indicates broader concerns about the industry's prospects. Therefore, we hypothesize that firms subject to rigorous scrutiny through comment letters are likely to encounter greater competitive challenges post-IPO. Accordingly, we propose the following hypothesis:

H3: Increased correspondence with regulators for an IPO firm is associated with diminished competitiveness in the product market post-IPO.

## 2.3.3. Post-IPO stock price informativeness

In additional to operational deficiencies, regulatory correspondence reveals important information about firms' information transparency. While the amendments made in response to comment letters can provide value-relevant information and reduce information asymmetry in the period leading up to an IPO, extensive regulatory scrutiny signals to the market that the firm is of low transparency in information disclosure practices, which directly influence stock price informativeness post-IPO (Zhang et al., 2021). Initially remedying disclosure issues for IPO compliance does not guarantee sustained enhancement of the information environment (Duan et al., 2024). Lowry et al. (2020) find that IPOs engaging in more extensive correspondence with regulators tend to exhibit higher volatility, lower liquidity, and more insider sales after the listing. Furthermore, even in the absence of intentionally misleading disclosures, the necessity to address more issues raised in comment letters could suggest the inherent complexity and uniqueness of a business. This complexity and incomparability with peers may make it challenging for investors to interpret disclosed information accurately, thereby reducing the stock price's ability to reflect the genuine value of the firm (Chemmanur

and Liu, 2011; Choi et al., 2018). Consequently, securities of such firms may trade with reduced price informativeness post-IPO, reflecting the market's difficulty in assessing the company's prospects and valuation. Therefore, we propose the hypothesis H4:

H4: More pre-IPO correspondence between a firm and the regulator is inversely related to the stock price informativeness in the post-IPO trading period.

## 3. Research design

#### 3.1. Measurements of comment letter reviews

To assess the contents and implications of regulatory correspondence, we employ a set of proxies to quantify the extent of scrutiny conveyed through comment letters during the IPO review process. Following Li and Liu (2017), Lowry et al. (2020), Cunningham et al. (2020), and Cunningham and Leidner (2022), we developed four proxies to measure content volume received by a firm: (1) the total number of comment letters a firm received prior to the offering (*N\_Letter*); (2) the count of major first-tier questions within these letters (*N\_Major*); (3) the count of minor second-tier questions within these letters (*N\_Minor*); and (4) the total number of Chinese characters across these letters (*N\_Character*). These measures enable us to assess the regulatory scrutiny encountered by firms during their IPOs.

#### 3.2. Data and sample

Our initial sample comprises 1,618 firms listed on the Shanghai Stock Exchange (SSE) and the Shenzhen Stock Exchange (SZSE) between 2015 and 2020. The sample period begins in 2015 as the CSRC began disclosing IPO comment letters on February 1, 2015. Prior to 2015, there were a trivial number of comment letters issued by SSE, SZSE, or the CSRC (Duan et al., 2024). Our sample period ends in 2020 to allow a three-year post-IPO window,

<sup>&</sup>lt;sup>8</sup> In an unreported robustness test, we use the review time, defined as the number of days between the filing date and the registration date, as an additional proxy for regulatory scrutiny. The results still hold.

which is essential for evaluating long-term performance metrics. We then exclude the following IPOs: (1) 48 firms that belong to the financial industry, and (2) 331 IPOs registered under the registration system rather than the approval system during the sample period, i.e., 246 firms listed on the STAR Market and 85 firms listed on the ChiNext after June 12, 2020.9 We then manually collect comment letters for the remaining firms from the CSRC and the stock exchanges. After dropping 69 firms whose comment letters are unavailable, we end with 1,170 IPO firms and 2,423 comment letters. Table 1 presents our sample selection process. Relevant financial data and stock return data are sourced from the China Stock Market and Accounting Research database (CSMAR).

Table 1

Table 2 presents the distribution of IPOs listed on the SSE and SZSE from 2015 to 2020. Across the entire sample, 1,170 IPO firms received a total of 2,423 comment letters, averaging 2.1 letters per IPO. Panel A illustrates the sample distribution of IPOs by listing year. The lowest review intensity was observed in 2015, where regulators issued 191 comment letters for 148 IPOs. Conversely, in 2020, 402 comment letters were issued for 164 IPOs, leading to the highest review intensity within the sample period. This trend indicates that regulators have progressively subjected firms to more rigorous scrutiny over time. Panel B presents the distribution of IPOs across different listing boards. A total of 567 firms were listed on the Main Board, receiving 1,208 comment letters from the regulator. For the Small and Medium Enterprise Board (SME) and ChiNext, 214 and 389 firms went public between 2015 and 2020, receiving 451 and 764 comment letters, respectively. Among the three boards, firms listed on the Main Board received slightly higher review intensity. Panels C, D, E, and

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<sup>&</sup>lt;sup>9</sup> The decision to conclude our sample period in 2020 is also influenced by the subsequent comprehensive implementation of the registration-based IPO system in the Chinese market. Our primary focus is on IPOs that went public under the approval system in the main tests. Additionally, we explore the implications of comment letters under the registration system in Section 7.

<sup>&</sup>lt;sup>10</sup> Among these 1,170 firms, 119 had previously faced rejection or withdrawal in initial IPO applications before ultimately receiving approval. These 119 firms collectively received 305 comment letters. Notably, our findings remain robust when these 119 firms are excluded from the analysis.

F illustrate the distribution of comment letter volume based on the total number of comment letters, the number of major questions, the number of minor questions, and the number of Chinese characters, respectively. Notably, Panel C reveals that 858 IPOs received two comment letters, making it the most frequent occurrence (73.33% of IPOs); 11.20% of IPOs received one comment letter, 12.65% received three comment letters, and only 2.82% received four comment letters. Panel D indicates that 540 IPOs (46.15%) were asked between 40 to 60 major questions; The majority of IPOs, (1,023, 87.44%), were asked fewer than 60 questions. Moreover, Panels E and F show that 72.83% of IPOs were asked fewer than 150 minor questions, and 81.70% of firms received fewer than 15,000 Chinese characters.

Table 3 presents the descriptive statistics for comment letter-related measures, along with other variables. On average, each IPO applicant received approximately 2.1 comment letters, comprising 42 major questions and 114 minor questions. In terms of Chinese character count, each IPO applicant received comment letters averaging 9,960 characters in length. Definitions of the variables are provided in the Appendix Table A1.

Table 2 and Table 3

## 4. Comment letters and post-IPO returns

In this section, we explore the relationship between regulatory correspondence and post-IPO returns, considering both short-term and long-term perspectives.

#### 4.1. Post-IPO short-term return

Hypothesis 1 posits that IPO firms with higher levels of correspondence with regulators during the IPO review process will demonstrate weaker short-term post-issuance returns compared to those with less correspondence. This is because an increased volume of comment letters during the review process may negatively impact secondary market

perceptions of firm value and diminish market sentiment. To test this hypothesis, we analyze the association between the volume of comment letters and post-IPO short-term returns. We measure short-term returns by underpricing and the short-term cumulative abnormal return post-listing.

Given the Chinese market's imposition of a maximum limit on price increases or decreases, we utilize the cumulative return during consecutive days that touch the price increase limit instead of the first-day return to calculate underpricing. <sup>11</sup> Specifically, we employ two proxies for underpricing: (1) initial return, calculated as the closing price on the first trading day that does not reach the price increase limit after the IPO minus the offer price, divided by the offer price (*IR*); and (2) market-adjusted initial return, which is the initial return adjusted by the equally weighted market returns of the SSE or SZSE (*adjIR*). In addition to underpricing, we also estimate 20-, 40-, and 60-day cumulative abnormal returns (*CAR\_day20*, *CAR\_day40*, and *CAR\_day60*) from the second trading day post-listing. Daily abnormal returns are calculated by daily returns adjusted by equally weighted market return.

Figure 1 and Figure 2 depict IPO underpricing and post-IPO short-term returns of our sample firms. Specifically, Figure 1 illustrates the underpricing, while Figures 2A to 2D present the CARs within 60 days post-listing. In addition to the full sample, the figures also compare the underpricing and short-term returns of subgroups categorized by regulatory correspondence levels, based on the four comment letter measures. Specifically, the sample is split into high and low subgroups based on the median number of comment letters, and into high, medium, and low groups based on the remaining three measures. Figure 1 reveals

<sup>&</sup>lt;sup>11</sup> In December 2013, the SSE and the SZSE imposed restrictions on the prices of newly listed stocks. They stipulated that during the continuous auction phase, the effective bid prices could not exceed 144% nor fall below 64% of the issue price. This policy fundamentally limited the first-day prices of new stocks, resulting in most companies experiencing an initial increase of around 44%. After the first day, the market adopts a 10% limit on price fluctuations. Thus, newly listed stocks frequently experienced consecutive daily price limits, a phenomenon referred to in the market as "consecutive limit-ups." The sample of main tests falls under this regulation.

<sup>&</sup>lt;sup>12</sup> Due to the concentration of the number of comment letters at the value 2, it is not feasible to divide the samples into three groups according to the number of comment letters.

that across all four measures, firms subjected to greater regulatory scrutiny consistently exhibit lower underpricing, indicating lower immediate post-listing returns. Similarly, Figures 2A to 2D demonstrate that, within the 60-day window, firms with extensive regulatory correspondence tend to achieve lower CARs.

Figure 1 and Figure 2

Descriptive statistics in Table 4 exhibit consistent implications with Figures 1 and 2. In Panels A to D of Table 4, we present between-group statistics of underpricing (*IR* and *adjIR*) and short-term CARs (*CAR\_day20*, *CAR\_day40*, and *CAR\_day60*). The tests for differences in underpricing and short-term CARs between subgroups of firms with high and low correspondence levels, determined by the four comment letter measures, indicate that firms receiving more comment letters exhibit significantly poorer performance in short-term post-IPO returns compared to those receiving fewer comment letters, as evidenced by both mean and median values.

Table 4

We further employ ordinary least squares (OLS) regression techniques to examine the impact of comment letters on post-IPO short-term returns. Specifically, we regress the natural logarithm of comment letter measures on underpricing and short-term CARs. We control for firm characteristics such as firm size (*Lnasset*) leverage ratio (*Leverage*), market-to-book ratio (*Mkt\_Bk*), shareholder structure (*Largest*) and state ownership (*SOE*). We also control for underwriter and auditor reputation (*UW* and *ACC*), listing time lag (*Timelag*) and previous IPO application experience (*Aud\_Dummy*). We include the fixed effects of listing board, industry and IPO year in the regressions. Table 5 presents the regression results. The results in Panel A indicate a significantly negative relationship between regulatory correspondence and IPO underpricing, while those in Panel B demonstrates a significantly negative

association between regulatory correspondence and short-term CARs across various windows following the IPO.

Table 5

In summary, our findings indicate that firms experiencing a higher volume of correspondences with the regulator during the review process tend to exhibit lower short-term post-IPO returns. This is consistent with Hypothesis H1 and suggests that increased regulatory concerns may diminish external investors' estimates of firm value and reduce overall market demand for the company.

## 4.2. Post-IPO Long-term Returns

In this section, we examine the relationship between comment letters and post-IPO long-term returns. Figure 3 depicts the long-term returns observed over a three-year period following the IPOs for sample firms. Long-term returns are measured as the cumulative abnormal stock returns, adjusted by equally weighted market returns of the SSE and SZSE (Fan et al., 2007). Similar to Figure 2, we compare the long-term returns between subgroups of firms categorized by regulatory correspondence levels, as determined by the four comment letter measures in Figures 3A to 3D. Figure 3 shows that, across the four partition ways of subsamples, the long-term returns of the subgroups with low levels of regulatory correspondence are higher than those of the subgroups with high levels of correspondence throughout the 36-month period following an IPO.

Figure 3

Table 4 also provides between-group statistics on long-term cumulative abnormal stock returns over the 12-, 24-, and 36-month windows, starting from the second month post-listing.

<sup>13</sup> We also employ the following alternative measures of long-term returns: (1) returns adjusted by value-weighted market returns instead of equal-weighted market returns, (2) returns adjusted by the median of industry returns, and (3) buy-and-hold abnormal returns adjusted by equally weighted market returns. Our findings continue to be robust.

Comparisons between the subgroups with high and low levels of correspondence reveal that, across all comment letter measures, the long-term returns of firms in the high-level correspondence group are significantly lower than those in the low-level correspondence group.

Next, we further investigate the impact of comment letters on post-IPO long-term returns after controlling for other factors. Specifically, we regress the natural logarithm of comment letter measures on long-term cumulative abnormal stock returns over the 12-, 24-, and 36-month windows. We include the same control variables and fixed effects as those included in Table 5. Table 6 presents the regression results. The findings indicate that comment letters, across all four measures, are significantly and negatively associated with long-term stock returns for up to three years post-IPO. These results suggest that IPO firms receiving more regulatory scrutiny through comment letters during the inquiry stage exhibit poorer long-term performance, thereby supporting our Hypothesis H2.

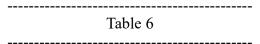


Figure 3 and Table 6 collectively demonstrate that IPO firms subjected to increased regulatory scrutiny during the review process tend to underperform in the long run. This outcome is consistent with the observations of Lowry et al. (2020), who identified negative correlations between regulatory concerns regarding revenue recognition in comment letters and abnormal returns in the first year following the IPO. However, this finding appears to contrast with the results of Li and Liu (2017), who reported that IPO firms receiving more comment letters exhibit superior performance up to three years post-IPO. This divergence underscores that regulatory correspondence has varied implications for capital markets depending on the monitoring objectives.

Overall, our findings indicate that comment letters possess predictive power for both short-term and long-term returns. This suggests that capital markets fail to fully incorporate

all value-relevant information contained in comment letters within a short period of time after listing. These results resonate with previous literature that documents long delays in market reactions to comment letters (Dechow et al. 2016; Grove et al. 2016).

#### 5. Tests based on classic asset pricing models

Empirically, tests based on long-run returns can be challenging due to potential measurement issues. There are disagreements over correct methodology, the correct model to compute risk-adjusted returns. Before proceeding to additional hypotheses, we adopted other asset pricing models to solidify the predictive power of comment letters on long-term returns.

## 5.1. Risk-adjusted long-term returns

In this section, we calculate the risk-adjusted returns based on several classical asset pricing models. Following Purnanandam and Swaminathan (2004), the risk-adjusted return for each IPO is estimated by the intercept of the regression that regress each IPO's monthly returns from the second month post-public offering to three years thereafter on the factors outlined in the CAPM, the Fama and French (1993) three-factor model, and the Fama and French (2015) five-factor model, respectively, for the same period. Risk-adjusted returns, representing the monthly average abnormal return, are less susceptible to misspecification issues than the Buy-and-Hold Abnormal Return approach. We employed both pooled regression and the Fama-MacBeth approach to examine the long-term effects of comment letters on risk-adjusted returns. The regression results are presented in Table 7.

The coefficients on comment letter measures are consistently negative across various asset pricing models adopted and estimation approaches, indicating that comment letters can predict negative returns not accounted for by traditional risk factors.

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#### 5.2. Portfolio Tests

We also employ portfolio tests, wherein we analyze the returns generated by a zero-investment portfolio that is long on firms with low regulatory correspondence and short on firms with high regulatory correspondence levels, as determined by comment letter measures. He had be presents the results. For the 1–36 month returns, the constants are all significantly positive across portfolios constructed according to various comment letter measures, ranging from 0.006 to 0.010. This indicates that holding a low–high portfolio enables investors to earn value premiums of 0.6% to 1%, or annualized excess returns of 7.2% (0.6%×12) to 12% (1%×12) over the three years following IPOs. We further divide the 36-month period into the first 12 months and the subsequent 24 months. Excess returns are significantly positive during the first year following an IPO. However, while remaining positive, their magnitude and significance diminish in the second and third years. These findings suggest that a substantial portion of excess profits is realized in the short term (the first year) following IPOs, compared to the long term (the subsequent two years).

Table 8

#### 6. Product market competition and stock price informativeness

In Hypotheses H3 and H4, we suggest that product market competition and stock price informativeness are potential mechanisms through which regulatory correspondence can predict long-term performance. In this section, we investigate these mechanisms by examining the relationship between comment letters, product market competition, and stock

<sup>&</sup>lt;sup>14</sup> In our portfolio tests, we construct portfolios based on the sorting of number of major questions, minor questions, and the count of Chinese characters, but not the number of comment letters. This is because the number of comment letters only allows for the creation of two subgroups, unlike the three subgroups achievable with other measures. The two subgroups formed based on the number of comment letters exhibit a less pronounced contrast between the low and high subgroups

price informativeness following an IPO.

#### 6.1. Product market competition

Table 9 presents the regression results examining the association between comment letters and post-IPO product market competition. We utilize both firm market share growth and the industry Herfindahl index as proxies for market competition. Following Chod and Lyandres (2011), we measure changes in IPO firms' market shares over one- to three-year periods post-IPO, relative to their market share pre-IPO. Panel A shows that comment letters are significantly and negatively related to market share growth during the first two years following an IPO, but not in the third year post-IPO. These findings suggest that increased regulatory correspondence results in lower product market share growth, which supports lower long-term post-issuance returns. In Panel B, market concentration is used as a measure for general industry competition. We find that comment letters are significantly related to a lower Herfindahl index compared to pre-IPO, indicating a more decentralized product market structure, during the first two years post-IPO. This association diminishes by the third year. Overall, our findings suggest that increased correspondence with regulators for IPO firms is associated with competitive disadvantage and a higher degree of market competition, leading to reduced market share growth, which could impede long-term returns. The results in Table 9 support Hypothesis H3.

Table 9

## 6.2. Stock price informativeness

Table 10 presents the regression results examining the impact of comment letters on stock price informativeness. We employ three variables as proxies for stock price informativeness: (1) stock price non-synchronicity, which measures the extent to which

firm-specific, value-relevant information is incorporated into stock prices (Morck et al., 2000; Ng and Rezaee, 2020); (2) volume-based probability of informed trading (VPIN), where a higher VPIN indicates that stock prices contain more information from private sources, thereby enhancing informativeness; and (3) bid-ask spread, a measure of stock liquidity, with increased liquidity correlating with improved price informativeness (Kerr et al., 2020). Additionally, we utilize stock price volatility as a proxy for firm risk and examine the implications of comment letters on post-IPO firm risk.<sup>15</sup> Detailed variable definitions are provided in Appendix Table A1.

Table 10 presents the regression results. Panels A to C indicate that the comment letter variables are significantly negatively associated with stock price non-synchronicity and the probability of informed trading, while being positively associated with the bid-ask spread throughout the three years following an IPO. These results suggest that increased correspondence with regulators during the pre-market phase indicates deteriorated stock price informativeness over the long term. Panel D demonstrates that firms with more correspondence with regulators are associated with higher stock volatility, indicating that these firms tend to exhibit higher risks post-IPO. These findings are consistent with Hypothesis H4.

Table 10

## 7. Comparative analysis of approval versus registration systems

In previous sections, using IPOs issued under the approval system, we document a negative correlation between regulatory correspondence and post-issuance returns. The STAR

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<sup>&</sup>lt;sup>15</sup> Davila and Parlatore (2023) describe the relationship between volatility and informativeness as varying—being positive, negative, or ambiguous—and caution that volatility should only infer informativeness under certain conditions. In our study, we use volatility merely as a general indicator of firm risk.

Market, established in 2019, initially adopted the registration system, followed by the ChiNext in 2020. By 2023, the main boards of both the SSE and the SZSE had also adopted the registration system, marking its full implementation across the Chinese market. Under the registration system, the review process shifts its focus toward disclosure issues and away from fundamental quality assessment. With the adoption of a review process more akin to the U.S. style, exploring whether the implications of comment letters have changed becomes pertinent. In this section, we extend our sample period to 2022 and include IPOs both under approval and registration systems. We conduct a comparative analysis of the implications of comment letters on post-issuance returns under both the approval and registration systems in the Chinese market. This comparison allows us to understand whether and how the shift in monitoring objectives influences the implications of regulatory correspondence.

Table 11 provides an overview of IPO distribution during the extended sample period from 2015 to 2022. Over this period, a total of 2,254 IPOs received 7,739 comment letters, averaging 3.43 comment letters per IPO. Panel B reveals that the STAR board has the highest review intensity, with an average of 5.65 comment letters per IPO. Furthermore, Panel C indicates that each IPO under the registration system received an average of 5.43 comment letters, which is significantly higher than the average of 2.09 comment letters per IPO under the approval system. Panels D, E, F, and G compare the sample distributions of IPOs under different review systems based on the number of comment letters, the number of major questions, the number of minor questions, and the number of Chinese characters. Generally, compared to IPOs under the approval system, IPOs under the registration system receive more comment letters, more major questions, more minor questions, and more Chinese

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<sup>&</sup>lt;sup>16</sup> A detailed comparison of the review processes between the approval and registration systems is presented in Appendix Table 2.

<sup>&</sup>lt;sup>17</sup> The ChiNext is the only board that has undergone a significant number of IPOs under both the approval and registration systems within the extended sample period. From 2015 to 2022, ChiNext witnessed 389 IPOs under the approval system, which collectively received 765 comment letters, averaging 1.97 comment letters per IPO. Under the registration system, there were 417 IPOs that received 2,160 comment letters, averaging 5.18 comment letters per IPO. Thus, the higher number of comment letters per IPO under the registration system cannot be attributed to variations in the composition of IPO boards over different periods. Our conclusion in Section 7 still hold when considering only firms listed on the ChiNext.

characters, suggesting the regulator increases scrutiny in the registration system.

Table 11

Table 12 and Table 13 present the regression results comparing the relationship between comment letters and post-IPO short-term and long-term returns under different review systems. To facilitate a comparative analysis of the approval versus registration system, we construct an indicator for the registration system (RegSystem), which equals one if IPOs are offered under the registration system and zero otherwise. We include the system indicator and its interactions with comment letter measures in the regressions. Table 12 and Table 13 display the results for short-term and long-term returns post-IPO, respectively. In both Table 12 and Table 13, the coefficients on the comment letter measures remain significantly negative, while the coefficients on the interaction terms between comment letter measures and the registration system indicator are significantly positive for underpricing, short-term returns, and long-term returns across various windows. This suggests that the shift in the review system significantly mitigates the predictive power of regulatory correspondence on post-IPO returns. The linear sums of the coefficients on the comment letter measures and the interaction terms, which reflect the association between comment letters and returns under the registration system, are insignificant most of the time. These results indicate that the association between comment letters and post-IPO returns becomes inconclusive after the system reform.

Table 12 and Table 13

#### 8. Conclusions

This study illuminates the significant adverse implications of comment letters on post-IPO returns in China. Using a dataset of 1,170 IPOs and 2,423 comment letters, we document that extensive regulatory correspondence during the IPO review process correlates with underperformance in IPO firms, affecting both short-term and long-term returns. Our results remain robust across various asset pricing models used to calculate risk-adjusted returns, as well as through pooled and Fama-MacBeth regressions. By constructing a long-short portfolio—purchasing stocks from firms with fewer comment letters and selling those with more—we observed that such portfolios could yield annualized value premiums between 7.2% to 12.0%, with these premiums being more pronounced in the first year post-IPO.

Furthermore, this study identifies competition and informativeness as fundamental mechanisms explaining the detrimental effects of comment letters. Firms with heavier regulatory interaction face increased market competition and reduced market share. And the negative implications of comment letters are also reflected in decreased stock price informativeness post-IPO.

A comparative analysis of IPO review systems—approval versus registration—illustrates how changes in regulatory frameworks influence the predictive power of comment letters on post-IPO returns. The shift to a registration system in China offers a unique perspective on these dynamics.

In conclusion, our research enhances the understanding of the impact of regulatory correspondence on firms and capital market in the IPO context. It provides a comparative view of the function of comment letters under different regulatory regimes and explores the effects of regulatory shifts in China. Additionally, the study offers actionable insights for practitioners by proposing a trading strategy based on comment letter analysis, enriching asset-pricing theory, and contributing to signal theory by demonstrating how markets

assimilate negative signals into stock prices. Overall, this research underscores the complex influence of regulatory oversight on post-IPO performance, providing valuable insights for investors and policymakers.

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**Table 1. Sample Selection Process** 

Total IPOs listed on Shanghai and Shenzhen Stock Exchanges during 2015–2020	1,618
Less:	
Firms belonging to the financial industry	48
Firms listed on the Science and Technology Innovation Board (STAR)	246
Firms listed on the Growth Enterprise Market (ChiNext) after June 12, 2020	85
Firms whose IPO comment letter information is unavailable	69
Final sample	1,170

Note: There are 69 IPOs for which comment letter information is missing: 63 IPOs were listed in 2015, 2 IPOs in 2017, 2 IPOs in 2019, and 2 IPOs in 2020. The STAR Market implemented the registration system from its inception. The registration system was introduced to the ChiNext on June 12, 2020.

**Table 2. Sample Distribution** 

This table presents sample distributions in China during the period 2015–2020. Panel A and Panel B display sample distributions categorized by IPO year and board type, respectively. Panels C, D, E, and F illustrate the distribution of samples classified by the total number of comment letters, major questions, minor questions, and Chinese characters, respectively. "SME" refers to the Small and Medium Enterprise Board; "ChiNext" refers to the Growth Enterprise Board.

		F	Panel A: By IPO	year						
		IPO fir	ms	Commen	nt letters	4				
Year		N	%	N	%	- Average				
2015		148	12.65	191	7.88	1.29				
2016		216	18.46	433	17.87	2.00				
2017		429	36.67	886	36.57	2.07				
2018		95	8.12	232	9.57	2.44				
2019		118	10.09	279	11.51	2.36				
2020		164	14.02	402	16.59	2.45				
Total	1	1,170	100.00	2,423	100.00	2.07				
Panel B: By listing board										
		IPO fir	rms	Commen	1					
Board		N	%	N	%	- Average				
Main Board		567	48.46	1,208	49.86	2.13				
SME		214	18.29	451	18.61	2.11				
ChiNext		389	33.25	764	31.53	1.96				
	I	Panel C: By	total number of	comment lette	ers					
# of letters	1	2	3	4	5	6				
N	131	858	148	33	0	0				
%	11.20	73.33	12.65	2.82	0.00	0.00				
		Panel D: 1	By number of ma	ajor questions						
Range	≤20	(20, 40]	(40, 60]	(60, 80]	(80, 100]	>100				
$\overline{N}$	164	319	540	107	16	24				
%	14.02	27.26	46.15	9.15	1.37	2.05				
		Panel E: H	By number of mi	nor questions						
Range	≤50	(50, 100	[ (100, 150]	(150, 200]	(200, 250]	>250				
$\overline{N}$	210	266	376	222	54	42				
%	17.95	22.74	32.14	18.97	4.62	3.59				
	Panel I	E: By number	er of Chinese cha	aracters (in the	ousands)					
Range	≤5	(5, 10]	(10, 15]	(15, 20]	(20, 25]	>25				
N	262	337	357	140	46	28				
%	22.39	28.80	30.51	11.97	3.93	2.39				
					•					

**Table 3. Descriptive Statistics**This table provides summary statistics for the variables defined in Appendix Table A1.

Variable	Mean	Median	Min	P25	P75	Max	Std
IR	2.683	2.069	0.421	0.764	3.642	13.877	2.434
adjIR	2.678	2.078	0.360	0.776	3.649	13.827	2.423
CAR_day20	0.771	0.745	-0.324	0.364	1.151	1.999	0.543
CAR_day40	0.738	0.711	-0.371	0.324	1.126	2.262	0.555
CAR_day60	0.719	0.697	-0.410	0.302	1.120	2.244	0.563
CAR12	0.377	0.046	-0.857	-0.290	0.685	5.041	1.039
CAR24	0.365	0.078	-1.228	-0.335	0.748	4.918	1.063
CAR36	0.425	0.146	-1.312	-0.355	0.882	4.927	1.131
N_Letter	2.071	2.000	1.000	2.000	2.000	4.000	0.589
$N\_Major$	42.256	44.000	1.000	32.000	54.000	117.000	21.735
$N_{\_}Minor$	113.738	115.000	1.000	67.000	153.000	348.000	69.010
N_Character ('000)	9.960	9.901	0.097	5.620	13.401	32.679	6.398
Largest	0.378	0.363	0.088	0.275	0.473	0.798	0.146
Leverage	0.398	0.395	0.069	0.281	0.512	0.833	0.162
Lnasset	20.699	20.542	19.025	20.035	21.122	25.124	0.968
Timelag	11.655	12.000	8.000	10.000	13.000	24.000	2.746
$Mkt\_Bk$	1.679	1.650	0.288	1.265	2.079	3.199	0.556
$Aud\_Dummy$	0.102	0.000	0.000	0.000	0.000	1.000	0.302
SOE	0.080	0.000	0.000	0.000	0.000	1.000	0.272
UW	0.859	1.000	0.000	1.000	1.000	1.000	0.348
ACC	0.044	0.000	0.000	0.000	0.000	1.000	0.204

**Table 4. Between-group Statistics of Stock Returns** 

This table provides the descriptive statistics of the underpricing, short-term CARs and long-term CARs. Panels A, B, C and D present the between-group statistics of underpricing (IR and adjIR), short-term CARs within the 20-, 40-, and 60-day windows post-IPO (CAR\_day20, CAR\_day40, and CAR\_day60) and long-term CARs within the 12-, 24-, and 36-month window post-IPO (CAR12, CAR24, and CAR36). In Panel A, the sample is divided into high and low subgroups based on the total number of comment letters received. In Panels B to D, the sample is equally divided into high, medium, and low groups according to the number of major questions, the number of minor questions, and the number of Chinese characters contained in comment letters, respectively. Tests for differences in mean and median between subgroups of firms with high and low correspondence levels are conducted.

\*\*\*\*, \*\*\*, \*\* denote significant at the 1%, 5%, and 10% levels, respectively. Variables are defined in Appendix Table A1.

		Panel A:	Total number of o	comment letters	S	
	Mean			Median		
	Low	High	High-Low	Low	High	High-Low
IR	2.881	1.599	-1.282***	2.292	1.038	-1.254***
adjIR	2.876	1.595	-1.282***	2.282	1.078	-1.204***
CAR_day20	0.812	0.551	-0.261***	0.803	0.488	-0.315***
CAR_day40	0.781	0.500	-0.281***	0.768	0.457	-0.311***
CAR_day60	0.760	0.496	-0.265***	0.734	0.440	-0.294***
CAR12	0.427	0.102	-0.325***	0.078	-0.086	-0.164***
CAR24	0.412	0.105	-0.308***	0.124	-0.100	-0.223***
CAR36	0.479	0.134	-0.345***	0.203	-0.092	-0.295***

Panel B: Number of major question	ns
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	Mean				Median				
	Low	Medium	High	High-Low	Low	Medium	High	High-Low	
IR	3.720	2.587	1.647	-2.073***	2.958	2.052	0.897	-2.061***	
adjIR	3.719	2.579	1.641	-2.078***	2.978	2.023	0.911	-2.068***	
CAR_day20	0.991	0.714	0.589	-0.402***	0.987	0.666	0.558	-0.429***	
CAR_day40	0.963	0.674	0.556	-0.407***	0.989	0.597	0.493	-0.495***	
CAR_day60	0.943	0.654	0.540	-0.403***	0.956	0.608	0.459	-0.497***	
CAR12	0.700	0.237	0.162	-0.538***	0.248	-0.004	-0.082	-0.331***	
CAR24	0.648	0.253	0.166	-0.482***	0.233	0.058	-0.057	-0.290***	
CAR36	0.670	0.358	0.225	-0.445***	0.351	0.145	0.007	-0.344***	

Table 4. (continued)

	Mean				Median				
	Low	Medium	High	High-Low	Low	Medium	High	High-Low	
IR	3.922	2.560	1.560	-2.363***	3.068	2.058	0.441	-2.628***	
adjIR	3.922	2.551	1.554	-2.368***	3.133	2.050	0.504	-2.628***	
CAR_day20	1.024	0.704	0.585	-0.439***	1.012	0.664	0.552	-0.461***	
CAR_day40	0.995	0.660	0.557	-0.438***	1.018	0.597	0.479	-0.539***	
CAR_day60	0.977	0.636	0.544	-0.433***	0.995	0.594	0.463	-0.532***	
CAR12	0.719	0.241	0.169	-0.550***	0.261	-0.004	-0.076	-0.336***	
CAR24	0.664	0.248	0.180	-0.483***	0.261	0.014	-0.052	-0.314***	
CAR36	0.688	0.349	0.237	-0.451***	0.375	0.137	-0.009	-0.384***	

Panel	$\mathbf{D}$	Number	r of Chinese	characters

	Mean				Median			
	Low	Medium	High	High-Low	Low	Medium	High	High-Low
IR	3.838	2.618	1.593	-2.246***	3.039	2.100	0.554	-2.485***
adjIR	3.839	2.608	1.587	-2.251***	3.099	2.078	0.570	-2.529***
CAR_day20	1.014	0.708	0.593	-0.421***	1.009	0.688	0.552	-0.458***
CAR_day40	0.989	0.653	0.571	-0.417***	1.016	0.600	0.493	-0.523***
CAR_day60	0.969	0.629	0.561	-0.408***	0.977	0.602	0.459	-0.519***
CAR12	0.723	0.214	0.195	-0.528***	0.272	-0.037	-0.041	-0.313***
CAR24	0.663	0.240	0.191	-0.471***	0.244	-0.012	-0.041	-0.285***
CAR36	0.686	0.338	0.252	-0.434***	0.387	0.120	0.017	-0.369***

#### Table 5. Comment Letters and Short-term Returns Post-IPO

This table presents the regression results analyzing the impact of comment letters on the short-term returns post-IPO, focusing on both IPO underpricing (IR and adjIR) and cumulative abnormal returns within the 20-, 40-, and 60-day window (CAR\_day20, CAR\_day40, and CAR\_day60). Panels A and B display the regression results for IPO underpricing and short-term returns, respectively. The independent variables include the natural logarithm of one plus the total number of comment letters (Ln\_N\_Letter), the number of major questions (Ln\_N\_Major), the number of minor questions (Ln\_N\_Minor), and the number of Chinese characters (Ln\_N\_Character). The control variables included in Panel B are identical to those in Panel A. Fixed effects for the listed board, industry, and IPO year are included but not reported. Robust t-statistics are presented in parentheses. Variables are defined in our Appendix Table A1. \*\*\*, \*\*, \* denote significant at the 1%, 5%, and 10% levels, respectively.

			Panel A: I	PO underpricin	g			
	IR	adjIR	IR	adjIR	IR	adjIR	IR	adjIR
Ln N Letter	-4.083***	-4.077***		•				-
	(-9.50)	(-9.61)						
Ln N Major			-0.976***	-0.977***				
			(-9.67)	(-9.83)				
Ln N Minor					-0.879***	-0.880***		
					(-10.83)	(-11.01)		
Ln N Character							-0.792***	-0.792***
							(-10.81)	(-10.97)
Largest	-0.030	-0.032	-0.023	-0.025	-0.033	-0.035	-0.029	-0.031
	(-0.43)	(-0.46)	(-0.34)	(-0.37)	(-0.50)	(-0.54)	(-0.43)	(-0.47)
Leverage	0.015	0.018	0.032	0.034	0.037	0.039	0.040	0.042
_	(0.18)	(0.21)	(0.39)	(0.42)	(0.46)	(0.49)	(0.50)	(0.53)
Lnasset	-0.210*	-0.210**	-0.171	-0.170*	-0.193*	-0.192*	-0.183*	-0.183*
	(-1.96)	(-1.97)	(-1.64)	(-1.65)	(-1.90)	(-1.92)	(-1.79)	(-1.81)
Timelag	0.001	-0.003	-0.018	-0.023	-0.017	-0.022	-0.023	-0.027
•	(0.02)	(-0.05)	(-0.26)	(-0.33)	(-0.25)	(-0.32)	(-0.33)	(-0.40)
$Mkt\_Bk$	0.652***	0.645***	0.678***	0.672***	0.685***	0.678***	0.694***	0.687***

	(7.01)	(6.95)	(7.43)	(7.37)	(7.66)	(7.59)	(7.73)	(7.67)
Aud Dummy	0.155**	0.152**	0.037	0.034	0.031	0.028	0.017	0.015
	(2.24)	(2.21)	(0.57)	(0.53)	(0.49)	(0.45)	(0.28)	(0.23)
SOE	0.111	0.110	$0.126^{*}$	0.125	$0.132^{*}$	$0.131^{*}$	$0.130^{*}$	$0.129^{*}$
	(1.40)	(1.39)	(1.65)	(1.64)	(1.79)	(1.78)	(1.74)	(1.73)
UW	-0.285	-0.288	-0.154	-0.157	-0.091	-0.094	-0.109	-0.112
	(-1.49)	(-1.51)	(-0.80)	(-0.82)	(-0.48)	(-0.50)	(-0.58)	(-0.59)
ACC	-0.194	-0.193	-0.242	-0.240	-0.215	-0.214	-0.221	-0.220
	(-0.74)	(-0.73)	(-0.98)	(-0.98)	(-0.90)	(-0.90)	(-0.91)	(-0.90)
Boards	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170
adj. R-sq	0.251	0.253	0.285	0.288	0.317	0.320	0.313	0.316

Table 5. (continued)

•	•			Pane	el B: Post-IP	O short-teri	n returns					
	CAR_	CAR_	CAR_	CAR_	CAR_	CAR_	CAR_	CAR_	CAR_	CAR_	CAR_	CAR_
	day20	day40	day60	day20	day40	day60	day20	day40	day60	day20	day40	day60
Ln_N_Letter	-0.793***	-0.797***	-0.787***									
	(-11.85)	(-11.97)	(-11.63)									
$Ln_N_Major$				-0.196***	-0.197***	-0.198***						
				(-13.83)	(-13.91)	(-13.70)						
$Ln_N_Minor$							-0.177***	-0.176***	-0.177***			
							(-15.48)	(-15.08)	(-14.92)			
Ln_N_Character										-0.158***	-0.159***	-0.159***
										(-15.40)	(-14.97)	(-14.75)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Boards	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170
adj. R-sq	0.404	0.418	0.422	0.436	0.451	0.456	0.462	0.473	0.478	0.458	0.470	0.474

## Table 6. Comment Letters and Long-term Returns Post-IPO

This table presents the regression results analyzing the impact of comment letters on the long-term returns post-IPO, focusing on the cumulative abnormal returns within the 12-, 24-, and 36-month window (*CAR12, CAR24,* and *CAR36*). The independent variables include the natural logarithm of one plus the total number of comment letters (*Ln\_N\_Letter*), the number of major questions (*Ln\_N\_Major*), the number of minor questions (*Ln\_N\_Minor*), and the number of Chinese characters (*Ln\_N\_Character*). Control variables include *Lnasset, Leverage, Mkt\_Bk, Largest, SOE, UW, ACC, Timelag* and *Aud\_Dummy*. Fixed effects for the listed board, industry, and IPO year are included but not reported. Robust *t*-statistics are presented in parentheses. Variables are defined in our Appendix Table A1. \*\*\*, \*\*, \* denote significant at the 1%, 5%, and 10% levels, respectively.

	CAR12	CAR24	CAR36									
Ln_N_Letter	-1.632***	-1.458***	-1.371***									
	(-8.93)	(-8.01)	(-7.42)									
$Ln_N_Major$				-0.406***	-0.349***	-0.312***						
				(-9.74)	(-8.42)	(-7.50)						
$Ln_N_Minor$							-0.339***	-0.292***	-0.264***			
							(-10.11)	(-8.68)	(-7.82)			
$Ln_N_Character$										-0.304***	-0.263***	-0.237***
										(-10.17)	(-8.78)	(-7.81)
Controls	Yes											
Boards	Yes											
Industry	Yes											
Year	Yes											
N	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170
adj. R-sq	0.230	0.217	0.240	0.269	0.240	0.252	0.278	0.246	0.257	0.274	0.244	0.255

# Table 7. Comment Letters and Long-run Risk-adjusted Returns

This table presents the regression results analyzing the impact of comment letters on the long-term risk-adjusted returns post-IPO. Panel A and Panel B present the regression results using (a) pooled regression approach and (b) Fama and MacBeth (1973) approach, respectively. Risk adjusted returns are calculated as follows. We regress each IPO's monthly returns starting 2 months after they go public and ending three years after they go public on factors outlined in the CAPM, the FF3 model, and the FF5 model for the same period, respectively. The risk-adjusted returns are the intercepts from these regressions. The independent variables include the natural logarithm of one plus the total number of comment letters ( $Ln_N_Letter$ ), the number of major questions ( $Ln_N_Major$ ), the number of minor questions ( $Ln_N_Minor$ ), and the number of Chinese characters ( $Ln_N_Character$ ). Control variables include Lnasset, Leverage,  $Mkt_Bk$ , Largest, SOE, UW, ACC, Timelag and  $Aud_Dummy$ . Fixed effects for the listed board, industry, and IPO year are included but not reported. Robust t-statistics are presented in parentheses. Variables are defined in our Appendix Table A1. \*\*\*, \*\*, \* denote significant at the 1%, 5%, and 10% levels, respectively.

	CAPM	FF3	FF5	CAPM	FF3	FF5	CAPM	FF3	FF5	CAPM	FF3	FF5
Panel A: Pooled	regressions											
Ln_N_Letter	-0.041***	-0.027***	-0.034***									
	(-7.00)	(-5.90)	(-6.75)									
$Ln_N_Major$				-0.010***	-0.006***	-0.008***						
				(-7.47)	(-5.48)	(-7.23)						
$Ln_N_Minor$							-0.008***	-0.005***	-0.007***			
							(-7.53)	(-6.03)	(-7.51)			
Ln_N_Charact er										-0.007***	-0.005***	-0.006***
										(-7.58)	(-6.03)	(-7.52)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Boards	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170
adj. R-sq	0.240	0.172	0.196	0.258	0.175	0.210	0.260	0.180	0.214	0.259	0.179	0.213

Table 7. (continued)

Tuble 7. (continue	cuj											
Panel B: Fama-macI	Beth (1973) 1	regressions	·	·	·						·	
Ln_N_Letter	-0.663**	-0.584**	-0.473**									
	(-2.09)	(-2.09)	(-2.38)									
$Ln_N_Major$				-0.247**	-0.287**	-0.248***						
				(-2.36)	(-2.11)	(-3.37)						
$Ln_N_Minor$							-0.141***	-0.188**	-0.112			
							(-2.58)	(-2.49)	(-0.96)			
Ln_N_Character										-0.114**	-0.164**	-0.155***
										(-2.24)	(-2.10)	(-2.66)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Boards	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of Negative Coeff.	5.000	4.000	5.000	6.000	5.000	5.000	6.000	5.000	5.000	5.000	5.000	5.000

## **Table 8. Portfolio Tests**

This table presents the results of portfolio tests based on the CAPM, FF3, and FF5 models. Panels A, B, and C display the regression results for low-high portfolios constructed using comment letter measures within 1–36 months, 1–12 months, and 13–36 months post-IPO, respectively. Portfolio returns are calculated using equal-weighted monthly calendar time returns. Ordinary least squares regressions are employed to generate the *t*-statistics, which are provided in parentheses. Significance levels are denoted by \*\*\*, \*\*, and \*, corresponding to 1%, 5%, and 10%, respectively.

	Major que	stions		Minor ques	tions		Chinese ch	aracters	
	CAPM	FF3	FF5	CAPM	FF3	FF5	CAPM	FF3	FF5
Par	nel A: 1-36 m	onth							
$\alpha$	$0.006^{***}$	$0.006^{***}$	$0.007^{***}$	$0.010^{***}$	$0.010^{***}$	$0.010^{***}$	$0.007^{***}$	$0.007^{***}$	$0.008^{***}$
	(3.12)	(3.11)	(3.32)	(4.02)	(3.69)	(3.73)	(2.77)	(2.71)	(2.78)
Par	nel B: 1-12 m	onth							
$\alpha$	$0.009^{**}$	$0.009^{**}$	$0.010^{**}$	$0.020^{***}$	$0.022^{***}$	$0.025^{***}$	$0.016^{***}$	$0.017^{***}$	$0.020^{***}$
	(2.46)	(2.32)	(2.58)	(4.20)	(4.40)	(4.63)	(3.33)	(3.50)	(3.78)
Par	nel C: 13-36 ı	nonth							
$\alpha$	$0.005^{**}$	$0.005^{**}$	$0.005^{**}$	$0.006^*$	0.004	0.004	0.003	0.002	0.002
	(2.04)	(2.03)	(2.15)	(1.83)	(1.16)	(1.17)	(0.97)	(0.65)	(0.67)

### **Table 9. Comment Letters and Post-IPO Product Market Competition**

This table reports the association between comment letters and post-IPO product market competition. In Panel A, the dependent variable is the difference between the natural logarithm of market share in the first (second, and third) year post-IPO and the natural logarithm of the average market share during the three years pre-IPO. A firm's market share in a given year is defined as the ratio of the firm's annual sales to the total industry sales. In Panel B, the dependent variable is the difference between the Herfindahl-Hirschman Index in the first (second, and third) year post-IPO and the average Herfindahl-Hirschman Index during the three years pre-IPO. The independent variables include the natural logarithm of one plus the total number of comment letters ( $Ln_N_Letter$ ), the number of major questions ( $Ln_N_Major$ ), the number of minor questions ( $Ln_N_Minor$ ), and the number of Chinese characters ( $Ln_N_Character$ ). Control variables include Lnasset, Leverage,  $Mkt_Bk$ , Largest, SOE, UW, ACC, Timelag and  $Aud_Dummy$ . Fixed effects for the listed board, industry, and IPO year are included but not reported. Robust t-statistics are presented in parentheses. Variables are defined in our Appendix Table A1. \*\*\*, \*\*\*, \*\* denote significant at the 1%, 5%, and 10% levels, respectively.

	Year 1 after IPO	Year 2 after IPO	Year 3 after IPO	Year 1 after IPO	Year 2 after IPO	Year 3 after IPO	Year 1 after IPO	Year 2 after IPO	Year 3 after IPO	Year 1 after IPO	Year 2 after IPO	Year 3 after IPO
Panel A: Change is	n market shai	e										
Ln_N_Letter	-0.134**	-0.172**	0.084									
	(-2.36)	(-2.31)	(0.99)									
$Ln_N_Major$				-0.039***	-0.056***	-0.000						
				(-3.23)	(-3.58)	(-0.01)						
$Ln_N_Minor$							-0.032***	-0.043***	0.006			
							(-3.21)	(-3.32)	(0.42)			
Ln_N_Character										-0.029***	-0.037***	0.008
										(-3.25)	(-3.26)	(0.65)
Controls	Yes											
Board	Yes											
Industry	Yes											
Year	Yes											
N	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170
adj. R-sq	0.114	0.150	0.131	0.121	0.158	0.130	0.121	0.157	0.131	0.121	0.156	0.131

Table 9. (continued)

Panel B: Change in	n market con	centration										
Ln_N_Letter	-0.210*** (-3.13)	-0.096 (-1.12)	0.070 (0.75)									
Ln_N_Major				-0.072*** (-5.41)	-0.059*** (-3.46)	-0.006 (-0.34)						
Ln_N_Minor				, ,		, ,	-0.056*** (-5.26)	-0.044*** (-3.19)	0.002 (0.11)			
Ln_N_Character							,	,	,	-0.050***	-0.038***	0.001
										(-5.26)	(-3.10)	(0.06)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Board	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170
adj. R-sq	0.117	0.183	0.212	0.134	0.193	0.212	0.133	0.192	0.212	0.132	0.191	0.212

#### Table 10. Comment Letters and Stock Price Informativeness

This table reports the association between comment letters and post-IPO stock price informativeness. Panels A, B, C, and D illustrate the effects of comment letters on post-IPO stock price nonsynchronicity, volume probability of informed investors, bid-ask spread, and stock price volatility, respectively. The independent variables include the natural logarithm of one plus the total number of comment letters ( $Ln_N_Letter$ ), the number of major questions ( $Ln_N_Major$ ), the number of minor questions ( $Ln_N_Minor$ ), and the number of Chinese characters ( $Ln_N_Character$ ). Control variables include Lnasset, Leverage,  $Mkt_Bk$ , Largest, SOE, UW, ACC, Timelag and  $Aud_Dummy$ . Fixed effects for the listed board, industry, and IPO year are included but not reported. Robust t-statistics are presented in parentheses. Variables are defined in our Appendix Table A1. \*\*\*, \*\*, \* denote significant at the 1%, 5%, and 10% levels, respectively.

	Year 1 after IPO	Year 2 after IPO	Year 3 after IPO	Year 1 after IPO	Year 2 after IPO	Year 3 after IPO	Year 1 after IPO	Year 2 after IPO	Year 3 after IPO	Year 1 after IPO	Year 2 after IPO	Year 3 after IPO
			J			nsynchronic					J	
Ln N Letter	-0.894***	-0.922***	-0.624***			•	-					
	(-4.53)	(-4.45)	(-3.13)									
$Ln_N_Major$				-0.273***	-0.313***	-0.117***						
				(-7.50)	(-8.22)	(-3.08)						
$Ln_N_Minor$							-0.229***	-0.261***	-0.114***			
							(-7.80)	(-8.54)	(-3.65)			
Ln_N_Character										-0.208***	-0.237***	-0.103***
										(-7.83)	(-8.51)	(-3.66)
Controls	Yes											
Board	Yes											
Industry	Yes											
Year	Yes											
N	1,170	1,170	1,166	1,170	1,170	1,166	1,170	1,170	1,166	1,170	1,170	1,166
adj. R-sq	0.194	0.151	0.155	0.213	0.179	0.154	0.216	0.182	0.157	0.216	0.182	0.157

Table 10. (continued)

					Panel	B: VPIN						
Ln_N_Letter	-0.011*** (-3.48)	-0.024*** (-7.36)	-0.024*** (-6.83)									
Ln_N_Major				-0.003*** (-4.11)	-0.007*** (-10.39)	-0.006*** (-7.98)						
Ln_N_Minor							-0.002*** (-4.83)	-0.006*** (-10.96)	-0.005*** (-8.71)			
Ln_N_Character										-0.002*** (-4.76)	-0.005*** (-10.94)	-0.004*** (-8.59)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Board	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	1,170	1,170	1,169	1,170	1,170	1,169	1,170	1,170	1,169	1,170	1,170	1,169
adj. R-sq	0.105	0.170	0.169	0.109	0.209	0.182	0.114	0.217	0.191	0.113	0.217	0.189
					Panel C: E	Bid-ask sprea	.d					
Ln_N_Letter	0.043*** (9.07)	0.095*** (10.13)	0.056*** (6.51)									
Ln_N_Major				0.013*** (13.11)	0.028*** (15.15)	0.016*** (8.54)						
Ln_N_Minor							0.010*** (12.97)	0.022*** (15.06)	0.012*** (8.12)			
Ln_N_Character										0.009*** (12.92)	0.020*** (15.04)	0.011*** (8.17)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Board	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170
adj. R-sq	0.127	0.205	0.198	0.227	0.322	0.244	0.223	0.306	0.234	0.213	0.302	0.231

Table 10. (continued)

					Panel D	: Volatility						
Ln_N_Letter	0.024*** (4.60)	0.049*** (5.81)	0.045*** (5.06)									
Ln_N_Major	(4.00)	(3.01)	(3.00)	0.007*** (6.30)	0.013*** (7.03)	0.013*** (6.76)						
Ln_N_Minor				,	,		0.006*** (6.67)	0.011*** (7.39)	0.011*** (7.03)			
Ln_N_Character							,	,	,	$0.005^{***}$	$0.010^{***}$	$0.010^{***}$
										(6.53)	(7.26)	(6.98)
Controls	Yes	Yes	Yes	Yes								
Board	Yes	Yes	Yes	Yes								
Industry	Yes	Yes	Yes	Yes								
Year	Yes	Yes	Yes	Yes								
N	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170	1,170
adj. R-sq	0.049	0.099	0.092	0.082	0.130	0.126	0.088	0.137	0.131	0.086	0.134	0.129

Table 11. Sample Distribution under the Approval v.s. Registration Systems

This table presents sample distributions in China during the period 2015–2022. Panels A, B, and C present sample distributions categorized by IPO year, board type, and review system, respectively. Panels D, E, F, and G illustrate the distribution of samples under the approval and registration system classified by the total number of comment letters, major questions, minor questions, and Chinese characters, respectively. "SME" refers to the Small and Medium Enterprise Board; "ChiNext" refers to the Growth Enterprise Board; "STAR" refers to the Science and Technology Innovation Board.

			Panel A:	By IPO ye	ear		
		IP	0 firms		Commen	nt letters	4
Year		$\overline{N}$	%	<u> </u>	N	%	– Average
2015		148	6.57		191	2.47	1.29
2016		216	9.58		433	5.60	2.00
2017		429	19.03		886	11.45	2.07
2018		95	4.21		233	3.01	2.45
2019		188	8.34		716	9.25	3.81
2020		386	17.13		1,472	19.02	3.81
2021		473	20.98		2,226	28.76	4.71
2022		319	14.15		1,582	20.44	4.96
Total		2,254	100.00		7,739	100.00	3.43
			Panel B: B	y listing b	oard		
		IP	O firms	<i>,</i> <u> </u>	Commen	nt letters	,
Board		$\overline{N}$	%		N	%	– Average
Main board		745	33.05		1,599	20.66	2.15
SME		214	9.49		451	5.83	2.11
ChiNext		806	35.76		2,925	37.80	3.63
STAR		489	21.69		2,764	35.72	5.65
			Panel C: By	review sy	stem		
		IP	O firms		Commen	t letters	
System		$\overline{N}$	%		N	%	– Average
Approval		1,348	59.80		2,815	36.37	2.09
Registration		906	40.20		4,924	63.63	5.43
J		Panel	D: By total nu	mber of co	mment letters		
		1	2	3	4	5	6
Approval	N	133	1010	164	36	4	1
11	%	9.87	74.93	12.17	2.67	0.30	0.07
Registration	N	1	34	33	66	358	414
3	%	0.11	3.75	3.64	7.28	39.51	45.70

Table 11. (continued)

1 abic 11. (c	ontinu	icuj					
		Pane	l E: By numbe	r of major que	stions		
		≤20	(20, 40]	(40, 60]	(60, 80]	(80, 100]	>100
Approval	N	166	353	652	127	23	27
	%	12.31	26.19	48.37	9.42	1.71	2.00
Registration	N	32	146	394	168	79	87
	%	3.53	16.11	43.49	18.54	8.72	9.60
		Pane	l F: By numbe	r of minor que	stions		
		≤50	(50, 100]	(100, 150]	(150, 200]	(200, 250]	>250
Approval	N	212	273	435	303	74	51
	%	15.73	20.25	32.27	22.48	5.49	3.78
Registration	N	29	58	109	203	215	292
	%	3.20	6.40	12.03	22.41	23.73	32.23
		Panel G: By n	umber of Chir	nese characters	(in thousands)		
		≤5	(5, 10]	(10, 15]	(15, 20]	(20, 25]	>25
Approval	N	264	351	445	199	53	36
	%	19.58	26.04	33.01	14.76	3.93	2.67
Registration	N	23	37	87	109	180	470
	%	2.54	4.08	9.60	12.03	19.87	51.88

## Table 12. Comment Letters and Short-term Returns Post-IPO — the Approval vs Registration Systems

This table presents the regression results assessing the relationship between comment letters and post-IPO short-term returns for firms that went public under approval versus registration systems during the period from 2015 to 2022. Panels A and B illustrate the regression outcomes for IPO underpricing (IR and adjIR) and short-term returns (CAR\_day20, CAR\_day40, and CAR\_day60), respectively. The independent variables include the natural logarithm of one plus the total number of comment letters (Ln\_N\_Letter), the number of major questions (Ln\_N\_Major), the number of minor questions (Ln\_N\_Minor), the number of Chinese characters (Ln\_N\_Character), the indicator for the registration system (RegSystem) and its interaction terms with comment letter measures. Control variables include Lnasset, Leverage, Mkt\_Bk, Largest, SOE, UW, ACC, Timelag and Aud\_Dummy. Fixed effects for the listing board, the industry and IPO year are included but not reported. Robust t-statistics are presented in parentheses. Coeff. Sum refers to the linear combinations of the coefficients on the comment letter measures (Ln\_N\_Letter, Ln\_N\_Major, Ln\_N\_Minor, and Ln\_N\_Character) and their interaction terms with RegSystem. Variables are defined in our Appendix Table A1.

\*\*\*\*, \*\*\*, \*\* denote significant at the 1%, 5%, and 10% levels, respectively.

		P	anel A: IPO und	erpricing				
	IR	adjIR	IR	adjIR	IR	adjIR	IR	adjIR
Ln_N_Letter	-3.416***	-3.404***						
	(-10.12)	(-10.21)						
Ln N Major			-0.963***	-0.963***				
			(-11.15)	(-11.36)				
Ln N Minor					-0.865***	-0.864***		
					(-12.70)	(-12.92)		
Ln_N_Character							-0.791***	-0.790***
							(-12.69)	(-12.89)
Ln_N_Letter×RegSystem	2.844***	2.835***						
	(6.45)	(6.48)						
Ln_N_Major×RegSystem			1.095***	1.072***				
			(7.17)	(7.11)				
Ln_N_Minor×RegSystem					0.915***	$0.899^{***}$		
					(7.26)	(7.21)		
$Ln\_N\_Character \times RegSystem$							0.636***	0.627***

RegSystem	-4.091***	-4.079***	-5.338***	-5.243***	-5.533***	-5.448***	(5.32) -6.925***	(5.29) -6.827***
	(-6.04)	(-6.07)	(-8.62)	(-8.58)	(-8.42)	(-8.39)	(-5.84)	(-5.81)
Controls	Yes	Yes						
Board	Yes	Yes						
Industry	Yes	Yes						
Year	Yes	Yes						
N	2,254	2,254	2,254	2,254	2,254	2,254	2,254	2,254
adj. R-sq	0.295	0.296	0.330	0.332	0.356	0.358	0.355	0.357
Coeff. Sum	-0.573*	-0.569*	0.132	0.109	0.051	0.036	-0.155	-0.163
P-value	(0.054)	(0.054)	(0.285)	(0.371)	(0.628)	(0.730)	(0.125)	(0.103)

Table 12. (continued)

Table 12. (continued)				Panel B	: IPO short-	term returns	3					
	CAR_	CAR_	CAR_	CAR_	CAR_	CAR_	CAR_	CAR_	CAR_	CAR_	CAR_	CAR_
	$day2\overline{0}$	day40	day60	day20	day40	day60	day20	day40	day60	day20	day40	day60
Ln_N_Letter	-0.718***	-0.722***	-0.712***									
	(-11.50)	(-11.72)	(-11.36)									
Ln_N_Major				-0.204***	-0.205***	-0.207***						
				(-15.00)	(-15.16)	(-14.96)						
Ln_N_Minor							-0.185***	-0.184***	-0.187***			
							(-16.98)	(-16.62)	(-16.66)			
Ln N Character										-0.168***	-0.169***	-0.170***
										(-16.72)	(-16.58)	(-16.48)
Ln N Letter×RegSystem	$0.670^{***}$	$0.626^{***}$	$0.682^{***}$									
	(7.50)	(7.42)	(7.62)									
Ln_N_Major×RegSystem				$0.252^{***}$	$0.235^{***}$	$0.242^{***}$						
0				(8.60)	(7.92)	(7.74)						
Ln N Minor×RegSystem							0.226***	0.217***	0.213***			
							(9.56)	(8.74)	(8.07)			
Ln N Character×RegSystem							, ,	, ,	, ,	0.187***	0.183***	0.181***
										(8.28)	(7.85)	(7.40)
RegSystem	-1.636***	-1.533***	-1.630***	-1.854***	-1.767***	-1.782***	-1.980***	-1.914***	-1.883***	-2.633***	-2.566***	-2.533***
	(-11.72)	(-11.97)	(-11.73)	(-16.10)	(-15.09)	(-14.55)	(-16.59)	(-15.19)	(-14.08)	(-11.86)	(-11.23)	(-10.55)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	2,254	2,254	2,254	2,254	2254	2,254	2,254	2,254	2,254	2,254	2,254	2,254
adj. R-sq	0.595	0.584	0.577	0.615	0.604	0.598	0.630	0.618	0.612	0.628	0.617	0.610
Coeff. Sum	-0.047	-0.096	-0.031	$0.048^{*}$	0.031	0.035	$0.041^{**}$	0.033	0.027	0.019	0.014	0.010
P-value	(0.465)	(0.103)	(0.634)	(0.062)	(0.244)	(0.214)	(0.048)	(0.139)	(0.264)	(0.336)	(0.498)	(0.638)

## Table 13. Comment Letters and Long-term Returns Post-IPO —— the Approval vs Registration systems

This table presents the regression results assessing the relationship between comment letters and post-IPO long-term returns for firms that went public under approval versus registration systems during the period from 2015 to 2022. Long-term returns are measured by the cumulative abnormal returns within the 12-, 24-, and 36-month window (*CAR12, CAR24*, and *CAR36*). The independent variables include the natural logarithm of one plus the total number of comment letters (*Ln\_N\_Letter*), the number of major questions (*Ln\_N\_Major*), the number of minor questions (*Ln\_N\_Minor*), the number of Chinese characters (*Ln\_N\_Character*), the indicator for the registration system (*RegSystem*) and its interaction terms with comment letter measures. Control variables include *Lnasset*, *Leverage*, *Mkt\_Bk*, *Largest*, *SOE*, *UW*, *ACC*, *Timelag* and *Aud\_Dummy*. Fixed effects for the listing board, industry, and IPO year are included but not reported. Robust *t*-statistics are presented in parentheses. *Coeff. Sum* refers to the linear combinations of the coefficients on the comment letter measures (*Ln\_N\_Letter*, *Ln\_N\_Major*, *Ln\_N\_Minor*, and *Ln\_N\_Character*) and their interaction terms with *RegSystem*. Variables are defined in our Appendix Table A1.\*\*\*, \*\*\*, \*\* denote significant at the 1%, 5%, and 10% levels, respectively.

	CAR12	CAR24	CAR36	CAR12	CAR24	CAR36	CAR12	CAR24	CAR36	CAR12	CAR24	CAR36
Ln_N_Letter	-1.350***	-1.245***	-1.288***									
	(-8.82)	(-7.89)	(-7.54)									
$Ln\_N\_Major$				-0.388***	-0.336***	-0.313***						
				(-10.38)	(-8.83)	(-7.73)						
$Ln_N_Minor$							-0.316***	-0.274***	-0.258***			
							(-10.70)	(-9.07)	(-8.02)			
Ln_N_Character										-0.286***	-0.248***	-0.235***
										(-10.60)	(-9.08)	(-10.42)
$Ln_N_Letter \times RegSystem$	1.472***	1.431***	$0.987^{***}$									
	(8.64)	(7.74)	(4.32)									
$Ln_N_Major \times RegSystem$				$0.390^{***}$	$0.380^{***}$	$0.210^{**}$						
				(7.09)	(5.75)	(2.57)						
Ln_N_Minor×RegSystem							$0.328^{***}$	$0.307^{***}$	$0.176^{**}$			
							(7.32)	(5.77)	(2.49)			
Ln_N_Character×RegSystem										0.314***	$0.270^{***}$	0.127

										(7.62)	(5.49)	(1.38)
RegSystem	-2.366***	-2.390***	-1.897***	-2.067***	-2.081***	-1.667***	-2.159***	-2.114***	-1.706***	-3.512***	-3.152***	-2.034**
	(-10.27)	(-9.34)	(-6.22)	(-9.38)	(-7.91)	(-5.30)	(-9.38)	(-7.78)	(-4.89)	(-8.74)	(-6.56)	(-2.35)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Board	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	2,254	2,047	1,614	2,254	2,047	1,614	2,254	2,047	1,614	2,254	2,047	1,614
adj. R-sq	0.248	0.223	0.262	0.286	0.245	0.274	0.292	0.248	0.277	0.288	0.246	0.276
Coeff. Sum	0.121	$0.185^{*}$	-0.301*	0.002	0.044	-0.104	0.012	0.034	-0.082	0.028	0.022	-0.107*
P-value	(0.140)	(0.067)	(0.060)	(0.952)	(0.415)	(0.138)	(0.732)	(0.446)	(0.190)	(0.374)	(0.589)	(0.095)

# Appendix

**Table A1. Variables Definitions** 

Definitions  Dependent variables  CAR_day20, CAR_day40, CAR_day60  CAR_day60  CAR_12, CAR24, CAR36  Camulative abnormal stock returns over the 12-, 24-, and 36-month window post-IPO starting from the second month post-listing, adjusted by equally-weighted return of the SSE or SZSE.  CAR36  CAR36  CAR36  CAR36  CAR36  CAR36  CAR36  CAR36  CAR36  Car312  CAR36  CAR36  CAR36  Car312  CAR36  CAR36  CAR36  CAR36  Car312  CAR36  CAR36  CAR36  Car312  CAR36  CAR36  CAR36  CAR36  CAR36  Car312  CAR36  CAR36  CAR36  CAR36  Car312  CAR36  CAR36  CAR36  Car312  CAR36  CAR36  CAR36  CAR36  CAR36  Car312  CAR36  Car312  CAR36  CAR36  CAR36  CAR36  Car312  CAR36  Car312  CAR36  CAR36  Car312  CAR36
CAR_day20, CAR_day40, CAR_day60 CAR_day60 CAR_12, CAR24, CAR36 CUmulative abnormal stock returns over the 12-, 24-, and 36-month window post-IPO starting from the second month post-listing, adjusted by equally-weighted return of the SSE or SZSE.  CAR36
CAR_day40, CAR_day60  day post-listing, adjusted by equally-weighted return of the SSE or SZSE.  CAR12, CAR24, Car24, CAR36  Car25  CAR36  Calculated as the closing price on the first trading day that does not reach the price increase limit after the IPO minus the offer price, divided by the offer price.  CAR36  CAR37  CAR36  CAR
day post-listing, adjusted by equally-weighted return of the SSE or SZSE.  CAR12, CAR24, Car24, Car24, Car25 Cumulative abnormal stock returns over the 12-, 24-, and 36-month window post-IPO starting from the second month post-listing, adjusted by equally-weighted return of the SSE or SZSE.  Initial return post-IPO, calculated as the closing price on the first trading day that does not reach the price increase limit after the IPO minus the offer price, divided by the offer price.  Market-adjusted initial return post-IPO, calculated as the initial return adjusted by the equally weighted market returns of the SSE or SZSE compounded during the same period of
SSE or SZSE.  CAR12, CAR24, CAR36 CUmulative abnormal stock returns over the 12-, 24-, and 36-month window post-IPO starting from the second month post-listing, adjusted by equally-weighted return of the SSE or SZSE.  IR Initial return post-IPO, calculated as the closing price on the first trading day that does not reach the price increase limit after the IPO minus the offer price, divided by the offer price.  Market-adjusted initial return post-IPO, calculated as the initial return adjusted by the equally weighted market returns of the SSE or SZSE compounded during the same period of
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CAR36  36-month window post-IPO starting from the second month post-listing, adjusted by equally-weighted return of the SSE or SZSE.  IR  Initial return post-IPO, calculated as the closing price on the first trading day that does not reach the price increase limit after the IPO minus the offer price, divided by the offer price.  Market-adjusted initial return post-IPO, calculated as the initial return adjusted by the equally weighted market returns of the SSE or SZSE compounded during the same period of
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IR.
Comment letter measures
N_Letter The total number of comment letters received by an IPO prior
(Ln_N_Letter) to the offering date. Ln_N_Letter refers to the natural
logarithm of $(1+N\_Letter)$ .
<i>N_Major</i> The number of major questions (first-tier questions) addressed
(Ln_N_Major) in the comment letters received by an IPO. Ln_N_Major
refers to the natural logarithm of $(1 + N_Major)$ .
N_Minor The number of minor questions (second-tier questions)
(Ln_N_Minor) addressed in the comment letters received by an IPO.
$Ln_NMinor$ refers to the natural logarithm of $(1+N_Minor)$ .
N_Character The number of Chinese characters (in thousands) contained in
(Ln_N_Character) the comment letters received by an IPO. Ln_N_Character
refers to the natural logarithm of $(1+N\_Character)$ .
Price informativeness measures
Nonsynchronicity Stock price nonsynchronicity in one year after the listing.
Following Bennett et al. (2020), nonsynchronicity is
$1-R_i^2$
calculated as $\ln(\frac{1-R_j^2}{R_j^2})$ , $R_j^2$ is obtained following
$r_{j,i,t} = \beta_{j,0} + \beta_{j,m} r_{m,t} + \beta_{j,i} r_{i,t} + \varepsilon_{i,j,t}$ , where j is for firm j, i is for
industry i, and t is for day t. $r_{j,i,t}$ is the return of firm j in
industry i defined as secondary-industry classification in the
manufacturing industry and first-industry classification in the
others.
VPIN Volume synchronized probability of informed trading in one
year after the listing.
Bid-ask spread Bid ask spread in one year after the listing.
Volatility Standard deviation of the weekly returns in one year after the
listing.
Control variables

Largest	Shareholding ratio controlled by the largest shareholders.
Leverage	Ratio of debt to assets.
Lnasset	The natural logarithm of total assets.
Timelag	The days between the initial offering date and the IPO listing date.
$Mkt\_Bk$	Market to book equity ratio.
Aud_Dummy	A dummy variable that equals one if firms have been rejected or withdrawn an IPO before eventually getting approved by the regulators, and zero otherwise.
SOE	A dummy variable that equals one if ultimate controlling shareholders of firms that went public are local or central governments, and zero otherwise.
UW	A dummy variable that equals one if the applicant is underwritten by a reputable underwriter and zero otherwise. A reputable underwriter is defined based on the market share in terms of the total underwriting fee for the current and previous two years.
ACC	A dummy variable that equals one if the accounting firm is one of the Big Four, and zero otherwise.
Industry	We employ the secondary-level industry classifications issued
classifications	by Shenyin Wanguo Co. Ltd. in 2021 in our regressions.
-	First-level industry classifications are used to present our sample description.

## Table A2. The filing review process

This table illustrates the IPO review process in China. The administrative approval-based system and the approval system are collectively referred to as the approval system. Under the approval system, the Stock Issuance Examination and Verification Committee (the Committee) of the China Securities Regulatory Commission (CSRC) bears the primary responsibility for reviewing IPO filings. Conversely, under the registration system, the exchanges conduct an initial review of IPO filings to ensure compliance with listing criteria, following which the filings must be registered with the CSRC. Detailed information regarding the review process is publicly accessible on the official websites of the Shanghai Stock Exchange (SSE), the Shenzhen Stock Exchange (SZSE), and the Beijing Stock Exchange (BSE).

	The approval system	The registration system
Board	i) The Main Board and the Small and Medium Enterprise	i) The Main Board and the SME since April 10, 2023.
utilizing the	Board (SME) prior to April 10, 2023. Note that the SZSE	ii) The ChiNext since June 12, 2020.
approval /	consolidated its Main Board with the SME on April 6, 2021.	iii) The Science and Technology Innovation Board (STAR)
registration	ii) The Growth Enterprise Market (ChiNext) prior to June 12,	and the BSE since their launches.
system	2020.	
Review	The CSRC.	The SSE, the SZSE, or the BSE.
entity		
Submission	Issuers are required to submit their application materials to	Issuers are required to submit their application materials to the
of	the CSRC. The CSRC then forwards these materials to the	SSE, the SZSE, or the BSE. The respective exchange will
application materials	Issuance Supervision Department (ISD). Upon formal acceptance, the ISD discloses the materials and assign the	decide whether to accept the issuers' application materials within five business days. Upon acceptance, issuers are
	applicants to individual review officers.	mandated to disclose preliminary prospectuses and other
		relevant materials on the official websites of the respective exchange.
Preliminary	The ISD conducts a preliminary review through two steps:	The exchange conducts a preliminary review process, which
review	pre-screening and a preliminary review meeting.	includes an exchange review and a listing committee meeting.
	i) During the pre-screening phase, after examining the issuers'	i) The exchange department (the Department) issues comment
	application materials, reviewers provide comments on the	letters within 20 business days of the filing's acceptance.
	filings. These comments are then discussed in a feedback	Issuers and their sponsors are required to respond to the
	session, which includes ISD reviewers and office leaders.	comments point by point in a timely manner. The filing review

This session focuses on the primary issues identified in the initial filings, requests additional information from the issuer, and seeks verifications from intermediaries. Subsequently, a comment letter is drafted and sent to the issuers' sponsors, who are responsible for coordinating with the issuers and their intermediaries to address the comments outlined in the letter. The filing review process may involve multiple rounds. Once the initial reviews are completed, a preliminary examination report is prepared and submitted to the preliminary review meeting.

(ii) At the preliminary review meeting, reviewers present information about the issuer, along with the comments and responses received. Following discussions, the reviewers refine and enhance the preliminary report. The updated report and application materials are then submitted to the Committee for further consideration.

process may involve multiple rounds. If the Department determines that no further inquiries are necessary, it will prepare a report summarizing the comments and responses, and submit this report to the listing review committee.

(ii) The listing committee convenes to review the report prepared by the Department, along with the issuer's application materials. The listing committee may request on-site communications with the issuer and its sponsor. The listing committee then decides whether to approve or disapprove the listing.

Formal review or registration

The CSRC issues a notice of the Committee meeting at least five days prior to the scheduled date. This notice includes the list of issuers, the meeting time, and the Committee members. During the meeting, the reviewers present a detailed report on the issuer, along with comments and responses. Issuers and their sponsors are required to make statements and respond to questions posed by the Committee. Following the meeting, the Committee members vote on the filings. If necessary, issuers and their sponsors must provide supplemental information and amendments to the application filings in response to a comment letter.

The exchange provides comments on whether the issuer meets the issuance qualifications and disclosure requirements. The exchange then submits the review opinions, relevant review materials, and application materials for issuance and listing to the CSRC for registration. The CSRC decides whether to approve or disapprove the filing within 20 business days. If the issuer fails to register, the exchange terminates the review process.

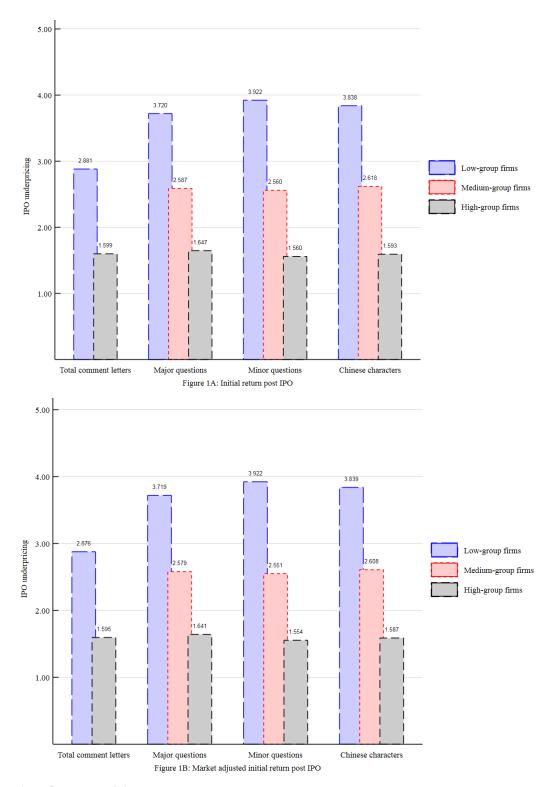
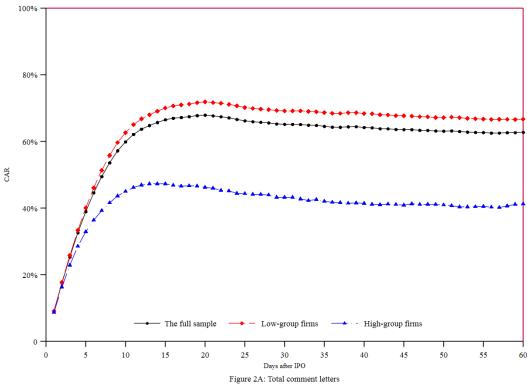
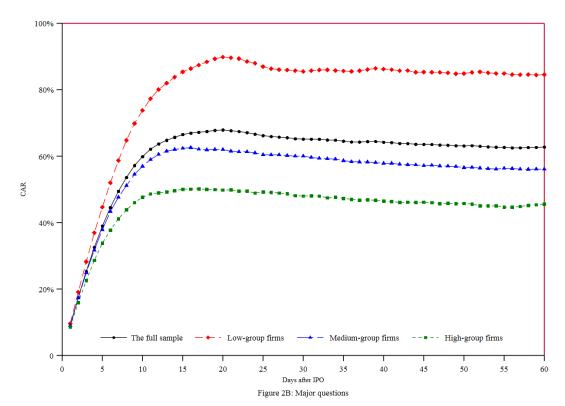


Figure 1. IPO Underpricing

Figure 1 demonstrates the IPO underpricing for firm subgroups categorized by regulatory correspondence levels. Figures 1A and 1B present initial and market-adjusted returns post-IPO, respectively. The first cluster in the chart splits the sample into high and low subgroups based on the total comment letters received. The remaining three clusters equally distribute the sample into high, medium, and low groups based on the number of major questions, the number of minor questions, and the number of Chinese characters contained in the comment letters.







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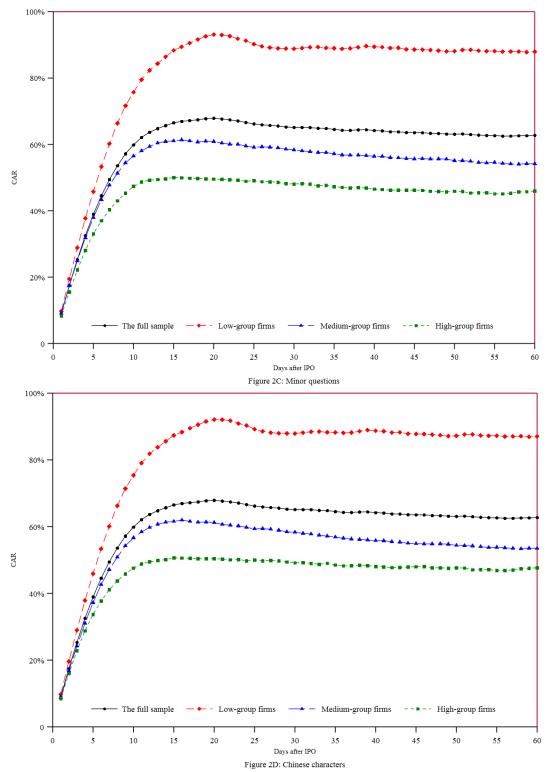
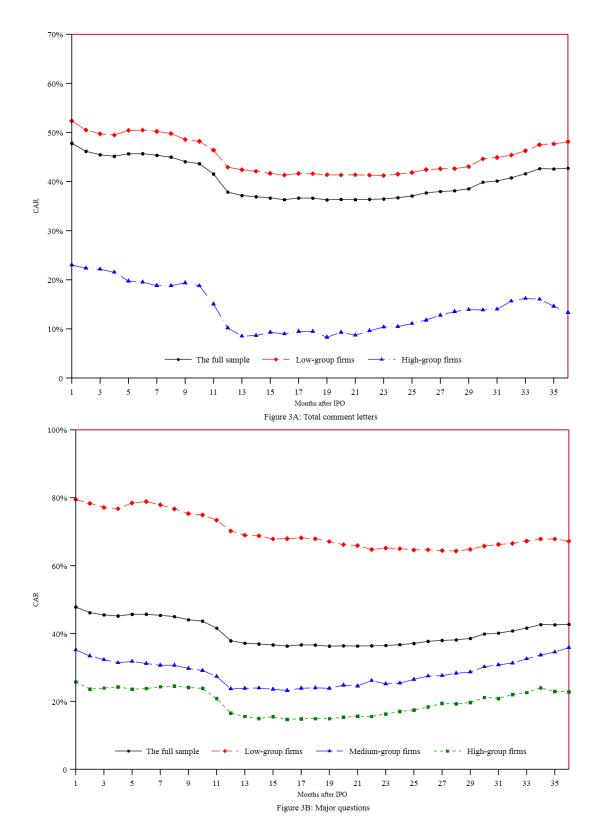


Figure 2. Post-IPO Short-term Returns

Figure 2 depicts the cumulative abnormal returns (CARs) of the sample firms over a 60-day period (from the 2nd to the 61th day) following their IPOs. In Figure 2A, the sample is divided into low and high subgroups based on the median number of comment letters received. In Figures 2B to 2D, the sample is equally divided into low, medium, and high subgroups based on the number of major questions, the number of minor questions, and the number of Chinese characters, respectively.



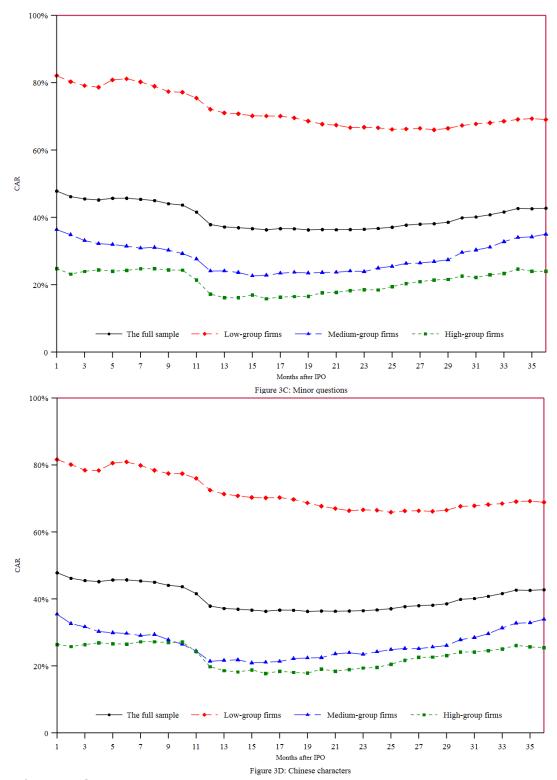


Figure 3. Post-IPO Long-term Returns

Figure 3 depicts the cumulative abnormal returns (CARs) of the sample firms over a three-year period (from the 2nd to the 37th month) following their IPOs. In Figure 3A, the sample is divided into low and high subgroups based on the median number of comment letters received. In Figures 2B to 2D, the sample is equally divided into low, medium, and high subgroups based on the number of major questions, the number of minor questions, and the number of Chinese characters, respectively.