

A Review of Corporate Finance Studies in Chinese-Speaking Regions

華語地區公司財務研究文獻回顧

Yan-Shing Chen, Department of Finance and Center for Research in Econometric Theory and Applications, National Taiwan University

陳彥行 / 國立臺灣大學財務金融學系與國立臺灣大學計量理論與應用研究中心

Yan Feng, Department of Finance, National Taiwan University

馮岩 / 國立臺灣大學財務金融學系

Woan-Lih Liang, Department of Information Management and Finance, National Yang Ming Chiao Tung University and Center for Research in Econometric Theory and Applications, National Taiwan University

梁婉麗 / 國立陽明交通大學資訊管理與財務金融學系與國立臺灣大學計量理論與應用研究中心

Yanzhi Wang, Department of Finance and Center for Research in Econometric Theory and Applications, National Taiwan University

王衍智 / 國立臺灣大學財務金融學系與國立臺灣大學計量理論與應用研究中心

Received 2025/10, Final revision received 2026/4

Abstract

This paper reviews corporate finance studies using data from Chinese-speaking regions, with a particular focus on Taiwanese companies and capital markets. To identify the relevant literature, we conduct a comprehensive search of papers published after 2000 in Taiwan-affiliated finance and management journals as well as leading international finance journals. We organize the selected studies around major corporate finance domains, including capital structure and new issues, corporate investment, payout policy, corporate governance, and environmental, social, and governance (ESG) issues. For each domain, we provide a concise overview of prior research, followed by more detailed illustrations of selected studies. Conceptually, the review adopts Tirole's contracting-based perspective as an organizing framework, interpreting firms' financing, investment, payout, governance, and ESG-related decisions through key market frictions such as agency conflicts, information asymmetries, commitment and control-rights limitations, and stakeholder externalities. This approach connects diverse empirical findings from Chinese-speaking regions to broader theoretical debates in corporate finance. Finally, we offer suggestions for future research directions.

【Keywords】 capital structure, corporate investments, corporate payout policy, ESG, corporate governance

摘要

本文回顧以華語地區資料為基礎的公司財務研究，並聚焦於台灣企業與資本市場。本文系統性搜尋 2000 年以後發表於台灣相關財務與管理主流期刊，以及國際主要財務學術期刊中使用華語地區資料的研究，並依公司財務主要領域，整理資本結構與新股發行、企業投資、盈餘發放政策、公司治理，以及環境、社會與公司治理等議題。本文先提供各領域的整體研究脈絡，再介紹具代表性的研究成果。概念上，本文以 Tirole 的契約觀點作為分析架構，將企業財務與治理決策視為代理衝突、資訊不對稱、控制權限制與利害關係人外部性等市場摩擦下的政策選擇。最後，本文所提出未來研究方向有助於深化對華語地區公司財務特性及其學術貢獻之理解。

【關鍵字】資本結構、企業投資、股利政策、環境、社會與治理、公司治理

1. Introduction

Corporate finance theory examines firms' operating and financing decisions that enhance firm value, increase stakeholder wealth, and potentially influence society at large. Three central areas of inquiry are long-term investment, capital structure, and payout policy, which have been the focus of extensive scholarly investigation (Jensen and Smith, 1984). The origins of modern corporate finance theory can be traced back to the classical study of Modigliani and Miller (1958), who proposed the capital structure irrelevance theorem, arguing that firm value is unaffected by leverage. Since then, corporate finance theory and empirical research have advanced significantly across these three domains. Beyond these financial decisions, the study of corporate governance emerged prominently in the 1980s, building on Jensen and Meckling (1976) agency theory. More recently, research has extended further to consider environmental, social, and governance (ESG) issues, which broaden the scope of stakeholders beyond shareholders and creditors by emphasizing social and environmental impacts. ESG considerations also align closely with the United Nations' Sustainable Development Goals (SDGs), reflecting the growing integration of corporate finance with broader societal objectives.

We review corporate finance studies in Chinese-speaking regions, focusing on the Taiwanese capital market. The Chinese-speaking region is the most influential and fastest-growing capital market in Asia. Moreover, the Chinese-speaking economies of Taiwan, China, and Hong Kong form a dynamic ecosystem closely interconnected with global product and financial markets. These markets are characterized by advanced technological development and distinctive ownership structures, often dominated by family-controlled firms, which have drawn sustained academic attention. This review paper follows the major research domains of corporate finance, including capital structure, corporate investment, payout policy, corporate governance, and ESG-related issues. By synthesizing findings across these areas, this review provides a comprehensive overview of the contributions of corporate finance research in Chinese-speaking contexts and outlines potential directions for future inquiry.

To identify the relevant literature, we focus on papers that use data from Chinese-speaking regions published after 2000 in both Taiwan-affiliated and leading international journals. The Taiwan-affiliated journals include *Academia Economic Papers*, *Journal of*

Financial Studies, *Journal of Management and Business Research*, *NTU Management Review*, *Review of Securities and Futures Markets*, *Sun Yat-Sen Management Review*, and *Taiwan Economic Review*. The international journals considered are *Journal of Banking and Finance*, *Journal of Corporate Finance*, *Journal of Finance*, *Journal of Financial Economics*, *Journal of Financial and Quantitative Analysis*, and *Review of Financial Studies*. Our comprehensive search across these outlets results in more than 800 papers that satisfy the above criteria. To ensure that the selected Taiwan-affiliated papers reflect meaningful academic impact, we include those published before 2011 with at least three citations and those published after 2010 with at least one citation, thereby alleviating the issue of citation truncation. Finally, about 130 papers published in the above-mentioned journals are included in this review article.

We review capital structure theories and related empirical analyses within the context of Chinese-speaking regions, focusing on the static trade-off theory, agency theory, pecking order theory, and market timing theory. In addition, we explore the literature on initial public offerings (IPOs) and seasoned equity offerings (SEOs), showing their interplay with firms' capital structure decisions. Our review of corporate investments primarily covers studies on capital expenditures, mergers and acquisitions (M&A), patent- and trademark-based innovations, research and development (R&D), and cash holdings, highlighting that both tangible and intangible investments are examined. Regarding corporate payout policy, we review research on cash dividends, open-market share repurchases, and stock dividends or splits, emphasizing how institutional features shape payout outcomes through informational, governance, and behavioral channels.

This paper also reviews studies on ESG integration and its components, drawing on evidence from Chinese-speaking regions. These contexts reveal unique challenges that shape domestic sustainability practices while offering insights for global ESG and governance debates. Board research emphasizes leadership succession, director independence, engagement, and gender diversity. Ownership concentration provides stability but risks entrenchment, with deviations from cash-flow rights linked to expropriation and weaker efficiency. Compensation studies show diluted pay-to-performance sensitivity under concentrated control, while bonuses and stock options serve as governance tools with mixed effects. Broader work shows how political ties, managerial biases, and crisis responses shape governance resilience.

Figure 1 provides an organizing framework for this review by mapping the major research themes in corporate finance to Tirole (2010) contracting-based view, which emphasizes how firms' financing, investment, payout, governance, and ESG-related decisions arise from fundamental market frictions, including agency conflicts, information asymmetries, commitment and control-rights limitations, and stakeholder externalities. Throughout the paper, we organize and interpret the empirical literature in Chinese-speaking regions through this friction-based lens, highlighting how institutional environments shape corporate policies across these interconnected domains.

The remainder of this article is organized as follows. Section 2 surveys papers regarding capital structure and new issues. Section 3 reviews papers about corporate investments. Section 4 includes the literature review about corporate payout policy. Section 5 discusses work related to corporate governance and ESG. Finally, Section 6 concludes with a discussion and directions for future research.

2. Capital Structure and Equity Issues

In the contracting view of corporate finance (Tirole, 2010), capital structure is not merely a choice between debt and equity, but a mechanism through which firms allocate cash-flow rights, control rights, and liquidation priorities in the presence of market frictions. The irrelevance proposition of Modigliani and Miller (1958) establishes that financing choices do not affect firm value in frictionless markets, thereby implying that observed capital structure outcomes must arise from imperfections such as agency conflicts, asymmetric information, limited commitment, and costly liquidation. Once these frictions are introduced, financing decisions, including equity issuance and access to external capital, become integral components of contractual design, shaping incentives, monitoring, and firms' ability to commit to future actions. Empirical evidence further suggests that these contractual mechanisms operate within specific ownership, governance, and institutional environments, giving rise to heterogeneous financing outcomes across firms and markets.

Within this framework, classical capital structure theories emphasize different frictions and contractual channels. Trade-off theory interprets leverage as a response to commitment and liquidation considerations, balancing tax benefits against expected

financial distress costs and implying adjustment toward implicit leverage targets. Agency-based models (Jensen and Meckling, 1976) highlight the disciplining role of debt alongside shareholder–debtholder conflicts, with the effectiveness of leverage as a governance device depending on ownership structure and managerial characteristics. Information-based theories, most notably the pecking order theory (Myers and Majluf, 1984), stress adverse selection and signaling concerns that limit firms’ reliance on external equity, underscoring the role of disclosure quality and transparency in shaping borrowing costs. Market timing theory (Baker and Wurgler, 2002) further links financing choices to perceived mispricing, emphasizing the dynamic interaction between capital structure decisions and market valuations observed in equity issuance activity.

From a contracting perspective, equity issuance events, such as initial public offerings (IPOs) and seasoned equity offerings (SEOs), and the degree of financial constraint faced by firms are closely connected through their effects on contractual arrangements, information environments, and control. IPOs represent a discrete transition in ownership structure, disclosure requirements, and external monitoring, improving information availability while simultaneously exposing firms to market pricing mechanisms and investor heterogeneity. SEOs further reshape control incentives and market discipline by altering ownership concentration and the timing of equity issuance, with announcement effects and post-issuance performance reflecting both information asymmetry and market timing considerations. When contractual frictions remain severe, due to opaque information, weak governance, or limited pledgeable income, firms face tighter financial constraints that restrict access to external finance and distort both leverage and investment decisions.

As emphasized by Harris and Raviv (1991) and Frank and Goyal (2009), observed leverage, equity issuance, and financing capacity reflect the joint operation of multiple frictions rather than a single dominant mechanism. In Chinese-speaking regions, and particularly in Taiwan, institutional features such as concentrated ownership, family control, business group affiliation, banking sector structure, and regulatory interventions shape the nature and severity of multiple market frictions, including agency conflicts, information asymmetries, commitment problems, and control- and liquidation-related constraints, thereby influencing firms’ financing choices and outcomes. Accordingly, this section reviews empirical studies on capital structure, IPOs, SEOs, and financial

constraints, highlighting how firms deploy financing instruments and respond to institutional settings to address agency problems, information asymmetries, and control-rights considerations within the broader contracting framework illustrated in Figure 1.

2.1 Capital Structure

Within the contracting view of corporate finance, classical capital structure theories, such as static trade-off theory, pecking order theory, and market timing theory, can be understood as emphasizing different frictions and contractual considerations shaping firms' financing choices. Empirical evidence from Taiwan provides valuable insights into how classical capital structure frameworks interact with the region's unique corporate structures, ownership patterns, and regulatory environment. Wang and Gu (2003) extend the static trade-off theory by incorporating debt ratio adjustments into a target capital structure model using Tobit and logistic regressions. They find that Taiwanese firms, across both high-tech and traditional industries, tend to realign toward target leverage. Profitability, growth, and strong stock returns increase equity issuance, while dilution concerns deter it. Moreover, target leverage shapes financing choices and the scale of funding and debt repayment, reflecting active capital structure management in Taiwan.

Governance-related agency concerns feature prominently in several capital structure studies. Chou and Yang (2016) analyze the role of chairman interlocking in debt financing and the cost of debt and find that firms with chairman interlocking exhibit higher bond leverage, especially under financial constraints, while simultaneously benefiting from lower borrowing costs. Contrary to prior literature that highlights the adverse effects of interlocking on firm performance, their results suggest that financially constrained firms may strategically leverage chairman interlocking to achieve more advantageous capital structures. Similarly, Chang, Tsai, Lin, Wang, and Hung (2013) investigate the interaction between managerial overconfidence and family ownership in determining leverage. Using a three-stage least squares (3SLS) approach, they show that while overconfidence increases leverage sensitivity, this effect is mitigated in family firms, especially those led by family CEOs. Their findings highlight the importance of behavioral factors and suggest that ownership structure and CEO identity in family firms can moderate behavioral biases in financing decisions. Agency theory is further investigated in the work of Chen, I. (2011), who compares single-segment and multi-segment firms in their stock market reactions

to public debt offerings. Testing both the free cash flow and investment opportunities hypotheses, Chen, I. (2011) finds that market responses are significantly more favorable for single-segment firms, consistent with the investment opportunities view. These findings imply that leverage serves as a governance mechanism by mitigating overinvestment problems, particularly in firms with fewer internal growth constraints, thereby reinforcing the disciplinary role of debt in capital structure decisions.

In the context of information asymmetry and the pecking order theory, one of the most representative studies is Chen, Weng, and Zhuo (2009), examining how disclosure quality affects the cost of debt. Their findings show that higher disclosure levels are associated with improved credit ratings and reduced borrowing costs. Importantly, the latter result holds after addressing endogeneity, suggesting that improved transparency alleviates financing disadvantages caused by information asymmetry, thereby facilitating access to lower-cost external debt financing.

Finally, although not directly addressing corporate leverage, Hsiao, Chang, Cianci, and Huang (2010) provide valuable context by analyzing Taiwan's "First Financial Restructuring" and its implications for bank efficiency. Using data envelopment analysis, they document significant efficiency improvements in commercial banks during the post-reform period, largely attributable to enhanced risk management and compliance practices. These structural changes in the banking sector indirectly affect firms' financing conditions by reshaping credit availability and loan supply, thereby influencing risk management practices and opportunities for capital structure adjustments.

2.2 Initial Public Offerings

In the Tirole (2010) framework, initial public offerings (IPOs) represent a discrete contractual transition in which firms reallocate ownership, control rights, and disclosure obligations by accessing public equity markets for the first time. Taiwan's IPO market is particularly noteworthy due to its unique mechanisms, such as IPO auctions and pre-IPO markets. As an emerging market, Taiwan exhibits strong growth potential, but faces high information asymmetry, which significantly impacts IPO underpricing and post-listing performance. We discuss the relevant research as follows.

Research on IPO underpricing in Taiwan identifies key determinants across multiple dimensions, ranging from governance and ownership structure to firm characteristics

and innovation activities. Wang and Tang (2013) employ a two-stage least squares (2SLS) framework to account for the endogenous relationship between credit ratings and ownership structures. They find that credit ratings are positively related to IPO initial returns, supporting the signaling theory of underpricing. Similarly, corporate integration into global markets serves as a signal of resilience; Chen, Hsieh, and Wu (2018) demonstrate that firm internationalization reduces underpricing, particularly for firms investing in developing countries at early internationalization stages. These findings indicate that the pricing of IPO shares is jointly shaped by firms' location choices and the degree of their cross-border operations. Kao and Lu (2010) document that abnormally high initial returns of IPO are largely driven by idiosyncratic risks rather than market-wide factors. They further suggest that information asymmetry explains both greater underpricing and heightened return volatility. From an innovation perspective, Lu and Chen (2010) establish a non-monotonic R&D-underpricing relationship: moderate R&D reduces underpricing by signaling quality, whereas excessive R&D heightens uncertainty and increases underpricing. These findings suggest that IPO underpricing reflects firms' attempts to resolve information asymmetry through multiple signals, including credit quality, internationalization, and innovation activities, while also revealing the limits of these signals when uncertainty becomes too high.

Post-IPO operating performance patterns reveal significant long-term challenges. Lee and Lo (2002) show that returns on equity continue to decline for up to nine years after listing. Using a DuPont framework, they attribute this deterioration to lower profitability, asset turnover, and suboptimal financial leverage. These findings suggest that agency problems, pre-IPO earnings management, and market timing considerations continue to influence firm performance after the IPO event. The evidence highlights the importance of post-IPO dynamics in evaluating the long-term implications of going public.

Taiwan's IPO auction market provides a unique setting for studying investor behavior because underwriters exercise little discretion over pricing and allocation. Hsu and Shiu (2004) demonstrate that investor bids incorporate public information, and bidding behavior and institutional allocations are reliable predictors of post-IPO stock performance. They further find that once public information is fully incorporated into auction bids, it loses residual predictive power, thereby supporting the market efficiency of this unique pricing mechanism. Lin, Lee, and Liu (2007) show that institutional investors tend to bid more

aggressively when IPO shares are more valuable, and that underpricing is greater when institutional bids are relatively higher, suggesting that institutions possess valuable private information and can capture informational rents. Chiang, Qian, and Sherman (2010) compare institutional and retail investor behavior in Taiwan's IPO auctions, showing that institutions behave consistently with informed bidder theory. In contrast, retail investors tend to chase past returns and engage in overbidding. Extending this line of research, Chiang, Hirshleifer, Qian, and Sherman (2011) find that individual investors frequently display naive reinforcement learning, bidding more aggressively after favorable past experiences but ultimately earning lower returns as their participation increases. In contrast, institutional investors exhibit little evidence of such behavioral biases.

Another feature of Taiwan's IPO process is its mandatory pre-IPO market, the Emerging Stock Market (ESM), whose main function is to serve as a price discovery platform before the formal listing. Chang, Chiang, Qian, and Ritter (2017) find that pre-market prices on the ESM exhibit strong predictive power for subsequent offer prices, with the pre-IPO price-earnings ratio explaining the vast majority of variation in the offer price-earnings ratio, particularly when stock liquidity is high. Despite this strong informational link, underpricing remains substantial, indicating that even with accurate pre-IPO signals, agency frictions between underwriters and issuers can still drive excessive discounts. This highlights how bargaining power and regulatory structure influence IPO pricing outcomes.

Studies of IPOs in China reveal similarities and differences from the Taiwanese experience. Qian, Ritter, and Shao (2024) investigate China's IPO market and find that strict regulations suppress offer prices and increase initial returns, encouraging lottery-like investor behavior. They further observe that the auction mechanism operates effectively because mutual funds bid exhibits an informed advantage unrelated to preferential treatment. Li, Wang, and Wang (2019) report that social trust reduces IPO underpricing in China and find that this negative effect is more pronounced for small, growing, and high-tech firms characterized by greater information asymmetry. They further find that this relationship weakens for firms with insider ownership, political connections, or those located in regions with stronger legal systems. These results highlight the role of social trust as a substitute for formal institutions. Finally, Chan, Wang, and Wei (2004) find that China's A-share IPOs exhibit extreme underpricing compared to B-shares, with determinants such as listing delays and regional investor bases affecting only A-shares.

However, in the long run, A-shares slightly underperform their benchmarks, whereas B-shares outperform them. Their results underscore the differences in the short- and long-term performance of A-share and B-share IPOs.

Taken together, these findings highlight the central role of information asymmetry in shaping IPO outcomes, while also demonstrating how institutional features influence the mechanisms through which this friction is resolved. Evidence from both Taiwan and China suggests that IPO pricing is not determined solely by firm-level information but is jointly shaped by market design, regulatory constraints, and investor composition. In Taiwan, mechanisms such as auction-based pricing and the pre-IPO trading platform (ESM) enhance information aggregation and price discovery, yet substantial underpricing persists, indicating the continued importance of agency frictions such as conflicts between issuers and underwriters. In China, regulatory controls and investor behavior further shape IPO outcomes, with price restrictions contributing to excessive underpricing and lottery-like participation, while factors such as social trust and institutional investors affect the extent to which information asymmetry is mitigated.

These results suggest that while IPO underpricing is often interpreted through the lens of signaling theory, such as Bhattacharya (1979), signaling alone cannot fully account for observed patterns across different institutional settings. Instead, IPO pricing reflects the interaction between information asymmetry, agency frictions, and institutional arrangements. From the perspective of Tirole (2010), this implies that IPO outcomes depend critically on how contracting frictions are mediated by market structure and regulatory design.

2.3 Seasoned Equity Offerings

Within a contracting perspective, seasoned equity offerings (SEOs), which provide firms with a mechanism to adjust capital structure and ownership arrangements after listing, often reveal changes in information environments, control incentives, and market conditions. **In particular, SEOs are closely related to information asymmetry and agency frictions, as managers may time equity issuance based on private information or use external financing in ways that affect existing shareholders.** In Taiwan, prior research offers a valuable setting for examining how market timing, information asymmetry, and firm-specific characteristics shape both market reactions

at the announcement stage and firms' subsequent long-run performance. Chiou, Chou, and Wong (2004) show that IPO firms that return to the stock market within three years achieve superior long-term performance and that firms with multiple SEO issuances outperform firms with a single issuance. However, firms raising capital within nine months of listing exhibit significantly worse outcomes than those issuing later. This suggests that an early return to the market serves as a negative signal, conveying managerial concerns regarding the firm's future prospects. Their evidence highlights that the timing of the first SEO is critical in shaping post-issuance performance. A firm's life cycle stage can also shape SEO outcomes. Tsao, Chang, Kuo, and Ou (2009) investigate how a firm's life cycle stages influence analysts' earnings forecasts and SEO underpricing. They show that analysts' forecasts are systematically optimistic for growth-stage firms, and investors fail to adjust to such predictable biases. In addition, growth-stage firms tend to have lower SEO underpricing, particularly when accompanied by smaller forecast errors. Thus, these findings highlight an interaction between life cycle stage and forecast accuracy in shaping both investor expectations and pricing outcomes of SEOs. After the IPOs, some firms choose public offerings, while others turn to private placements; the choice itself sends a message to the market. Young, Kao, and Li (2014) compare public SEOs with private placements in Taiwan, showing that the two financing choices convey different information and lead to distinct outcomes. They show that SEOs are associated with negative announcement effects and poor long-run performance, supporting information asymmetry and market timing arguments. In contrast, private placements produce positive announcement effects and relatively better short-term returns after issuance but worsen long-term results, suggesting that investors overestimate the certification effect of private placements.

The motivation for conducting SEO shows the importance of market timing. Lin, Li, and Liao (2012) investigate the motivations behind SEOs by testing the market timing and market conditions hypotheses. The evidence supports the market timing hypothesis because managers tend to issue equity when they perceive the firm's stock as overvalued. As a result, SEO announcements are often followed by short-term stock price declines, meaning investors may benefit from a long-term holding strategy or reducing their exposure to firms that have recently issued shares.

Taken together, these findings highlight that SEO outcomes are shaped not only by

information asymmetry and managerial incentives, but also by how investors interpret the signals embedded in issuance decisions. In particular, issuance timing and financing choices (public offerings versus private placements) serve as important signals, while firm characteristics such as life cycle stages influence how these signals are processed in the market. The evidence further suggests that investors do not always fully adjust for predictable biases, as reflected in the overestimation of private placement certification effects and systematic optimism in growth-stage firms. From the perspective of Tirole (2010), this suggests that the effects of information asymmetry and managerial incentives depend critically on how investors interpret issuance signals, and such interpretations may be subject to systematic biases.

2.4 Financial Constraint

Within the contracting framework, financial constraints arise when contractual frictions limit firms' ability to credibly pledge future cash flows to external investors; the analysis of financing choices would be incomplete without accounting for their role. Hung, Ku, and Li (2008) analyze how business group affiliation influences financing constraints in Taiwan. Their evidence shows that group-affiliated firms exhibit reduced sensitivity of R&D investment to internal cash flow, suggesting that group networks help alleviate financial frictions and support innovation. However, this mitigating effect is not observed for physical investment, implying that group resources are channeled preferentially toward R&D activities, underscoring the distinctive role of business groups in shaping firms' financing and investment behavior.

Another perspective on financial constraints comes from share pledging. Shen and Zhang (2025) use Taiwan data and examine whether insiders' use of company shares as collateral for personal loans affects firms' debt contracting outcomes. To establish causality, the authors employ a difference-in-differences design based on an unexpected regulatory change that exogenously reduced board directors' incentives to pledge shares. Empirically, they find that firms with higher pre-regulation pledging intensity, which experience the largest subsequent declines in pledging, have lower loan spreads and less restrictive non-price loan terms.

At the policy level, Chang, Lu, Tsai, and Weng (2023) examine the Taiwanese government's 2016 initiative to expand small and medium enterprise (SME) lending.

Their analysis reveals that, despite its well-intentioned design, the policy generates a rapid surge in SME loan balances but misallocates credit predominantly to publicly listed SMEs rather than to privately held SMEs, which typically face more severe financing constraints. This misallocation leads to excessive credit extension of listed firms, weaker post-funding performance, and the emergence of agency problems. These findings highlight how politically motivated credit expansion, while intended to support economic development, can distort resource allocation and undermine overall financial efficiency.

From the perspective of Tirole (2010), this evidence provides an important extension to the standard contracting framework. While financial constraints are typically viewed as arising from information asymmetry and limited pledgeability under arm's-length market transactions, the evidence from Chinese-speaking markets shows that these frictions are frequently mediated through non-market mechanisms embedded in ownership structures and institutional environments. In particular, access to finance is shaped not only by firm fundamentals but also by institutional channels such as business group networks, which facilitate internal capital allocation and reduce reliance on external funding; insider financial arrangements, such as share pledging, which affect creditors' risk perceptions and loan contracting terms; and policy interventions, which directly influence credit allocation but may also lead to misallocation and agency problems.

3. Innovation, Real Investments, M&A, and Other Issues Relating to Corporate Investment

In the friction-based framework of corporate finance, corporate investment decisions determine how financial resources are transformed into future cash flows under conditions of market frictions. Unlike financing choices, which allocate cash-flow and control rights, investment policies govern the deployment of capital in the presence of agency conflicts, information asymmetries, commitment problems, and stakeholder externalities. As a result, real investment, mergers and acquisitions, diversification, and innovation activities reflect not only firms' growth opportunities but also the incentives, constraints, and external obligations arising from interactions with employees, regulators, and other stakeholders.

Empirical research in Chinese-speaking regions, and particularly in Taiwan, highlights how these market frictions and stakeholder considerations jointly shape

corporate investment behavior. Investment efficiency and scale are influenced by managerial characteristics, ownership identity, financial leverage, labor regulations, political and policy uncertainty, and access to external finance. At the same time, strategic investment choices, such as acquisitions, diversification, and cash holding, often respond to agency concerns, contracting limitations, and stakeholder-related costs, including labor adjustment frictions, regulatory compliance, and social or political exposure. Innovation-related investments further amplify these forces, as R&D activities involve high uncertainty, limited collateral value, and sensitivity to property rights protection, labor market conditions, and institutional support.

Accordingly, this section reviews empirical studies on real investment, mergers and acquisitions, diversification, cash holding, and innovation in Chinese-speaking regions. The reviewed literature examines how firms adjust investment policies in response to agency conflicts, information asymmetries, commitment problems, and stakeholder externalities, and how these adjustments affect firm performance, risk, and long-term value creation. Together, these studies complement the evidence on financing choices discussed in Section 2 by illustrating how capital structure, institutional environments, and stakeholder considerations interact to shape firms' real and innovative investment decisions within the broader friction-based framework illustrated in Figure 1.

3.1 Real Investment, M&A, Diversification, and Cash Holding

Corporate real investment and efficiency have been a major focus of scholarly research, especially in the Chinese market. For example, ownership identity and institutional conditions (e.g., the role of government and state-owned enterprises (SOEs)) can shape investment efficiency, aligned with Tirole's view of corporate finance framework on institutional environment. In the context of China, Carpenter, Lu, and Whitelaw (2021) show that the informativeness of stock prices has improved substantially among private firms, while remaining low among SOEs, particularly after state interventions. Lin, Fu, and Fu (2021) show that innovation outcomes vary across ownership types, with central SOEs outperforming private firms and local SOEs in terms of patent-based innovation quantity and quality, especially in environments characterized by strong ESG practices and low corruption. Political risk, on the other hand, can deter investment. Liu, Shu, and Wei (2017) find that politically sensitive firms experience sharp stock price declines following the Bo

Xilai scandal in 2012, driven largely by increases in discount rates. Moreover, Wong and Chang (2017) have reviewed M&A studies using Asia regions that researchers can follow.

Another angle exploring the impact of institutional environment concentrates on external constraints, where external constraints such as labor regulation and financial leverage interact with ownership in shaping investment decisions. Geng, Huang, Lin, and Liu (2022) find that minimum wage increases in China spur capital investment. They further show that this effect is more significant among labor-intensive firms that cannot pass on labor costs to consumers. Firth, Lin, and Wong (2008) show that the negative relationship between leverage and investment is weaker in SOEs and firms with poor performance, suggesting leniency from state-owned lenders. Finally, Wang, Chou, and Chen (2006) state that variation in merger payment methods and stock price responses reflects not only institutional differences across markets but also methodological inconsistencies in empirical studies.

We further review managerial characteristics and their role in corporate investment, which is related to tangible investments and generally categorized as capital expenditures. These papers echo agency perspectives in terms of managerial traits. Chang and Kao (2024) find that overconfident managers are less sensitive to diversifiable firm-specific risk when making capital investment decisions. This behavior reduces agency conflicts, especially in firms with high volatility, low institutional ownership, and limited financing capacity. Similarly, Hu and Liu (2015) find that CEOs with diverse career backgrounds face fewer financial constraints, as their broader networks enhance access to external capital. Firms led by such CEOs rely less on internal cash flow and more on external finance, including bank loans and trade credit.

Next, a firm's M&A policy typically reflects a strategic trade-off between efficiency-driven motives and agency-related concerns, as acquisitions may generate operating or financial synergies. At the same time, they also pose risks of value destruction due to managerial empire building or overconfidence. Strategic choices further involve the direction of integration, whether through horizontal consolidation to capture scale economies, vertical integration to mitigate holdup problems, or conglomerate expansion into new business segments. The execution of acquisitions depends critically on financial policy, as firms select payment methods and transaction timing in response to information asymmetry, relative valuation, and financing conditions in capital markets. Ultimately,

M&A policy plays a pivotal role in the market for corporate control, necessitating a balance between exposure to disciplinary takeovers and the deployment of defensive measures.

In practice, firms' M&A strategies are often shaped by contract incompleteness, market structure, and ownership provisions. These viewpoints address the impact of information asymmetry and stakeholder alignment. Wu and Hu (2009) examine the choice between joint ventures and mergers using the framework of incomplete contract theory. They find that mergers generally offer higher efficiency and welfare gains than 50-50 joint ventures, especially when the acquiring firm retains partial ownership for incentive alignment. Their model suggests that, under symmetric cost structures, mergers facilitate coordination and outperform joint ventures in maximizing both private returns and social surplus. Tsai, Hsu, and Weng (2020) examine M&A choices and find that firms tend to pursue within-industry mergers in favorable economic conditions, and across-industry mergers during downturns. Internal characteristics such as firm sales and R&D intensity also influence M&A direction: high-sales bidders prefer diversification, while R&D-intensive firms pursue industry consolidation to gain scale economies. Their findings support the view that both external and internal drivers jointly determine the structure of acquisitions. Wang et al. (2006) use Taiwan M&A data and investigate the wealth effects of different merger payment methods and find significant discrepancies between Taiwan and international evidence. They attribute these inconsistencies largely to methodological flaws in local studies rather than structural differences between capital markets. Nevertheless, they also acknowledge that certain market-specific features may contribute to the heterogeneity in M&A outcomes. Organizational form also shapes firms' vertical integration strategies.

Diversification represents a distinct mode of M&A strategy within corporate expansion decisions. Diversified firms trade at an average discount of approximately 8% relative to portfolios of comparable stand-alone firms (Lang and Stulz, 1994), highlighting the potential costs of multi-segment organization. This dark side of diversification is commonly attributed to agency problems, as managerial discretion over internal capital allocation can facilitate divisional rent-seeking, inefficient cross-subsidization, and distorted investment decisions (Shin and Stulz, 1998; Scharfstein and Stein, 2000). Simultaneously, diversification may enhance firm value by improving productivity,

facilitating efficient internal resource allocation, and relaxing financial constraints, particularly when firms face exogenous changes in their economic or institutional environments (Stein, 1997; Maksimovic and Phillips, 2002). Huang and Chang (2020) further examine the relations among the three key elements of a firm: technological diversity, social networks, and innovation performance.

Therefore, ownership structure and board characteristics explain heterogeneity in diversification outcomes. For example, Tsao, Chin, and Lu (2011) find that international diversification is positively associated with the controlling shareholders' cash flow rights, while product diversification is negatively related. Their findings suggest that international diversification enhances firm value, whereas product diversification is often a vehicle for private benefit extraction. The moderating role of cash-flow versus voting-right divergence reinforces the importance of distinguishing diversification motives. Moreover, Liu, Chen, and Huang (2022) find that bank board diversity affects operating diversification, but the impact varies across performance types. Diversity reduces loan spread and quality but does not influence overall return or risk. When board diversity and operating diversification co-evolve, their interaction improves performance only in lending diversification; effects are neutral or negative for income-based diversification. Among diversity dimensions, seniority matters most, while gender has a limited effect. A multidimensional view of board diversity is essential, as no single trait guarantees consistent benefits.

Prior research has also examined the roles of liquidity and cash management, emphasizing the critical importance of family firms. Family firms are usually regarded as those that exploit minority shareholders, and their decisions can be shaped by political risks. First, family firms often display distinct cash-holding behaviors compared to their non-family counterparts. Lu and Yeh (2022) find that family-controlled firms in Taiwan hold less cash overall, but accumulate more when facing higher precautionary motives or financing needs. They also find variation within family business groups: firms occupying a core position in the ownership pyramid hold more cash, reflecting the hierarchical nature of internal capital markets. Policy uncertainty also affects corporate liquidity. Lu, Lee, and Yeh (2021) state that firms increase cash holdings during presidential elections due to elevated uncertainty, particularly among younger, high-tech, and financially constrained firms. In contrast, county-level elections are associated with reduced cash holdings, consistent with the grabbing hand hypothesis. These findings imply that the

nature of political uncertainty (i.e., national versus local) can generate opposing effects on firm behavior. Liquidity also plays a vital role in the financial sector. Chen, Yang, and Yeh (2017) apply a liquidity discount model to Taiwan's banking industry and classify firms into liquidity categories. They find that liquidity discounts increase significantly during the financial crisis and are linked to firm-specific performance metrics. Their evidence supports the use of liquidity classification as an early warning signal for financial vulnerability. Family ownership structures influence firms' cash holding decisions in nuanced ways.

3.2 R&D and Innovation

Taiwan companies are heavily concentrated on high-tech, innovative, and R&D-intensive industries. Therefore, prior studies have greatly emphasized the role of corporate R&D investment, which contains firm-specific uncertainties and is not entirely regarded as a harmful factor by the capital market. This research stream is tightened to information uncertainty and asymmetry studies in Tirole's corporate finance theory, due to the nature of R&D and innovation activity. R&D can be viewed as a good signal under an environment with asymmetric information. For example, Wu, Chen, and Chen (2024) decompose idiosyncratic volatility into positive and negative components and find that both are positively associated with R&D intensity. More importantly, the increase in positive (good) ones dominates, implying that investors interpret R&D-related uncertainty as a signal of future value creation. Researchers also examine market valuation of R&D, which echoes high risk-high return principle. Chin, Lin, and Chiou (2005) state that the response coefficient of R&D investment on firm value declines from the growth to the stagnant stage, and that R&D has greater explanatory power than capital expenditures during the early stages of firm development in generating value. These findings confirm that intangible investments are particularly valuable when firms are young and growth-oriented. On the other hand, innovation activity often exhibits strong persistence across time. Huang and Yang (2010) analyze Taiwan's manufacturing sectors and find that past innovation behavior significantly increases the likelihood of current innovation, even after controlling for firm heterogeneity and initial conditions. The effect is particularly pronounced in science-based industries, suggesting that innovation capabilities and routines, once established, tend to reinforce themselves over time. This phenomenon

is consistent with the notion of state dependence in innovation processes. Finally, Wang, Wang, and Wu (2008) build up a theoretical model with empirical analyses and comprehensively explore how a firm's business type influences the impact of R&D and patents on operating performance. They find that R&D has positive, lagged effects, especially in high-tech firms, and patent types affect performance differently. Own Brand Manufacturing (OBM) firms benefit more from R&D and patents compared to Original Design Manufacturing (ODM) and Original Equipment Manufacturing (OEM) firms. In contrast, hybrid firms exhibit the strongest link between innovation and performance. The study highlights business type as a key factor in how firms turn innovation into value.

Property rights and financial access are also vital in innovation activities, including patents and trademarks. These innovation outputs are generally accompanied by the nature of information uncertainty and asymmetry. To reduce the negative impact of information uncertainty and asymmetry on corporate investment decision, institutional environment can play an important role. Cull and Xu (2005) find that legal protections, particularly contract enforcement and protection against expropriation, are associated with higher reinvestment rates, and this effect is particularly pronounced among small firms. To learn the effect of trademarks, Tsao and Deng (2004) show that the estimated value of registered trademarks is significantly associated with firm value. In contrast, the simple count of trademarks is not significantly related to firm value. They further document that the legal amendments in Taiwan increased the value relevance of trademark disclosures. This study is also followed by Chen, Y. (2011), who focuses on textile, food, and chemicals industries in Taiwan. Fang, Lerner, and Wu (2017) examine the interaction between intellectual property rights (IPR) protection and ownership structures in China and find that innovation increases significantly following the privatization of state-owned enterprises, especially in regions with stronger IPR enforcement. Their results suggest that private firms respond more sensitively to legal protections than state-owned enterprises (SOEs), highlighting the complementary relationship between market liberalization and institutional safeguards in promoting innovation.

Additionally, some important factors could drive a firm's innovation investments. Policy regulations and interventions can mitigate innovation underinvestment. Liang and Liu (2021) show that the enactment of Taiwan's Biopharmaceutical Act leads to increased R&D spending among approved firms (i.e., firms receiving subsidies and/or R&D tax

credits), particularly those that are smaller or previously less active in innovation. This study highlights that tax credits under the Act are especially effective, suggesting that targeted fiscal incentives can lower entry barriers and stimulate innovation where private investment alone is insufficient. Human capital and wage policy also affect innovation and investment. Kong, Wang, and Zhang (2020) find that firms paying higher relative wages to non-executive employees produce more and better patents, particularly in competitive labor markets. In related work, Kong, Zhang, and Zhang (2022) use a policy shock in college-educated labor supply and find that access to educated workers enhances innovation output, especially in skill-intensive industries. Finally, informal institutional factors such as trust can play a role. Kong, Zhao, and Liu (2021) proxy CEOs' trust levels using exposure to the cultural revolution and find that trust enhances firm-level innovation, particularly in settings with weak formal institutions. These findings highlight the substitutive relationship between informal norms and formal enforcement mechanisms.

Collectively, these studies suggest that the impact of R&D and innovation depends not only on the internal characteristics of firms but also on external governance, labor, and legal institutions. Investment efficiency and innovation outcomes improve when firms are led by experienced managers, operate under secure property rights, and benefit from complementary labor and policy environments.

4. Payout Policy

In the contracting view of corporate finance, payout policy constitutes a central mechanism through which firms distribute cash flows, discipline managerial behavior, and reinforce commitments to investors in the presence of market frictions. While the irrelevance proposition of Miller and Modigliani (1961) establishes that payout policy does not affect firm value in frictionless markets, real-world payout decisions arise precisely because firms operate under agency conflicts, asymmetric information, limited commitment, and liquidity considerations. As a result, the timing, magnitude, and form of payouts, such as cash dividends, share repurchases, or stock dividends and splits, reflect firms' contractual arrangements, ownership structures, and information environments.

Within this framework, payout policies serve multiple contractual and informational roles. Cash dividends are often used to signal earnings stability and to mitigate agency

problems associated with free cash flow, while share repurchases provide a more flexible instrument for signaling undervaluation, adjusting capital structure, and responding to valuation dynamics. Stock dividends and splits, although not involving cash outflows, reallocate claims among shareholders and influence market liquidity and investor composition. These payout mechanisms interact with tax regimes, disclosure requirements, regulatory constraints, and behavioral biases, generating heterogeneous payout outcomes across firms and over time.

Empirical evidence from Chinese-speaking regions, particularly Taiwan, highlights how institutional features shape payout behavior by influencing underlying agency problems, information asymmetries, and commitment mechanisms. Tax systems, ownership concentration, family control, board structure, market transparency, and investor composition jointly affect firms' payout choices and their valuation consequences. Accordingly, this section reviews empirical studies on cash dividends, share repurchases, and stock dividends and splits, illustrating how firms deploy payout policies to address informational frictions, governance concerns, and commitment issues within the broader contracting framework illustrated in Figure 1.

4.1 Cash Dividends

Cash dividends are the most common form of payout and are widely regarded as a sticky mechanism for signaling earnings stability and commitment to shareholders (Lintner, 1956; Bliss, Cheng, and Denis, 2015). Beyond classic signaling (Bhattacharya, 1979), tax preference (Miller and Scholes, 1978; Chetty and Saez, 2005), catering (Baker and Wurgler, 2004), and clientele effects (Becker, Ivković, and Weisbenner, 2011) explanations, empirical evidence from Chinese-speaking regions highlights the dominant role of institutional anchors and governance frictions.

In Taiwan, the imputation tax system provides a key institutional anchor. Wang and Chen (2004) show that the 1998 reform incentivized firms to increase cash dividends while reducing earnings stock dividends. Their findings demonstrate that firms' imputation credit ratios were positively related to total payout ratios, confirming that the reform not only strengthened incentives to distribute earnings but also mitigated distortions inherent in the classical tax regime. Lin, Huang, and Chen (2012) demonstrate that executive compensation is positively associated with cash dividends, while higher

managerial ownership, institutional holdings, and board independence further raise payouts. In family-controlled firms, higher dividends serve as a commitment to alleviate outside investors' concerns regarding the divergence between control and cash-flow rights. Complementing this governance perspective, Lu (2015) incorporates a behavioral dimension by examining managerial overconfidence. The results reveal a non-monotonic relation between ownership and payout: overconfidence reduces entrenchment-driven dividend cuts at intermediate ownership levels but dampens increases at high ownership level, as overoptimistic managers prefer to retain earnings. At the industry level, Lee (2020) documents strong peer effects, especially in low-competition, high-uncertainty sectors and among younger, smaller, or harder-to-value firms. This evidence supports the view that imitation serves as an information-based mechanism to reduce uncertainty in dividend decisions.

In contrast, payout practices in China have evolved primarily under the influence of regulatory mandates, most notably those introduced by China Securities Regulatory Commission (CSRC) in 2013, designed to strengthen cash dividend payments and protect minority shareholders. Jiang, Ma, and Shi (2017) document that stock liquidity increases both payout levels and propensity to pay, with effects most pronounced when information environments are opaque and insider-outsider conflicts are severe. Moreover, market reactions to CSRC stipulations are more favorable for low-liquidity firms, suggesting that regulation can substitute for market discipline. Turning to ownership, Firth, Gao, Shen, and Zhang (2016) find that mutual fund ownership significantly increases the likelihood and level of payouts, particularly in SOEs and firms with abundant free cash flows, while other institutional investors exert little influence. Finally, Tao, Wei, Xiang, and Yi (2022) highlight the role of board composition, showing that directors with foreign experience promote larger dividends, particularly when they serve as independent directors, in low-growth firms, or in non-SOEs. The effect is especially pronounced when such experience is acquired in countries with stronger investor protection, consistent with a governance-transfer mechanism.

Taken together, these findings highlight the central role of cash dividends within the contracting framework. In environments characterized by concentrated ownership and weaker investor protection, dividends function primarily as a governance mechanism that mitigates agency conflicts and alleviates concerns over expropriation. The evidence

also suggests that dividends serve as a commitment device that constrains managerial discretion, particularly in settings where external monitoring is limited. In contrast, while signaling considerations are central in the theoretical literature, the empirical evidence from Chinese-speaking regions places greater emphasis on institutional factors, such as tax regimes, regulatory mandates, and ownership structures, in shaping dividend policies.

4.2 Share Repurchase

In addition to cash dividends, open-market share repurchases (OMRs) serve as a flexible alternative for returning cash to shareholders. While dividends and repurchases are value-equivalent in perfect markets, real-world managers favor buybacks to signal perceived undervaluation (Ikenberry, Lakonishok, and Vermaelen, 1995), exploit market timing opportunities (Dittmar and Field, 2015), distribute free cash flow, or to manage Earnings Per Share (EPS) (Brav, Graham, Harvey, and Michael, 2005). The institutional landscape in Chinese-speaking regions provides a unique setting to examine these motives, particularly given the regulatory shift in Taiwan and the high-transparency environment of Hong Kong.

While share repurchases had long been practiced in developed markets, repurchases in Taiwan underwent a significant transformation in August 2000 with the introduction of treasury-stock (open-market) programs. Prior to this regulatory shift, firms had relied solely on subsidiary buybacks since 1994. Because this older mechanism coexisted with the new open-market share repurchases (OMRs) until 2002, the overlapping period offers a clean comparison of their signaling effects. As documented by Wang (2008), although both open-market and subsidiary buybacks convey undervaluation signals, the former **generate** significantly stronger short-run positive abnormal returns, whereas no significant long-run differences are observed between the two vehicles. Underpinning these signaling dynamics is the level of information asymmetry within the industry. Tsai, Chen, and Ma (2007) develop a game-theoretic model showing that firms are more likely to initiate repurchase when the proportion of high-quality firms and industry size dispersion is larger. In contrast, incumbent repurchases by industry peers may deter subsequent followers as the marginal cost of a credible signal rises. Repurchase policy is further moderated by ownership heterogeneity and the associated agency conflicts. Given the prevalence of family-controlled firms in Taiwan, Hung, Chen, and Hsu (2010) document that such firms

exhibit a lower propensity for repurchases, with a non-linear relationship existing between buyback likelihood and the divergence of control and cash-flow rights. While family CEOs or CEO-chair duality may increase repurchase propensity, effective monitoring by outside directors is essential to facilitate cash distribution through these programs. In some instances, repurchases may diverge from shareholders' interests to serve defensive insider motives. Chan, Chen, Hu, and Liu (2018) propose the margin-call hypothesis, arguing that when controlling shareholders face falling prices and high pledge ratios, they utilize corporate resources for repurchases to defend price levels, significantly raising both the likelihood and scale of repurchases. Markets view such actions as self-serving, resulting in weaker announcement effects.

Cognitive limitations and behavioral heuristics can also partly explain the firm's repurchase behavior. Wang, Cheng, You, and Wu (2014) find that overconfident managers initiate repurchases more frequently, yet firms led by such managers experience significantly worse post-repurchase performance due to capital misallocation. Further analysis finds that financial constraints can mitigate this excess. Along with the behavioral perspective, Lin, Lu, and Wang (2024) document that when current prices fall farther below historical highs, firms are more likely to initiate programs and set higher targets. However, while this anchoring behavior elicits short-run reactions, the lack of long-run fundamental improvements suggests that these decisions are driven by behavioral biases rather than superior private information.

Ultimately, the valuation impact of repurchases hinges on execution credibility and market transparency. Because investors form ex-ante expectations of completion, Liu and Chen (2010) show that the gap between actual and expected completion rates is the primary driver of market reactions. For firms that are undervalued or face severe agency conflicts, above-expected completion is interpreted positively; when such conditions are absent, the same surprise is viewed negatively as excessive payout. Hsu, Chen, and Li (2015) further embed execution into a trading-equilibrium framework, finding that completion rates are positively associated with long-run performance, and that market liquidity amplifies short-run reactions. A unique institutional contrast is found in Hong Kong, where the mandate for daily disclosure of actual repurchases enables the investigation of stock price performance surrounding and following actual share repurchases. Zhang (2005), using these data, shows that firms in Hong Kong exhibit

opportunistic timing by buying following price declines and that, on average, repurchasers do not earn significant abnormal returns in either the short or long run. However, the evidence also reveals heterogeneity, with small and value firms performing best, and value firms achieve three-year buy-and-hold abnormal returns (BHARs) exceeding 20%, which echoes the execution-credibility and firm-characteristic channels documented in Taiwan.

Taken together, these findings highlight the multifaceted role of share repurchases within the contracting framework. While repurchases can serve as a signaling device under information asymmetry, their effectiveness depends on execution credibility and investors' beliefs about managerial follow-through. The evidence from Chinese-speaking regions further underscores the importance of agency considerations, as repurchases may be used either to distribute excess cash or to serve controlling shareholders' interests, particularly under high ownership concentration and share pledging. Behavioral biases, such as overconfidence and anchoring, further complicate these dynamics. In this sense, repurchases represent a more flexible but less commitment-intensive instrument than cash dividends, highlighting how different payout mechanisms address contracting frictions in distinct ways.

4.3 Stock Dividends and Stock Splits

Another payout mechanism distributes shares rather than cash. Stock dividends and stock splits are not “true” dividends in the sense that no cash leaves the firm; however, they reallocate claims among shareholders by adjusting the nominal number of shares outstanding. These actions are strategically employed by managers to signal firm prospects, manage market liquidity, or cater to specific investor preferences.

In Taiwan, stock dividends may be distributed out of retained earnings or capital surplus, and the source embeds distinct managerial intents. Wang, Chih, and Chen (2010) show that distributions from retained earnings are used to signal favorable prospects or to obtain tax benefits, and firms choosing this channel subsequently deliver better operating performance. By contrast, capital-surplus stock dividends are primarily intended to boost prices or cater to investors, with no comparable link to fundamentals. Although investors do not appear to distinguish *ex ante* between the two sources, market reactions are consistently more positive when governance quality is stronger, suggesting that institutional oversight conditions serve as a filter that allows investors to distinguish

between information-driven melons and catering-driven lemons. In the Chinese market, stock split decisions primarily reflect a strategic catering to the gambling preferences of retail investors. Given that retail investors often seek skewed, lottery-like returns, Hu, Lin, and Liu (2022) demonstrate that firms utilize splits to engineer such characteristics. The resulting influx broadens the shareholder base, improves risk sharing with incumbent investors, and strengthens firms' capacity to bear risk. Consistent with this shift, post-split firms exhibit higher leverage, lower cash holdings, and more frequent M&A, indicating greater risk-taking. This evidence highlights how shifts in shareholder composition drive fundamental changes in corporate financing and investment behavior.

5. ESG, Corporate Governance, and Related Issues

In the contracting view of corporate finance, ESG practices and corporate governance mechanisms address a broad set of market frictions that extend beyond financing and investment decisions. These frictions include agency conflicts arising from the separation of ownership and control, information asymmetries between firms and capital markets, limitations in commitment and control rights under incomplete contracts, and stakeholder externalities related to environmental, social, political, and labor considerations. ESG engagement and governance structures, therefore, play a central role in shaping how firms manage incentives, disclose information, allocate decision authority, and internalize external costs.

From this perspective, corporate governance mechanisms serve as primary tools for mitigating agency conflicts by disciplining managerial behavior, protecting minority shareholders, and constraining expropriation by controlling owners. Board structure, ownership concentration, executive compensation, and monitoring intensity determine whether ESG initiatives reflect value-enhancing strategies or opportunistic managerial discretion. At the same time, ESG disclosure and transparency address information asymmetries by improving the credibility and comparability of non-financial information, thereby influencing investor perceptions, capital market responses, and firms' access to external finance.

Commitment problems and control-rights considerations further shape the effectiveness of ESG strategies. Because sustainability investments often involve long

horizons, uncertain payoffs, and limited verifiability, firms' ability to credibly commit to ESG objectives depends on governance arrangements, regulatory enforcement, and the allocation of control rights. Weak monitoring or misaligned control structures can undermine ESG implementation, while stronger governance and institutional safeguards enhance firms' capacity to sustain environmental and social investments over time. In addition, ESG policies interact with stakeholder externalities by internalizing environmental risks, labor costs, and social responsibilities that would otherwise remain outside firms' contractual relationships, thereby affecting operating costs, risk exposure, and long-term value creation.

Accordingly, this section reviews empirical studies on ESG adoption, environmental performance, and corporate governance in Chinese-speaking regions, with a particular focus on Taiwan and China. The reviewed literature examines how governance structures, disclosure regimes, ownership patterns, and institutional environments jointly shape ESG practices and their valuation consequences. Together, these studies illustrate how ESG and governance mechanisms operate as integrated responses to agency conflicts, information asymmetries, commitment and control-rights limitations, and stakeholder externalities within the broader friction-based framework illustrated in Figure 1.

5.1 ESG Challenges

The literature offers competing frameworks for understanding how ESG engagement affects firm value. From a stakeholder-oriented perspective, ESG activities enhance firm value by strengthening relationships with key stakeholders, such as employees, customers, suppliers, and regulators, thereby improving operational resilience, reputational capital, and long-term cash flows (Freeman, 2010; Edmans, 2011). By reducing non-financial risks and fostering trust, ESG investments can lower financing costs and support sustainable value creation (Eccles, Ioannou, and Serafeim, 2014). In contrast, agency-based theories caution that ESG initiatives may reflect managerial discretion or self-serving behavior, particularly when monitoring is weak. From this view, ESG spending can divert resources from value-maximizing projects, exacerbate agency problems, and reduce firm value if it primarily serves managerial reputation-building rather than shareholder interests (Jensen, 2001; Barnea and Rubin, 2010).

More recent theoretical and empirical work reconciles these perspectives by

emphasizing conditional effects. ESG enhances firm value when it is aligned with material stakeholder concerns and supported by effective governance mechanisms that discipline managerial discretion. In the absence of such governance, ESG engagement risks becoming symbolic or opportunistic, yielding limited or even negative valuation effects (Edmans, 2021; Khan, Serafeim, and Yoon, 2016). This conditional framework implies that the valuation consequences of ESG are highly sensitive to institutional context, ownership structure, and the effectiveness of corporate governance.

Against this theoretical backdrop, Chinese-speaking regions, particularly Taiwan and China, provide a distinctive setting for examining ESG challenges. Their institutional environments, characterized by concentrated ownership, evolving regulatory regimes, and heterogeneous governance quality, shape how ESG principles are adopted, implemented, and priced by capital markets. As ESG standards have rapidly gained global prominence, these regions have emerged as informative cases where institutional frictions and governance structures critically condition firms' sustainability strategies.

Taiwan's adoption of ESG has been driven by regulatory initiatives such as Corporate Governance 3.0 and the Green Finance Action Plan 3.0, alongside increasing investor demand for sustainability disclosure. Yet, several challenges persist. First, regulatory acceleration has raised firms' compliance costs and highlighted difficulties in producing credible, standardized, and decision-useful disclosure (Chen, Hsieh, and Yang, 2024; Chiou, Li, Chan, and Hsieh, 2025). Energy transition and resource security add further constraints, as companies must balance decarbonization with concerns over production stability and rising operational costs (Chang, 2019). Second, corporate governance characteristics strongly shape ESG adoption. Family-controlled ownership, variable board independence, and managerial incentives determine how credibly firms can commit to sustainability strategies. Research emphasizes that board engagement and managerial attention remain uneven across firms, complicating consistent ESG execution (Chiu and Huang, 2019; Hsu, Liu, and Peng, 2024). The staged rollout of independent directors illustrates the incremental nature of reforms and the gap between regulatory compliance and substantive monitoring (Huang, Ke, and Lin, 2020; Li, Chi, and Chen, 2024).

Finally, capital markets demand more disclosure and information that is material to firm value. Firms must learn to focus on material ESG issues and integrate sustainability into fundamentals rather than rely on undifferentiated scores. Investors, too, face the

challenge of navigating heterogeneous ratings and potential greenwashing, underscoring the importance of high-quality, credible disclosure (Ke, Wang, and Chan, 2024; Choo, Tsai, Yang, and Yin, 2021). Taken together, Taiwan's ESG challenges span regulatory compliance, resource constraints, governance limitations, and capital-market expectations, making it a valuable case for international comparative studies.

On the other hand, China, while making notable progress in ESG promotion, faces its distinct set of challenges. A defining feature of its environment is the dominance of SOEs and concentrated ownership, which create conflicts between political objectives and profit maximization. These dynamics constrain the depth of ESG adoption and highlight the tension between regulatory compliance and genuine stakeholder orientation (Chen, Firth, Gao, and Rui, 2006; Liu and Lu, 2007). Environmental pressures are particularly acute, as severe air pollution and resource-intensive industrial activity expose firms to both domestic and international scrutiny. Compliance with stricter regulations raises costs for corporations, especially in energy-intensive sectors, making it difficult to align sustainability initiatives with operational efficiency (Wang, Dai, and Kong, 2021; Cheng, Chu, Deng, and Huang, 2022).

Governance characteristics also complicate ESG integration. Limited protection of minority shareholders, political connections, and the persistence of controlling shareholders weaken external monitoring and investor protection. Although reforms have introduced independent directors and improved disclosure, enforcement remains inconsistent, leading to concerns over credibility (Chen, Chen, Li, and Ni, 2018; Cao, Cumming, and Wang, 2015; Wei, Hu, and Chen, 2020). In addition, the social dimension of ESG remains underdeveloped. Board gender diversity and inclusiveness still lag behind global standards, raising concerns about governance quality and organizational adaptability. This dimension reflects broader institutional constraints in embedding ESG across firms (Liu, Wei, and Xie, 2014; Wu, Lee, Lee, and Peng, 2022).

Overall, both Taiwan and China face multifaceted ESG challenges, yet their institutional contexts shape these obstacles in distinct ways. Taiwan's trajectory is characterized by regulatory acceleration, heterogeneous governance structures, and strong capital-market expectations within a relatively open and export-oriented economy. In contrast, China's difficulties arise from the dominance of SOEs, weaker investor protection, high compliance costs, and uneven progress in social inclusion. These

contrasting settings underscore how institutional environments shape the adoption and effectiveness of ESG, while also providing valuable comparative insights for the broader study of corporate governance and sustainability in Chinese-speaking regions.

5.2 ESG Integrated Studies

An important strand of the literature examines the determinants of ESG and corporate social responsibility (CSR) engagement, emphasizing the role of corporate governance structures. Board composition and ownership concentration significantly shape firms' adoption and intensity of CSR activities, reflecting the interaction between agency concerns and stakeholder orientation (Chiu and Huang, 2019). External governance mechanisms also matter. Venture capital participation provides monitoring and discipline during the investment period, thereby strengthening governance foundations. Interestingly, however, CSR performance improves most markedly after venture capital exit, suggesting that while venture capital helps establish governance capacity and resource allocation discipline, firms are able to pursue more substantive and long-term sustainability initiatives once they are relieved from short-term performance pressures imposed by venture capital monitoring (Cheng et al., 2022). Collectively, these studies highlight two complementary governance channels shaping ESG engagement. Internal governance structures such as board composition influence firms' willingness to adopt CSR policies, while external monitors such as venture capital investors affect the timing and strategic depth of sustainability initiatives. The contrast between these mechanisms also suggests that while external monitoring can strengthen governance discipline, it may simultaneously constrain long-term ESG investments when investors emphasize short-term performance objectives.

As ESG has become a core component of corporate strategy rather than a peripheral activity, research increasingly adopts an integrated perspective to examine how sustainability practices affect firm performance and capital market outcomes. A central theme in this literature is the importance of ESG materiality: firms that align CSR initiatives with issues that are financially material to key stakeholders exhibit superior operating performance, highlighting ESG as a channel for long-term value creation rather than symbolic compliance (Huang et al., 2020). Consistent with this view, stronger sustainability performance is associated with lower stock return volatility and higher liquidity, indicating that financial markets reward credible ESG engagement through

reduced risk and financing frictions (Ke et al., 2024). At the same time, the widespread adoption of ESG practices has made it increasingly difficult for investors to distinguish truly value-relevant sustainability efforts. Addressing this challenge, Choo et al. (2021) show that ESG investment strategies achieve higher returns when combined with fundamental financial analysis, suggesting that ESG information is most effective when integrated with traditional valuation signals in identifying firms capable of sustaining superior long-term performance.

Taken together, from the perspective of the contracting-based framework discussed earlier in this paper, these findings suggest that ESG practices influence firm value primarily by mitigating agency conflicts and reducing information frictions between firms and capital markets.

5.3 Environmental Issues

Research on the environmental dimension of ESG emphasizes the real economic consequences of firms' environmental performance, extending beyond disclosure to affect financial outcomes, information credibility, and labor costs. One strand of the literature focuses on disclosure quality and investor perceptions. Li et al. (2024) show that environmental information disclosure enhances investors' assessment of earnings quality, particularly when supported by governance mechanisms such as managerial ownership, which strengthens disclosure credibility. Beyond disclosure, proactive environmental engagement also has direct performance implications. Using data from Taiwan, Chiou et al. (2025) document that firms with stronger environmental performance exhibit superior financial performance and stock returns, suggesting that capital markets reward substantive environmental responsibility rather than symbolic compliance. Environmental conditions can also impose significant internal cost pressures. Using data from China, Wang et al. (2021) find that severe air pollution forces firms to increase employee compensation and benefits, indicating that environmental risks raise labor costs and weaken firm competitiveness. Collectively, these studies suggest that environmental performance affects firm value through several complementary channels. Disclosure improves information transparency and investor confidence; strong environmental performance enhances operating and market outcomes; and environmental risks such as pollution impose real internal cost pressures on firms.

Moreover, a complementary line of research adopts a policy-based perspective to identify the causal effects of environmental regulation on corporate financial outcomes. Using Taiwan's Air Pollution Prevention Action Plan of 2017 as a quasi-natural experiment, Chen et al. (2024) find that firms with higher pollutant emissions experience a significant increase in bank loan rates following the policy's implementation. Importantly, firms that successfully reduce emissions subsequently benefit from lower borrowing costs, indicating that creditors price environmental risk and reward improvements in environmental performance.

5.4 Corporate Governance Issues

5.4.1 Corporate Governance Characteristics

Corporate governance environments in East Asia exhibit distinctive features that shape how firms operate and how reforms are interpreted. In Taiwan, ownership is highly concentrated and often family-controlled, with pyramidal structures, cross-holdings, or dual-class shares separating control from cash-flow rights. This type of ownership starkly contrasts with the dispersed ownership common in Anglo-American systems and raises concerns over minority shareholder protection. Reforms to strengthen boards show that formal adoption does not necessarily translate into substantive effectiveness. While independent directors have been introduced, their effectiveness frequently diverges from regulatory intent when appointees retain close affiliations with controlling shareholders, complicating their monitoring role (Chou, Chung, and Yin, 2013). Gradual reforms, such as the staged introduction of independent directors and the persistence of the supervisor system, illustrate the gap between regulatory compliance and substantive independence, providing a quasi-experimental setting for analyzing governance outcomes (Chou, Hamill, and Yeh, 2018). Moreover, Taiwan's civil law system offers weaker investor protection than common law jurisdictions, elevating the importance of internal mechanisms such as concentrated ownership, board independence, and director monitoring.

In China, concentrated ownership takes a different form, dominated by SOEs pursuing political and profit objectives. This dual mandate permeates corporate decision-making and undermines minority shareholder protection (Chen et al., 2006; Liu and Lu, 2007). Independent directors are formally required, but their effectiveness is often constrained by political ties or the dominance of controlling shareholders, raising doubts

about genuine independence (Chen, Chen et al., 2018; Cao et al., 2015; Wei et al., 2020). Governance inclusiveness remains limited, as evidenced by the lack of gender diversity in leadership, which reflects sluggish progress in improving overall governance quality (Liu et al., 2014; Wu et al., 2022). Taken together, these institutional features highlight how ownership patterns, regulatory frameworks, and political influence jointly shape corporate governance effectiveness.

5.4.2 Board of Directors

From the perspective of the contracting-based framework discussed earlier in this paper (Tirole, 2010), the board of directors represents a central governance mechanism designed to mitigate agency conflicts between managers and shareholders while facilitating strategic coordination between firms and external stakeholders. The literature on boards of directors also conceptualizes the board as a multi-functional governance institution rather than a single-purpose monitoring mechanism. Based on agency theory and resource dependence theory, Shieh (2009) identifies four core board functions: monitoring, strategic decision-making, resource provision, and advisory services, and provides empirical validation using survey evidence from Taiwanese listed firms. This framework establishes the basis for examining how board composition and director characteristics affect corporate outcomes.

A growing body of research examines the determinants of board composition. Ownership structure plays a central role in shaping independent director appointments. Using Taiwanese data, Chou et al. (2018) show that formally compliant independent director appointments differ substantially in quality, reflecting controlling shareholders' incentive-alignment and entrenchment considerations. Director workload is another key dimension. Ting and Chen (2010) document that director busyness arises from firms' demand for professional expertise and reputation as well as firms' need for external resources, suggesting heterogeneity in the governance implications of busy boards.

Empirical evidence from Taiwan links board composition and director engagement to firm outcomes. Chou et al. (2013) find that higher board meeting attendance by directors themselves is positively associated with firm performance, while attendance by authorized representatives is negatively related to performance. Board leadership changes also affect firm outcomes. Chou and Hsu (2014) document significant performance effects following

chairman turnover, consistent with the role of leadership stability in corporate governance. Beyond financial performance, boards influence sustainability outcomes. Hung, Wei, and Chen (2024) show that stronger board commitment is associated with higher corporate social responsibility performance. Taken together, these studies highlight that board effectiveness depends not only on formal board structure but also on the intensity of director engagement and leadership stability.

Evidence from China provides complementary insights in an emerging market setting. Chen et al. (2006) find that a higher proportion of outside directors is associated with a lower likelihood of corporate fraud, indicating the importance of board monitoring under weak investor protection. Board diversity further shapes firm outcomes. Liu et al. (2014) document a positive relationship between female board representation and firm performance, with stronger effects when female directors reach a critical mass.

5.4.3 Ownership and Control

The literature emphasizes ownership concentration, family ownership, and the separation of cash-flow and voting rights as central determinants of firm value. From the perspective of the contracting-based framework discussed earlier in this paper (Tirole, 2010), ownership structure determines the allocation of control rights among managers, controlling shareholders, and minority investors, thereby shaping the incentives and potential agency conflicts within the firm. In contrast to dispersed ownership systems, concentrated ownership can mitigate the classic manager-shareholder agency problem by strengthening monitoring incentives and aligning control with firm performance (Jensen and Meckling, 1976; Shleifer and Vishny, 1986). However, when control rights exceed cash-flow rights, a distinct principal-principal agency conflict emerges, as controlling shareholders retain decision-making power while bearing only a fraction of the cash-flow consequences. This divergence increases incentives for expropriation and tunneling, thereby reducing firm value (La Porta, Lopez-de-Silanes, and Shleifer, 1999; La Porta, Lopez-de-Silanes, Shleifer, and Vishny, 2002; Bebchuk, Kraakman, and Triantis, 2000).

Family ownership introduces additional trade-offs. On the one hand, families' long investment horizons, reputational concerns, and firm-specific human capital can support value creation through effective monitoring and commitment to the firm (Anderson and Reeb, 2003). On the other hand, entrenched family control, particularly when reinforced

by pyramidal structures, dual-class shares, or excess voting rights, can weaken external discipline and facilitate private benefit extraction, undermining minority shareholder protection (Morck, Shleifer, and Vishny, 1988; Claessens, Djankov, Fan, and Lang, 2002).

This framework provides a unifying lens for interpreting empirical evidence from economies characterized by concentrated ownership, weak investor protection, and family-dominated business groups, features that are particularly salient in Chinese-speaking markets. A recurring theme is the influence of controlling shareholders and family ownership. Liu (2007) shows that family-controlled firms in Taiwan often combine CEO power with family succession planning, which can stabilize leadership but also increase the risk of entrenchment. Extending this perspective, Cao et al. (2015) demonstrate that demographic constraints, such as China's one-child policy, alter succession choices and governance practices in family firms, underscoring how institutional context further complicates ownership dynamics.

The separation of control and cash-flow rights is another critical determinant of governance outcomes. Yeh, Ko, and Su (2003) emphasize that the deviation between controlling shareholders' voting rights and cash-flow rights, as well as their share pledge ratios, are important indicators of expropriation tendencies, both of which are negatively associated with firm value. Similarly, Chang, Hou, Lin, and Shu (2014) show that greater divergence between control and cash-flow rights reduces accessibility to annual general meetings, thereby weakening shareholder participation and oversight. At the same time, under certain conditions, control structures can align with value creation: Chan, Hu, and Wang (2003) find that when investment opportunities exist and controlling shareholders' cash-flow rights are relatively low, incremental increases in cash-flow rights enhance firm value. Taken together, these studies highlight the dual governance role of concentrated ownership structures. While concentrated ownership and family control can mitigate managerial agency problems through stronger monitoring incentives, large deviations between control rights and cash-flow rights introduce a distinct principal-principal conflict that facilitates minority expropriation. Importantly, the mixed empirical findings also reflect institutional differences. Evidence emphasizing monitoring benefits often arises in settings where controlling shareholders retain substantial cash-flow stakes, whereas evidence of tunneling and governance failures is more prevalent in environments characterized by pyramidal ownership structures, weak investor protection, or large

deviations between voting and cash-flow rights. As a result, many of these findings are closely tied to the institutional features of East Asian ownership systems and may not fully generalize to economies characterized by dispersed ownership and stronger minority shareholder protection.

Ownership concentration also affects earnings management and fraud risk. Liao and Yang (2007) show that in family-controlled firms, conventional governance mechanisms such as board independence and larger board size are ineffective in curbing earnings manipulation, highlighting the limitations of formal board structures under concentrated ownership. Similarly, Liu and Lu (2007) argue that agency conflicts between controlling and minority shareholders account for a significant portion of earnings management in China's listed firms. Chen et al. (2018) add that controlling shareholders' personal incentives, such as foreign residency rights, can increase the likelihood of corporate fraud, suggesting that ownership interacts with individual attributes to amplify governance risks. Chen and Ho (2009) further highlight that board characteristics, such as independence and structure, mediate how family control translates into corporate policies, with weaker boards allowing entrenched controlling shareholders to exert disproportionate influence.

Controlling shareholders' power also shapes broader market outcomes, influencing how investors perceive and value firms. Yeh (1998) argues that family-controlled business groups generate strong return covariation in Taiwan's stock market, implying that investors must account for family group effects when constructing portfolios to achieve true diversification. Lee, Hu, and Wang (2007) show that in smaller firms, controlling shareholders' cash-flow rights have a significantly positive effect on the abnormal returns of overseas convertible bond issuance, suggesting that cash-flow rights can align with firm value under certain market conditions. By contrast, Wang, Chen, and Chang (2012) document that concentrated ownership reduces stock market liquidity, highlighting a negative externality of family control that undermines investor protection and market efficiency. More recent studies reinforce these risks: Chang and Yang (2023) find that the deviation between ultimate control rights and ownership is significantly associated with financial constraints, while Lin, Hsu, Chi, and Chen (2009) show that greater divergence between voting and cash-flow rights raises firms' credit risk, indicating that ownership misalignment has adverse financing and credit implications.

Variations in ownership structures further condition governance effectiveness.

Hsueh and Hsu (2012) find that the ownership of board directors and supervisors does not increase their willingness to convene or attend board meetings, nor does it motivate them to strengthen internal monitoring through mechanisms such as outside directors. This passivity reflects a preference for preserving existing power, except when firms face high risk. Jang, Tsai, and Kuo (2010) show that private equity placements can generate positive announcement effects, partially explained by subsequent adjustments in ownership concentration, highlighting the interaction between financing and control structures. Chu, Lee, Chuang, and Liao (2019) document that large shareholding and institutional ownership influence firm performance nonlinearly, positively at moderate levels but detrimentally once ownership surpasses a threshold, suggesting an inverted U-shaped relationship between ownership concentration and firm value. Hsieh and Chan (2022) demonstrate that state ownership in China weakens the positive relationship between CSR and both financial performance and stock returns, illustrating how state influence dilutes the effectiveness of sustainability initiatives.

In sum, research on ownership and control demonstrates that concentrated and family-dominated structures generate both stabilizing effects and significant governance risks. While control rights can at times align with firm value, deviations from cash-flow rights, weak monitoring, and state involvement often undermine investor protection, making ownership a central determinant of governance effectiveness in East Asian markets.

5.4.4 Executive and Employee Compensation

Theoretical literature views executive and employee compensation as a central governance mechanism for addressing agency problems within the firm. From the classic agency perspective, compensation contracts are designed to align managers' and employees' incentives with shareholder interests by linking pay to firm performance, thereby mitigating moral hazard and effort shirking (Jensen and Meckling, 1976; Holmström, 1979). Pay-performance sensitivity, equity-based compensation, and bonus schemes are therefore predicted to enhance firm value by encouraging value-maximizing behavior.

Subsequent theoretical work highlights important limitations of incentive-based compensation. When monitoring is costly or ownership is concentrated, firms may

substitute direct control and oversight for high-powered incentive contracts, reducing the reliance on performance-based pay (Holmström and Milgrom, 1991; Shleifer and Vishny, 1997). Moreover, compensation contracts can generate unintended consequences, such as excessive risk-taking, short-termism, or earnings manipulation, particularly when performance measures are imperfect or manipulable (Baker, Jensen, and Murphy, 1988). These trade-offs imply that the effectiveness of compensation as a governance tool depends critically on ownership structure, board oversight, and institutional context.

Consistent with the agency-based view that compensation serves as a governance mechanism, research on executive and employee compensation in Taiwan develops a nuanced understanding of how incentive contracts interact with ownership structure, board oversight, and performance measurement. A main theme is the conditional nature of pay-performance alignment. Hung and Wang (2005) show that cash-based executive compensation relies on accounting and performance metrics, though the strength of these links varies substantially across industries and governance environments. Relatedly, Wang, Lin, and Hsieh (2005) document that R&D expenditures are positively reflected in executive compensation, but also introduce scope for opportunistic behavior, highlighting the trade-off between incentivizing innovation and controlling agency risk.

Another strand of the literature emphasizes the interaction between compensation contracts and broader governance mechanisms. Lin, Huang, and Chen (2012) find that executive compensation is closely linked to dividend payout policies, suggesting that boards coordinate managerial incentives with shareholder return mechanisms to mitigate agency conflicts. This evidence is consistent with the view that compensation does not operate in isolation, but rather complements other governance tools in shaping managerial behavior.

Empirical studies further illustrate how local ownership structures condition the effectiveness of incentive-based compensation. Lin and Liu (2003) find that CEO compensation in Taiwan is positively related to firm performance, supporting the basic prediction of agency theory. However, the sensitivity of pay to performance is significantly weaker in firms with concentrated ownership, where controlling shareholders can rely on direct monitoring as a substitute for high-powered incentive contracts. Extending this perspective, Lin and Hu (2003) show that executive compensation structures are shaped not only by performance considerations but also by governance characteristics such as

board oversight and ownership concentration. Taken together, these studies highlight institutional differences in governance structures: in economies with dispersed ownership, incentive-based compensation tends to play a central role in aligning managerial incentives, whereas in environments characterized by concentrated ownership and family control, direct monitoring and internal control mechanisms may partially substitute for performance-based pay. As a result, the effectiveness of compensation contracts is closely tied to institutional ownership systems and may not fully generalize across different governance environments.

Beyond top executives, compensation-related mechanisms at the employee level provide an additional governance channel. Hsu and Chen (2008) show that employee bonus schemes link worker incentives to firm performance, with implications for profitability and long-term value creation. Kuo and Yu (2013) examine the valuation effects of employee stock options (ESOs) and find that the market initially interpreted disclosed ESO expenses as value-enhancing. Following the implementation of Accounting Statement No. 39 in 2008, however, ESO disclosures became negatively associated with firm value, reflecting investors' recognition of ESOs as real compensation costs rather than symbolic incentives. Notably, recognized ESO expenses have no significant valuation effect due to their relatively small magnitude.

Overall, the Taiwanese evidence reinforces the view that compensation functions as a flexible governance tool whose effectiveness depends on institutional context. Executive and employee compensation contracts interact with ownership concentration, board oversight, and regulatory frameworks, shaping how incentives translate into firm performance and value. From the perspective of the contracting-based framework of Tirole (2010), the evidence from Chinese-speaking markets provides an important extension to the traditional agency-based view of compensation. While much of the Western literature emphasizes incentive alignment through high-powered compensation contracts in dispersed ownership systems, studies from economies characterized by concentrated ownership and family control highlight how incentive contracts coexist with, and are sometimes substituted by, direct monitoring from controlling shareholders.

5.4.5 Other Topics

Beyond the main themes of board structure, ownership, and compensation, the literature also examines how broader contextual factors and director characteristics influence governance outcomes. One line of inquiry focuses on directors' political and social connections. Liu, Chiu, and Wang (2018) show that firms with board members embedded in stronger corporate social networks obtain more favorable bank loan contracts, as such connections reduce information asymmetry and improve access to external finance. This evidence suggests that directors' social capital can serve as an informal governance mechanism by facilitating resource acquisition. However, other studies document the potential costs of politically connected boards. Using Taiwanese data, Chi, Weng, Liao, and Huang (2017) find that firms with politically connected directors underperform in both accounting and market measures, with poorer performance observed when a larger proportion of directors previously served as government officials or legislators. These results indicate that political connections may weaken governance effectiveness by introducing rent-seeking incentives or constraining managerial autonomy. Consistent with this view, Wei et al. (2020) show that when politically connected directors lose their positions, firms in China's government-dominated market experience higher labor costs, highlighting the risks associated with reliance on political capital embedded in board membership.

Managerial behavior and psychological biases influence corporate decisions, but their consequences are conditioned by governance mechanisms. Shu, Yeh, Chiou, and Wang (2013) show that managerial overconfidence increases the likelihood of initiating mergers and acquisitions, while governance mechanisms weaken the positive association between overconfidence and deal completion, suggesting that monitoring mitigates excessive risk-taking. Similarly, Lu (2015) demonstrates that overconfident managers adopt less conservative dividend policies. This tendency is amplified by higher managerial ownership but constrained by stronger foreign institutional ownership, highlighting how ownership structures moderate the outcomes of managerial biases.

A related but distinct strand of the literature examines governance mechanisms that discipline underperforming management. Lee, Yeh, and Ho (2005) focus on executive turnover and show that CEO ownership reduces the likelihood of managerial dismissal, consistent with managerial entrenchment. However, the presence of external blockholders attenuates this negative relationship, indicating that external ownership serves as an

effective governance mechanism for removing poorly performing executives.

Innovation and investment outcomes also interact with governance. Hung, Chen, and Lin (2007) analyze R&D-intensive firms and find that governance mechanisms, particularly board oversight and ownership structure, affect both R&D intensity and diversification strategies, shaping their performance implications. Wu et al. (2022) provide quasi-experimental evidence from China's high-speed rail rollout, showing that improved geographic proximity enhances investment efficiency by reducing both over- and under-investment, particularly where information frictions are severe. Together, these studies underscore how governance influences the effectiveness of innovation, diversification, and spatial connectivity strategies.

Governance responses to crises have also been investigated. Ting, Chang, and Lin (2011) compare firms that successfully turn around from distress with those that remain trapped and find that pre-crisis governance quality is a critical differentiator. Firms with stronger governance prior to distress are more likely to recover, while those with weak governance remain in crisis longer and suffer greater long-term shareholder wealth losses. This evidence highlights that effective governance affects firm behavior in normal conditions and determines resilience in the face of financial shocks.

Overall, this section has synthesized empirical studies on ESG and corporate governance in Chinese-speaking regions, with Taiwan serving as a particularly important context for analysis. Importantly, the empirical evidence from Chinese-speaking markets extends the contracting-based governance framework of Tirole (2010). While a large body of international evidence documents the prevalence of family ownership and concentrated control outside the United States (Claessens et al., 2002), studies from Chinese-speaking regions provide deeper insights into how such ownership structures shape the interaction among governance mechanisms. In these environments, controlling shareholders influence not only firm control but also the functioning of boards, incentive contracts, and ESG strategies. The evidence suggests that governance mechanisms frequently operate through substitution and complementarity; for example, direct monitoring by controlling shareholders may substitute for high-powered incentive contracts, while ownership structures condition the effectiveness of boards and sustainability initiatives.

6. Conclusion

This review article surveys corporate finance studies based on data from Chinese-speaking regions, with particular emphasis on Taiwan. By organizing the literature around the major domains of capital structure, corporate investment, payout policy, governance, and ESG within a unified contracting-based framework, we highlight both the alignment with global theoretical developments and the distinctive institutional characteristics that shape these markets. Drawing on Tirole's view of corporate finance, the reviewed studies collectively illustrate how firms' financial and governance decisions respond to fundamental market frictions, including agency conflicts, asymmetric information, commitment and control-rights limitations, and stakeholder externalities.

Institutional features such as family ownership, concentrated control structures, emerging IPO markets, and advanced technological development condition the nature and severity of these frictions, thereby influencing how classical corporate finance mechanisms operate in practice. Rather than merely replicating established theories, empirical research in Chinese-speaking regions provides a rich setting for examining how contractual arrangements, governance structures, and policy environments modify firms' responses to these frictions. Overall, the surveyed studies demonstrate that corporate finance research in these regions has evolved from applying foundational theories toward offering deeper insights into how institutional contexts shape corporate behavior, contributing to a more comprehensive and globally relevant understanding of corporate finance.

Looking ahead, several promising avenues might warrant future research. First, the role of R&D and innovation can be investigated much deeper, particularly how Taiwanese R&D firms influence global technology supply chains and how they are affected by the risks and opportunities of U.S.-China decoupling. Second, the evolving IPO market in Taiwan provides fertile ground for investigating listing dynamics, valuation patterns, and regulatory shifts in a context that bridges regional and global capital markets. Third, corporate governance in Chinese-speaking economies should be examined in relation to geopolitical shocks, especially the U.S.-China trade war, which may alter ownership structures, monitoring effectiveness, and cross-border financing strategies. Fourth, digital transformation, fintech innovation, and artificial intelligence reshape disclosure practices, stakeholder engagement, and governance monitoring, creating new opportunities and risks that merit careful examination. Fifth, comparative work across Chinese-speaking economies could further illuminate how institutional variations, such as family-controlled

versus state-owned ownership regimes, shape the effectiveness of ESG adoption. Sixth, greater attention should be devoted to the social dimension of ESG, including labor rights, gender diversity, and employee well-being, which remains less developed relative to environmental and governance research. Seventh, longitudinal approaches would help trace how regulatory reforms and market pressures interact over time, offering insights into compliance dynamics, substantive change, and unintended consequences. Eighth, in an environment where TSMC dominates the semiconductor industry supply chain, supply chain management may be crucial, which has raised concerns and anxieties among industry professionals and policymakers. Finally, addressing endogeneity has become an essential requirement in modern corporate finance research. Chan et al. (2018) provide one such example, exploiting a change in Taiwan's pledge anti-dilution policy to identify causal effects. Another example is Chang et al. (2023), who examine the Taiwanese government's 2016 initiative to expand lending to small and medium-sized enterprises (SMEs). These policy changes offer promising quasi-natural experiments that future research can leverage to investigate a broader range of corporate finance issues.

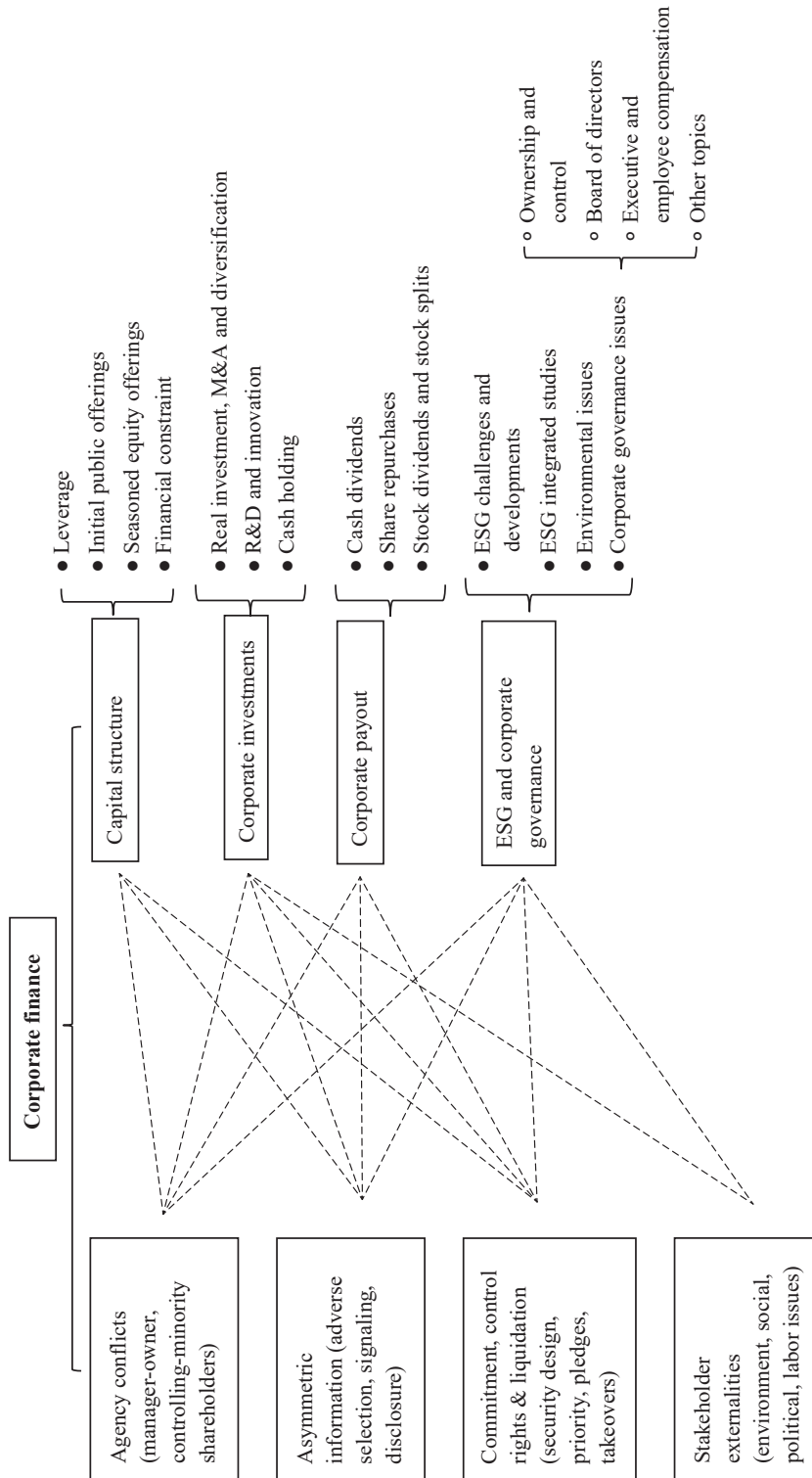


Figure 1 Overview and Themes of Corporate Finance Research in Chinese-Speaking Region

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Author Biography

Yan-Shing Chen

Yan-Shing Chen is a Professor at the College of Management at the National Taiwan University. Before arriving at NTU in 2013, he was an Assistant Professor at National Yunlin University of Science and Technology. He received his Ph.D. in Finance from the Department of Finance at National Taiwan University in 2009. His research examines corporate finance and sustainability issues. His works have been published in the *Journal of Financial Economics*, *Journal of Financial and Quantitative Analysis*, *Research Policy*, and *Journal Banking and Finance*.

Yan Feng

Yan Feng is a Ph.D. candidate in the Department of Finance at the National Taiwan University. Her research area focuses on corporate finance.

Woan-Lih Liang

Woan-Lih Liang is a Professor at the College of Management at the National Yang Ming Chiao Tung University. Before arriving at National Chiao Tung University in 2013, she was an Associate Professor at Yuan Ze University. She received her Ph.D. in Finance from National Taiwan University in 2007. Her research examines corporate finance issues, payout policy and innovation. Her work is published in the *Journal of Financial and Quantitative Analysis*, *Research Policy*, *Journal Banking and Finance*, *Journal of Empirical Finance*, and *Journal of Business Ethics*.

*Yanzhi Wang

Yanzhi Wang is a Distinguished Professor at the College of Management at the National Taiwan University. Before arriving at NTU in 2012, he was an Associate Professor at Yuan Ze University. He received his Ph.D. in Finance from the Department of Finance at National Taiwan University in 2005. His research examines corporate finance issues, especially in innovation and payout policy. His works have been published in the *Journal of Financial Economics*, *Strategic Management Journal*, *The Accounting Review*, *Journal of Financial and Quantitative Analysis*, and *Research Policy*.

*We thank two anonymous reviewers, Chia-Ying Sherry Chan, Hung-Kun Chen, Hsiou-Wei Lin (the editor), and Carl Shen, and Taychang Wang for their useful comments and suggestions. This work was supported by the Center for Research in Econometric Theory and Applications (Grant no. 112L900201)

and Ministry of Science and Technology in Taiwan (NSTC 112-2410-H-002 -151 -MY2).

Corresponding author: Yanzhi Wang, Department of Finance, National Taiwan University. Tel: +886-2-33661075; E-mail address: yzwang@ntu.edu.tw.

作者感謝兩位匿名審查人、詹佳榮、陳鴻崑、林修葳（期刊主編）、沈信漢和王泰昌教授提供的寶貴意見與建議。本研究由臺灣大學計量經濟理論與應用研究中心（高教深耕教育部計畫編號：112L900201）和國科會（國科會計畫編號 NSTC 112-2410-H-002-151-MY2）經費補助協助完成。

通訊作者：王衍智；國立臺灣大學財金系，連絡電話：+886-2-33661075；

電子信箱：yzwang@ntu.edu.tw。

