



EDITORIAL ESSAY

Coevolution of SOEs and the Chinese Economy: The Roles of SOE Heterogeneity from the Institutional, Strategic, and Organizational Perspectives

Kenneth G. Huang¹ , Runtian Jing², Jun Xia³, Cyndi Man Zhang⁴, Weiguo Zhong⁵ , and David H. Zhu⁶

¹National University of Singapore, Singapore, ²Shanghai Jiao Tong University, China, ³University of Texas at Dallas, USA, ⁴Singapore Management University, Singapore, ⁵Peking University, China and ⁶Arizona State University, USA

Corresponding author: Kenneth G. Huang (kennethhuang@nus.edu.sg)

Abstract

State-owned enterprises (SOEs) in China play a critical role in national economic development and the country's positioning on the global stage. Chinese SOEs have undergone substantial transformations from traditional government-run entities to a variety of corporate forms exhibiting different levels of state involvement. Despite their substantial influence, the internal diversity of SOEs – from wholly state-owned to mixed-ownership – has not been thoroughly examined. This paper provides an overview of SOEs' critical roles in the Chinese economy, the relationship between SOEs and privately owned enterprises (POEs), and the challenges of SOEs in different stages of Chinese economic development. It then introduces five research papers that explore the institutional, strategic, and organizational perspectives on how SOEs manage the dual pressures of state and market logic, respond to policy adjustments, tackle leadership challenges, and navigate current global trends such as digital transformation, technological innovation, and environmental sustainability. In this paper, we provide important implications for policy and managerial practices and highlight a future research agenda for the heterogeneity of Chinese SOEs, and how SOEs respond to these challenges in the evolving geopolitical landscape, adapt their strategies, and manage relationships with foreign governments and enterprises under such conditions.

摘要

中国的国有企业（SOEs）在国家经济发展和全球舞台上的定位中扮演着至关重要的角色。中国的国有企业经历了从传统的政府运营实体到多种公司形式的重大转型，这些形式展现了不同程度的国家参与。尽管它们具有巨大的影响力，但国有企业内部的多样性——从完全国有到混合所有制——尚未得到充分研究。本文概述了国有企业在中国经济中的关键作用、国有企业与民营企业（POEs）之间的关系，以及国有企业在中国经济发展不同阶段面临的挑战。随后，本文介绍了五篇研究论文，这些论文从制度、战略和组织的角度探讨了国有企业如何在国家和市场逻辑的双重压力下运作、应对政策调整、解决领导力挑战，并应对当前全球趋势，如数字化转型、科技创新和可持续发展。在本文中，我们为政策和管理实践提供了重要启示，并提出了关于中国国有企业异质性的未来研究议程，以及国有企业如何在不断变化的地缘政治格局下应对这些挑战、调整其战略，并在此条件下管理与外国政府和企业的关系。

Keywords: Chinese economy; heterogeneity; institutions; organizations; state-owned enterprises (SOEs); strategy; technological innovation

关键词: 国有企业 (SOEs) ; 异质性; 制度; 战略; 组织; 科技创新; 中国经济

Introduction

State-owned enterprises (SOEs) in China play a critical role in national economic development and the country's positioning on the global stage. Representing nearly a quarter of the Fortune Global 500 corporations, Chinese SOEs have undergone substantial transformations from traditional government-run entities to a variety of corporate forms exhibiting different levels of state involvement. Despite their substantial influence, the internal diversity of SOEs – from wholly state-owned to mixed-ownership – has not been thoroughly examined. This special issue of *Management and Organization Review* addresses this research gap by offering a collection of studies that explore the heterogeneity of Chinese SOEs, analyzing their organizational practices, strategic goals, and performance outcomes.

Over the past four decades, China's SOEs have undergone significant transformations, evolving alongside the country's economic reforms. In the 1980s, following Deng Xiaoping's 'reform and opening up' policies, China began shifting from a centrally planned economy to a more market-oriented system. During this period, SOEs faced growing competition from the private sector, and many were restructured or closed due to inefficiency (Nee, 1992). In the 1990s, SOE reforms intensified, focusing on corporatization, downsizing, and privatization of smaller enterprises in less strategic sectors. Large SOEs were consolidated into conglomerates in key sectors such as energy, telecommunications, and infrastructure, while smaller, less competitive ones were either sold off or closed (Jing & McDermott, 2013). By the 2000s, many SOEs were listed on domestic and international stock exchanges, adopting more modern management practices. The government maintained strong control over SOEs in strategic sectors, viewing them as instruments of state policy and vehicles for enhancing national competitiveness. Despite reforms, SOEs retained significant market dominance, especially in areas such as banking, energy, and transportation (Lin, Lu, Zhang, & Zheng, 2020). In recent years, under President Xi Jinping, the government has reinforced the role of SOEs, positioning them as crucial to China's 'dual circulation' strategy, aimed at balancing domestic growth/consumption with international trade and investment due to the current trend toward deglobalization. Reforms have focused on improving efficiency, governance, and innovation (e.g., Huang, 2010), although concerns about market distortions and inefficiencies remain (Boeing, Mueller, & Sandner, 2016; Ralston, Terpstra-Tong, Terpstra, Wang, & Egri, 2006). Overall, SOEs in China have transitioned from inefficient state-run entities to more competitive, yet still state-dominated, players in strategic sectors, representing China to enter the stage of global competition, reflecting the government's evolving economic and political objectives (Beck, 2023).

SOEs' Critical Roles in the Chinese Economy

SOEs play a multitude of different critical roles in the Chinese economy. First, SOEs dominate crucial, strategic sectors like oil, electricity, infrastructure, and defense, where the government maintains control due to their strategic importance for national security and economic stability. These enterprises often receive preferential treatment in terms of financing, land access, and regulatory support. Second, SOEs enhance the growth and stability of the Chinese economy by contributing significantly to employment and gross domestic product. They also provide an additional function to ensure social stability, sometimes prioritizing national goals, such as poverty alleviation or infrastructure development, over profitability. Third, SOEs can serve as key actors to achieve the government's economic goals, including industrial policy, technological innovation, and sustainability initiatives as well as international initiatives such as the Belt and Road Initiative (BRI). Lastly, SOEs have been encouraged to undergo reforms and modernization by adopting modern corporate governance practices, improving efficiency, and becoming more competitive globally. Reforms include corporatization, partial privatization through stock market listings, and restructuring into large conglomerates.

Relationship Between SOEs and Privately Owned Enterprises

SOEs have coexisted through collaboration and competition with privately owned enterprises (POEs) in China's mixed economy. While POEs have driven innovation and growth, particularly in consumer

goods, technology, and services sectors, since the 1990s, they often operate under different conditions than SOEs. POEs tend to face higher barriers to market entry, financing, and regulatory support (World Bank Group, 2000) despite the Chinese government's pledge to level the playing field in recent years. There has been growing collaboration between SOEs and POEs, particularly in technology, energy, and infrastructure projects. Partnerships, such as joint ventures, to pool resources and accelerate development in areas of strategic importance, including 5G networks, renewable energy, and high-speed rail, are often encouraged by the government to leverage the strengths of both types of enterprises for national development goals. These partnerships often resulted in hybrid enterprises where both state and private capital had stakes, although strategic decision-making remained aligned with the government's long-term planning (Beck, 2023).

After 2021, China increasingly focused on the creation of state-controlled large firms in key sectors by consolidating SOEs with successful POEs. These firms have a higher likelihood of dominating their respective industries while advancing China's broader economic and geopolitical objectives. For example, by consolidating POEs that excelled in innovation but lacked scale or political clout with SOEs that had access to vast resources, influential entities emerged that were part private and part state-controlled. This fusion was often driven by the state to achieve both market efficiency and social welfare.

Challenges of SOEs in Different Stages of Chinese Economic Development

The evolution of SOEs in China mirrors the broader economic transformation of the country – from a centrally planned economy to a more market-oriented system (Nee, 1992). Each phase of reform has brought unique challenges, from inefficiency and social unrest to the balancing act between profitability and state control. Today, SOEs remain crucial to China's national strategy, though they continue to grapple with how they should continue to modernize in an increasingly competitive and innovation-driven global economy.

In the pre-reform era between 1949 and 1978, after the establishment of the People's Republic of China in 1949, the economy was centrally planned. SOEs were the backbone of industrial production. All large enterprises were state-owned and the government controlled production, prices, and distribution. SOEs operated largely without competition then, leading to inefficiencies, overstaffing, and low productivity (Bai, Lu, & Tao, 2006). Furthermore, the focus on fulfilling government quotas left little room for innovation or improvement in management practices. Central planning led to the misallocation of resources, with industries sometimes producing more than was needed or not adapting to market demand.

During the era following Deng Xiaoping's 'reform and opening up' policy from 1978 to the 1990s, China started experimenting with market mechanisms while maintaining the state's important role in the economy. SOEs were allowed more autonomy and began experimenting with profit retention, management reform, and wage reforms (Groves, Hong, McMillan, & Naughton, 1994). During this period, managers and workers within SOEs were often resistant to reforms, particularly those that could result in layoffs or the loss of privileges (Jing & McDermott, 2013). The initial reforms also led to confusion about property rights and blurred the lines between state ownership and market-oriented management for the SOEs. Autonomy was increased without introducing full accountability, which allowed inefficiency and corruption to persist in many SOEs.

In the 1990s to 2000s, the focus was on deepening reforms, which included downsizing, privatization, and corporatization. Specifically, in the 1990s, the government undertook a more aggressive reform agenda. Small- and medium-sized SOEs were either privatized or closed (Nabeshima, Perkins, & Yusuf, 2005), while large SOEs in strategic sectors were corporatized and transformed into conglomerates. Many SOEs were listed on domestic and international stock exchanges, introducing shareholders and improving corporate governance. The downsizing and privatization of smaller SOEs led to massive layoffs and social unrest. By the late 1990s, tens of millions of workers were laid off, which strained China's social safety nets. In addition, SOEs faced challenges in adopting modern corporate governance practices (Fan, Wong, & Zhang, 2013; Jia, Huang, & Zhang, 2019). State

ownership remained dominant, often leading to inefficient management structures and conflicts between state policy goals and profitability. Even as SOEs were corporatized, they were still expected to fulfill social and political objectives, such as job creation and supporting regional development, often at the cost of profitability.

During the era of the ‘market economy’ from 2000 to the 2010s, the emphasis was on global expansion and strategic leadership across different key technological and non-technological sectors. During this period, SOEs consolidated their control over key strategic sectors like energy, telecommunications, and infrastructure. At the same time, they expanded internationally, participating in the BRI and contributing to China’s global economic ambitions. Many SOEs became powerful global players, with government support in the form of subsidies, access to capital, and diplomatic backing. However, as SOEs expanded internationally, they faced intense competition from more efficient, privately owned multinational corporations, which exposed inefficiencies in management, innovation, and international operations. Many SOEs started accumulating high levels of debt, particularly in the infrastructure and construction sectors. This has become a significant risk to financial stability, with concerns over ‘zombie’ SOEs that were unprofitable but kept afloat by state subsidies. Furthermore, SOEs increasingly had to compete with a dynamic private sector in China, particularly in high-tech industries. Many SOEs struggled to innovate and keep pace with nimbler POEs.

In recent years since the 2010s, the Chinese government under President Xi Jinping has reasserted the importance of SOEs, positioning them as central to national development strategies such as the ‘dual circulation’ strategy and technological self-reliance. The focus has been on making SOEs more efficient, competitive, and innovative while retaining strong state control. However, as the government has tried to make SOEs more market-oriented and efficient while maintaining state control, it aggravates the tension between profitability and government objectives for the SOEs (Jin, Xu, Xin, & Adhikari, 2022). Furthermore, some SOEs have been tasked with leading technological innovation in areas like semiconductors, artificial intelligence (AI), and renewable energy. However, many SOEs lack the agility and innovative culture found in private companies, creating challenges in fulfilling these roles. Debt levels within SOEs remain a concern, particularly in sectors like real estate, infrastructure, and heavy industry. The Chinese government has implemented measures to reduce financial risk, but many SOEs continue to be financially strained. As SOEs expand abroad, they also face increased scrutiny from foreign governments concerned about China’s growing influence. In some cases, this has led to restrictions and obstacles in international markets, particularly in sensitive sectors like telecommunications and infrastructure.

Given the historical development of SOEs, the complexity of the current environment SOEs operate in, and the multitude of public and private goals SOEs strive to fulfill, heterogeneity among SOEs has been inherited and continues to be a necessity for SOEs to not only survive but also thrive. Indeed, Chinese SOEs operate in a multifaceted environment influenced by institutional, strategic/managerial, and contextual factors that shape their practices and outcomes (e.g., Jia et al., 2019). Previous research has predominantly focused on comparisons between SOEs and non-SOEs, frequently neglecting the substantial internal variations in the SOE sector itself (Bruton, Peng, Ahlstrom, Stan, & Xu, 2015). Recognizing the importance of these variations, the call for submissions for this special issue highlighted the necessity to delve into the internal differences of SOEs, especially against the backdrop of ongoing economic reforms and policy shifts in China. After more than 40 years of reforms, Chinese SOEs have adapted to their different roles and differ in the ownership and hierarchical governance structure, the level of hybridity in blending multiple logics, and the leadership characteristics and composition. This heterogeneity among the SOEs not only allows them to survive the economic reforms – including mixed-ownership and governance improvements – but also bolsters their efficiency and competitiveness while maintaining a balance between state oversight and market dynamics (Wang & Luo, 2019).

The articles selected for this issue, therefore, offer a thorough exploration of the institutional, strategic, and organizational perspectives on how SOEs manage the dual pressures of state and market logic, respond to policy adjustments, tackle leadership challenges, and navigate current global trends such as digital transformation and environmental sustainability.

Institutional Complexity and Heterogeneity in Chinese SOEs

The following five studies collectively reflect the roles of SOE heterogeneity from different perspectives. From an institutional perspective, the study on 'Institutional complexity and corporate environmental investments' by Li, Chang, Wang, and Zhang (2024) examines how institutional complexity from mixed-ownership affects SOE environmental strategies, highlighting how competing state and financial logics create varied responses to environmental investments. From a strategic perspective, the 'Digital divide' article by Luo, Wang, Chen, and Chen (2024) contrasts central and local SOEs' approaches to digitalization, using an attention-based view to show how governance structures influence each type's attention to policy-driven digital initiatives. This approach reflects strategic heterogeneity, as SOEs align differently with state objectives depending on their governance. From an organizational perspective, the 'Leadership reconfiguration in state-acquired privately owned enterprises' article by Min, Lu, Wu, and Zhang (2024) explores leadership restructuring in SOEs formed through acquisitions of private firms. It shows how these hybrid organizations integrate state and market logic, navigating tensions between legitimacy and internal stability, thus embodying organizational adaptability in response to institutional changes. From a political perspective, the study on 'Executive compensation restriction and corporate social responsibility (CSR) in SOEs' by Ning, Lu, Wan, and Jia (2024) analyzes how political and economic factors shape SOE executives' CSR engagement. This article reveals the dual-career framework's influence on managers, highlighting the impact of compensation policies in the unique institutional context of SOEs. Finally, from a leadership and organizational perspective, the 'Female leadership and corporate acquisitions in Chinese SOEs' article by Zhu and Li (2024) provides insights into how gender dynamics shape acquisition strategies in SOEs. It suggests that female leaders might display higher risk tolerance in certain contexts, revealing how organizational structures and gendered leadership influence strategic decisions. Together, these studies illustrate the diverse responses and adaptations of SOEs to institutional, strategic, and organizational pressures, emphasizing the importance of SOE heterogeneity in understanding their roles in China's evolving economy.

In particular, the first article in this special issue, by Li et al. (2024), delves into the complex relationship between privatization and environmental investments in Chinese SOEs, particularly within the framework of mixed-ownership reforms. This research uncovers an inverted U-shaped relationship, indicating that moderate levels of privatization strike a balance between financial incentives and state-driven environmental goals, thereby facilitating optimal resource allocation for sustainability initiatives. However, as privatization deepens, the focus increasingly shifts toward maximizing financial returns, often at the expense of environmental considerations, which results in reduced investments in sustainability (Andersson, 2022; Raynard & Greenwood, 2023).

This study extends our understanding of the nuanced impact of privatization, demonstrating that neither wholly state-owned nor wholly privatized models are ideal for fostering environmental sustainability. Instead, a balanced approach to privatization can effectively leverage the strengths of both market mechanisms and state-driven objectives, providing valuable insights into how mixed-ownership reforms influence environmental investments in SOEs. This contribution enriches the literature on institutional complexity and environmental strategy by offering empirical evidence on the strategic interplay between state control and market efficiency in promoting sustainable practices.

Furthermore, the study's insights into the moderating effects of CEO backgrounds and external pressures – including market competition and relationships with local governments – contribute to the strategic management literature by underscoring the importance of individual leadership and contextual factors in shaping organizational practice. CEOs with financial expertise tend to prioritize short-term financial returns, while those with political affiliations are more inclined to pursue long-term strategic objectives, such as environmental sustainability (Reay & Hinings, 2005). This nuanced perspective provides valuable information for both scholars and practitioners, illustrating the specific conditions under which the effects of privatization on environmental investments vary. This understanding helps bridge the gap between strategic intentions and actual environmental commitment, offering a roadmap for more effective governance and strategy formulation in the context of complex institutional environments in China (e.g., Huang, Geng, & Wang, 2017; Wan, Wang, Geng, & Huang, 2023).

Moreover, this study contributes to the strategic management literature by emphasizing the critical role of individual leadership and contextual factors. Specifically, it offers valuable insights into the moderating effects of CEO backgrounds and external pressures, such as market competition and relationships with local governments, which shape organizational practices. CEOs with financial expertise often prioritize short-term financial returns, whereas those with political backgrounds are typically more focused on long-term strategic goals, including environmental sustainability (Reay & Hinings, 2005). The findings provide important guidance for both scholars and practitioners by illustrating how the effects of privatization on environmental investments can vary under different conditions. This deeper understanding bridges the gap between strategic intentions and actual environmental commitments, presenting a comprehensive framework for more effective governance and strategic planning in complex institutional settings.

Strategic Attention in Central and Local SOEs

The second article in this issue, by Luo et al. (2024), investigates the varied responses of central and local SOEs in China to national digitalization policies, using the attention-based view (ABV) as a theoretical lens. Central SOEs, which are designed to closely align with national strategic priorities, demonstrate greater strategic focus on digitalization initiatives than local SOEs, which tend to be guided by shorter-term local objectives (Ocasio, 1997). This difference is further exacerbated by governance structures and the distribution of government subsidies, which favor central SOEs. As a result, central SOEs are in a better position to invest in digitalization efforts without risking their financial stability.

This research extends the ABV framework to the context of SOEs, highlighting how governance structures and resource allocations shape strategic priorities. Central SOEs, benefiting from hierarchical governance structures, are better positioned to implement policies mandated by central government authorities. In contrast, local SOEs operate within a decentralized framework where local governments focus on immediate economic development objectives. Consequently, there is a divergence in the strategic attention allocated to long-term national initiatives, such as digitalization (Fan et al., 2013). Through a comparative analysis of central and local SOEs, the study underscores the fundamental differences in their strategic priorities and responses to national policies.

Furthermore, the findings emphasize the critical need to align local SOEs with national strategies to improve the effectiveness of policy implementation. This alignment can be facilitated through targeted subsidies and performance metrics, which serve to bridge the gap between local and national objectives, thereby fostering more cohesive strategic initiatives. In addition, this paper elucidates how varying governance structures and degrees of state control impact the strategic focus of SOEs, thereby offering a more nuanced understanding of the mechanisms that shape strategic attention in these organizations.

Organizational Hybridization in POE-to-SOE Acquisitions

The third article, by Min et al. (2024), explores the hybridization process in Chinese SOEs, focusing on acquisitions in which private enterprises transition to state ownership (POE-to-SOE). The study uncovers significant reconfiguration at the board level but relatively less reconfiguration in the top management team (TMT) in POE-to-SOE acquisitions compared to POE-to-POE acquisitions. This hybridization leads to a leadership structure in which governance bodies assert state-based control while management bodies retain market-oriented agency. This dual structure enables emergent SOEs to effectively navigate the competing demands of state and market logic (Battilana & Dorado, 2010).

Moreover, hybrid organizations integrate elements from multiple institutional logics, frequently encountering conflicting demands and expectations. In POE-to-SOE acquisitions, hybridization entails the fusion of market-oriented practices from private enterprises with the state-centric control mechanisms characteristic of SOEs. Board reconfiguration is more pronounced, acting as a crucial mechanism for introducing state control and ensuring alignment with state objectives. Meanwhile, the TMT remains relatively stable, preserving continuity in market-oriented management practices (Grosman, Wright, & Okhmatovskiy, 2016).

This article contributes to the literature on hybrid organizations and acquisitions by shedding light on the unique challenges and strategies inherent in POE-to-SOE acquisitions. It underscores the critical role of board reconfiguration as a key mechanism for embedding state control into newly acquired SOEs while maintaining managerial continuity to uphold market-oriented practices. This dual approach enables emergent SOEs to effectively balance the demands of both state and market logic. Additionally, the study enhances our understanding of organizational adaptation and integration processes within hybrid organizations. It offers valuable insights into managing institutional complexity and aligning divergent organizational practices in the aftermath of an acquisition.

Compensation Restrictions and Social Performance in Chinese SOEs

The fourth article, by Ning et al. (2024), examines the impact of compensation restrictions on the social performance of SOEs, uncovering a dual effect: these restrictions enhance income equality in firms but simultaneously diminish their social performance. While compensation restrictions are intended to reduce income disparities, they inadvertently create disincentives for executives to prioritize social responsibilities. This is due to the economic pressures and perceptions of unfairness arising from imposed limitations (Zhou, Gao, & Zhao, 2017).

The study employs a quasi-experimental design to evaluate the effects of compensation policies on SOE executives, emphasizing the importance of a balanced approach that accounts for economic and political incentives. The dual-career tracks of SOE executives, which involve navigating economic and political motivations, are pivotal in shaping their responses to compensation policies. While economic incentives drive immediate work engagement and performance, political incentives align with broader societal goals, such as social welfare and equality (Wang & Tan, 2020).

This article contributes to the literature on executive compensation and CSR by exploring the intricate relationship between compensation policies and social performance in SOEs. It offers empirical evidence of the unintended consequences of compensation restrictions, underscoring the need for a more nuanced approach that carefully balances economic and social objectives. The findings suggest that compensation policies should be structured to motivate executives to pursue both financial performance and social responsibilities.

In addition, this study deepens our understanding of SOE executives' dual-career tracks, illustrating how economic and political motivations shape their behavior. This dual perspective not only enriches the literature on SOE governance but also provides practical insights for policymakers in designing effective compensation frameworks that align with broader societal goals.

Female Leadership and Risk-Taking in Chinese SOEs

The last article, by Zhu and Li (2024), challenges the conventional view that female leaders are inherently more risk-averse by demonstrating that female executives in Chinese SOEs may, under certain conditions, be more inclined to take risks. The study attributes this behavior to the 'female agentic advantage', whereby female leaders receive favorable stakeholder evaluations for taking risks. This advantage is particularly evident among female executives in firms with low female representation or those holding political appointments, where they are more likely to engage in acquisition activities. These findings challenge traditional gender stereotypes and underscore the importance of context and stakeholder evaluations in shaping the strategic behaviors of female executives (Eagly & Karau, 2002).

The expectancy violation theory posits that women can gain a strategic advantage by engaging in behaviors that defy gender stereotypes. In the context of Chinese SOEs, female leaders who take risks, such as participating in acquisitions, may receive positive evaluations from governmental stakeholders. This recognition not only enhances their career prospects but also bolsters their legitimacy within the organization (Post, DiTomaso, Farris, & Cordero, 2022).

This article contributes to the literature on gender and leadership by demonstrating that female leaders in SOEs can, in certain contexts, be more inclined to take risks than their male counterparts, especially when they receive positive evaluations from stakeholders for such behaviors. This finding

has important implications for understanding the dynamics of female leadership and risk-taking in male-dominated environments, offering new insights into how gender and context influence strategic decision-making.

The study also adds depth to the literature on strategic decision-making by emphasizing the role of stakeholder evaluations in shaping the behavior of female executives. By illustrating how context and external perceptions influence leadership behavior, this research offers valuable insights for scholars and practitioners alike, particularly those focused on promoting gender diversity and inclusion in leadership positions.

Implications

The findings from these studies underscore the critical need to consider the diverse factors that contribute to the heterogeneity of SOEs and various institutional, strategic, and organizational factors that influence SOEs. Policymakers should design privatization policies that balance market efficiency and state goals, offering incentives that encourage top executives to align with SOEs' long-term objectives. Additionally, governance structures and resource allocations must be aligned to enhance the strategic focus of both central and local SOEs, promoting cohesive policy implementation across different levels of governance.

For example, SOE reforms in China have underscored the necessity of balancing political objectives with market-driven efficiencies (Leutert, 2016). Policymakers must acknowledge that while partial privatization can enhance resource allocation and operational efficiency, it also demands robust regulatory frameworks to ensure alignment with broader social and economic goals (Cardinale, 2022). Additionally, commercialization incorporating performance measurement (Asian Development Bank, 2008) has been proven to be an effective tool to increase efficiencies, reduce costs, and improve service delivery.

In organizations undergoing hybridization, effective leadership reconfiguration strategies are essential for managing the integration of conflicting logic. The dual role of governance bodies in exerting state control alongside market-oriented management bodies highlights the inherent complexity of hybrid organizations (Battilana & Dorado, 2010). Developing leadership capable of navigating these dual demands is critical for ensuring the stability and success of emergent SOEs.

Compensation frameworks should be designed to address both economic and political motivations, ensuring that executives are incentivized to achieve both financial performance and social responsibilities. The findings suggest that compensation policies should carefully balance short-term economic incentives with long-term political and social objectives to sustain executive motivation and commitment (Zhou et al., 2017). Moreover, fostering environments that support and encourage female leadership can help mitigate stereotype threats and enhance the overall effectiveness of SOE leadership (Post et al., 2022). Female executives, particularly in firms with low female representation or those in political appointments, are more likely to engage in acquisition activities, challenging traditional gender stereotypes and underscoring the importance of context and stakeholder evaluations in shaping strategic behaviors (Eagly & Karau, 2002).

Furthermore, governance reforms should prioritize enhancing transparency and accountability within SOEs. Transparent governance structures are vital for reducing corruption and building trust among stakeholders, which is essential for the long-term success of these enterprises (Fan et al., 2013). Policymakers should also consider the socio-economic context in which SOEs operate, customizing reforms to address specific local challenges and opportunities (Raynard & Greenwood, 2023). This approach involves acknowledging the differing strategic priorities and resource constraints of central versus local SOEs (Reay & Hinings, 2005).

Future Research Agenda

As highlighted in our special issue, the roles of Chinese SOEs are rapidly evolving, particularly in the international arena. Given their strategic importance in national economies and international affairs,

SOEs wield considerable influence in geopolitical landscapes. Operating in high-stakes environments, they are frequently impacted by sanctions, trade wars, and other geopolitical conflicts (e.g., Huang, Jia, & Ge, 2024). Future research may explore how SOEs respond to these challenges, adapt their strategies, and manage relationships with foreign governments and enterprises under such conditions. Considering their critical roles in industries like energy, telecommunications, and transportation, SOEs also have a profound impact on global supply chains. Studies might investigate how SOEs manage supply chain risks, respond to global disruptions, and influence supply chain policies both domestically and internationally. Considering escalating geopolitical tensions, there is an urgent need to reassess the global strategies of SOEs and the new challenges they face abroad. Understanding how SOEs adapt to geopolitical shifts while maintaining their competitiveness in a dynamic global landscape is essential for advancing our knowledge in this field.

Since China's opening and reform, the dual emphasis on both the market and government has been a recurring feature of the broader environment and tension faced by SOEs. The government has played a significant role in the developments and trajectories of SOEs and the markets they operate in, through its deliberate fiscal policies, personnel appointments and adjustments, and equity policies, which may guide or even shape the decision-making processes of SOEs. Given this backdrop, other important questions worth further investigation include the impacts of the dual emphasis on market and government on SOEs, the optimal organizational forms and governance structures of SOEs in different historical periods compared with those in other countries, the effectiveness of hybrid enterprises and mixed-ownership structures on SOEs' organizational innovation and investment behaviors, and the enabling or constraining effects of fiscal and equity policies on the competitiveness of SOEs.

Moreover, as digitalization continues to fundamentally reshape industries, the role of SOEs in leading or adapting to these changes remains underexplored. The rapid advancement of technology presents both significant opportunities and challenges for SOEs, both domestically and globally. Given their critical roles in national socio-economic development and socio-political security, it is essential to understand how SOEs engage with digital transformation and innovation. Future research may focus on how SOEs can leverage emerging and transformative technologies such as AI, blockchain, the Internet of Things, and advanced analytics to enhance their operations. By addressing these themes, scholars can offer deeper insights into how SOEs are navigating the complexities of digital transformation, contributing to theoretical advancements in technology adoption and strategic management, while also providing practical guidance for SOE managers and policymakers.

In addition, SOEs are uniquely positioned to spearhead environmental and sustainability initiatives, given their significant influence and control in national economies. Their leadership is expected not only in economic terms but also in their social and environmental contributions (Wang & Luo, 2019). Previous studies have primarily examined the extent and impact of CSR initiatives related to the environment in SOEs. However, a deeper understanding of how SOEs engage with broader environmental strategies and sustainable activities may offer valuable insights into national and global environmental management. The participation of SOEs in global governance, such as adherence to international environmental, social, and governance standards, may be another research focus. Future research may investigate how SOEs implement sustainable practices, such as green technologies, renewable energy projects, advanced water treatment technologies, and pollution control mechanisms. Exploring the drivers, challenges, and outcomes of these initiatives may shed light on the effectiveness of current practices and identify areas for improvement.

These suggested research themes are intended not only to enrich academic discourse but also to provide practical insights that can guide policymakers and SOE managers in navigating the contemporary landscape in which these entities operate.

Conclusion

The insights from this special issue highlight the multifaceted nature of Chinese SOEs and the delicate balance they maintain between state directives and market demands. As China continues its economic

transformation, the role of SOEs remains crucial, not only in driving economic growth but also in implementing national policies and promoting social equity. The research presented emphasizes the diversity within SOEs, underscoring the need for the nuanced design of privatization and reform policies, compensation and governance structures that account for this diversity while ensuring market efficiency and strategic state goals. The future of Chinese SOEs will also depend on effective leadership and organizational strategies capable of navigating the complexities of hybridization and institutional pressures to strengthen the strategic and innovation capabilities and resilience of these enterprises.

References

- Andersson, T. 2022. Institutional complexity and firm behavior. *Journal of Business Research*, **135**: 564–573.
- Asian Development Bank. 2008. State-owned enterprise reform. Available from [ADB website](#).
- Bai, C. E., Lu, J., & Tao, Z. 2006. The multitask theory of state enterprise reform: Empirical evidence from China. *American Economic Review*, **96**(2): 353–357.
- Battilana, J., & Dorado, S. 2010. Building sustainable hybrid organizations: The case of commercial microfinance organizations. *Academy of Management Journal*, **53**(6): 1419–1440.
- Beck, K. I. 2023. The political economy of state sector restructuring in China: Cross-provincial evidence 2008–2017. *Journal of Chinese Political Science*, **28**(1): 1–27.
- Boeing, P., Mueller, E., & Sandner, P. 2016. China's R&D explosion—Analyzing productivity effects across ownership types and over time. *Research Policy*, **45**(1): 159–176.
- Bruton, G. D., Peng, M. W., Ahlstrom, D., Stan, C., & Xu, K. 2015. State-owned enterprises around the world as hybrid organizations. *Academy of Management Perspectives*, **29**(1): 92–114.
- Cardinale, R. 2022. State-owned enterprises' reforms and their implications for the resilience and vulnerability of the Chinese economy. *Networks and Spatial Economics*, **22**(3): 489–514.
- Eagly, A. H., & Karau, S. J. 2002. Role congruity theory of prejudice toward female leaders. *Psychological Review*, **109**(3): 573–598.
- Fan, J. P. H., Wong, T. J., & Zhang, T. 2013. Institutions and organizational structure: The case of state-owned corporate pyramids. *Journal of Law, Economics, and Organization*, **29**(6): 1217–1250.
- Grosman, A., Wright, M., & Okhmatovskiy, I. 2016. State control and corporate governance in transition economies: 25 years on from 1989. *Corporate Governance: An International Review*, **24**(3): 200–221.
- Groves, T., Hong, Y., McMillan, J., & Naughton, B. 1994. Autonomy and incentives in Chinese state enterprises. *Quarterly Journal of Economics*, **109**(1): 183–209.
- Huang, K. G. 2010. China's innovation landscape. *Science*, **329**(5992): 632–633.
- Huang, K. G., Geng, X., & Wang, H. 2017. Institutional regime shift in intellectual property rights and innovation strategies of firms in China. *Organization Science*, **28**(2): 355–377.
- Huang, K. G., Jia, N., & Ge, Y. 2024. Forced to innovate? Consequences of United States' anti-dumping sanctions on innovations of Chinese exporters. *Research Policy*, **53**(1): 104899.
- Jia, N., Huang, K. G., & Zhang, C. M. 2019. Public governance, corporate governance and firm innovation: An examination of state-owned enterprises. *Academy of Management Journal*, **62**(1): 220–247.
- Jin, X., Xu, L., Xin, Y., & Adhikari, A. 2022. Political governance in China's state-owned enterprises. *China Journal of Accounting Research*, **15**(2): 100236.
- Jing, R. T., & McDermott, E. P. 2013. Transformation of state-owned enterprises in China: A strategic action model. *Management and Organization Review*, **9**(1): 53–86.
- Leutert, W. 2016. *Challenges ahead in China's reform of state-owned enterprises*. Seattle, WA: The National Bureau of Asian Research. Available from [NBR website](#).
- Li, H., Chang, Y., Wang, X., & Zhang, N. 2024. Institutional complexity and corporate environmental investments: Evidence from China's mixed-ownership reform of state-owned enterprises. *Management and Organization Review*, **20**(5): 716–747.
- Lin, K. J., Lu, X., Zhang, J., & Zheng, Y. 2020. State-owned enterprises in China: A review of 40 years of research and practice. *China Journal of Accounting Research*, **13**(1): 31–55.
- Luo, X. R., Wang, J., Chen, S., & Chen, B. 2024. 'Digital divide': How do central and local SOEs respond differently to digital transformation in China. *Management and Organization Review*, **20**(5): 748–772.
- Min, Y., Lu, J., Wu, Y., & Zhang, Y. 2024. Leadership reconfiguration in state-acquired privately owned enterprises: A paradox between institutional control and agency. *Management and Organization Review*, **20**(5): 773–803.
- Nabeshima, K., Perkins, D. H., & Yusuf, S. 2005. *Under new ownership: Privatizing China's state-owned enterprises*. Washington, DC: World Bank Group. Available from URL: <http://documents.worldbank.org/curated/en/599651468024849734/Under-new-ownership-privatizing-Chinas-state-owned-enterprises>
- Nee, V. 1992. Organizational dynamics of market transition: Hybrid forms, property rights and mixed economy in China. *Administrative Science Quarterly*, **37**: 1–27.

- Ning, P., Lu, F., Wan, G., & Jia, L.** 2024. Catch one and lose another? Executive compensation restriction and corporate social responsibility in state-owned enterprises. *Management and Organization Review*, **20**(5): 804–849.
- Ocasio, W.** 1997. Towards an attention-based view of the firm. *Strategic Management Journal*, **18**(S1): 187–206.
- Post, C., DiTomaso, N., Farris, G. F., & Cordero, R.** 2022. How stereotypes impair women's careers in science and technology. *MIT Sloan Management Review*, **63**(2): 66–74.
- Ralston, D. A., Terpstra-Tong, J., Terpstra, R. H., Wang, X., & Egri, C.** 2006. Today's state-owned enterprises of China: Are they dying dinosaurs or dynamic dynamos? *Strategic Management Journal*, **27**(9): 825–843.
- Raynard, M., & Greenwood, R.** 2023. Institutional complexity and organizational responses: Insights from a cross-national comparison. *Organization Studies*, **44**(3): 467–495.
- Reay, T., & Hinings, C. R.** 2005. The recomposition of an organizational field: Health care in Alberta. *Organization Studies*, **26**(3): 351–384.
- Wan, G., Wang, H., Geng, X., & Huang, K. G.** 2023. Natural disasters and corporate philanthropy: A double movement perspective. *Management and Organization Review*, **19**(1): 98–137.
- Wang, H., & Luo, J.** 2019. Political connections and firm pollution behavior: Evidence from China. *Journal of Development Economics*, **140**: 127–145.
- Wang, J., & Tan, J.** 2020. The impact of political connections on the survival and growth of firms: Evidence from China. *Asia Pacific Journal of Management*, **37**(1): 163–190.
- World Bank Group.** 2000. *China's emerging private enterprises: Prospects for the new century*. Washington, DC: World Bank Group. Available from URL: <http://documents.worldbank.org/curated/en/923231468744007740/Chinas-emerging-private-enterprises-prospects-for-the-new-century>
- Zhou, X., Gao, J., & Zhao, H.** 2017. Incentives and outcomes: The impact of managerial monetary incentives on firm performance in China. *Management and Organization Review*, **13**(1): 7–35.
- Zhu, D., & Li, X.-H.** 2024. Female leadership and corporate acquisitions in Chinese state-owned enterprises. *Management and Organization Review*, **20**(5): 850–870.

Kenneth G. Huang (kennethhuang@nus.edu.sg) is the Dean's Chair professor and associate professor (with tenure) at the National University of Singapore (NUS) in the Department of Industrial Systems Engineering and Management and the Department of Strategy and Policy of NUS Business School. He received his PhD in technology, management and policy from the Massachusetts Institute of Technology. His research focuses on managing innovation and technology (e.g., AI, biotechnology, energy, and environments), intellectual property and innovation strategy, entrepreneurship, and institutional change, especially in emerging economies like China and ASEAN. As an award-winning researcher and educator, his work has been published in leading journals such as *Science*, *Academy of Management Journal*, *Strategic Management Journal*, *Organization Science*, *Journal of Management*, *Journal of International Business Studies*, *Research Policy*, *Nature Biotechnology*, *PNAS*, and *Management and Organization Review*. He is the deputy editor of *Management and Organization Review* and serves on the editorial boards of *Academy of Management Journal*, *Strategic Management Journal*, and *Organization Science*.

Runtian Jing (rtjing@sjtu.edu.cn) is a professor of organizational management at the Antai College of Economics and Management of Shanghai Jiao Tong University. He received his PhD from the Xi'an Jiao Tong University in 1997 and taught at the University of Electronic Science and Technology of China before his present appointment. His research focuses on organizational change and leadership behavior. He was granted the Award of Yangtze River Scholarship Distinguished Professor by the Ministry of Education of China.

Jun Xia (jun.xia@utdallas.edu) is a professor of management at the Naveen Jindal School of Management, the University of Texas at Dallas. His research focuses on organizational theories, including resource dependence theory and institutional theory, as well as corporate strategies. His work has been published in academic journals, such as the *Academy of Management Journal*, *Strategic Management Journal*, *Organization Science*, *Journal of Management*, and *Journal of Management Studies*. He is a senior editor at *Management and Organization Review*.

Cyndi Man Zhang (cyndizhang@smu.edu.sg) is an associate professor of strategy and entrepreneurship at the Lee Kong Chian School of Business, Singapore Management University. She received her PhD from INSEAD. Her research builds on the intersection of the behavioral theory of the firm and institutional theories to examine firms' strategic choices, such as mergers and acquisitions and innovation. She is also particularly interested in the power struggle and coalition building in strategic decision-making and pursuing multiple goals in a firm's change decisions. Her work has been published in the *Academy of Management Journal*, *Journal of Management*, *Strategic Organization*, and *Advances in Mergers and Acquisitions*. She serves on the editorial board of the *Academy of Management Journal*, *Strategic Management Journal*, *Strategic Organization*, and *Management and Organization Review*. Mainstream business media, such as LSE Business Review and Forbes, have also covered her research.

Weiguo Zhong (zwg@gsm.pku.edu.cn) is an associate professor of strategy at the Guanghua School of Management, Peking University. His current research focuses on AI and corporate strategy, corporate political strategy, and the digital economy. His work has appeared in journals such as the *Academy of Management Journal*, *Strategic Management Journal*, *Journal of International Business Studies*, and *Journal of Management*.

David H. Zhu (david.zhu@asu.edu) is a professor of management and entrepreneurship and Dean's Council distinguished scholar at the W. P. Carey School of Business, Arizona State University. He received his PhD in strategy from the University of Michigan. He builds on behavioral theories to examine the strategic decision-making of top executives and entrepreneurs, innovation, corporate governance, and corporate strategy. He also studies how the structure of networks affects leadership behavior and firms' competitive advantages. His work has appeared in journals such as the *Academy of Management Journal*, *Strategic Management Journal*, *Administrative Science Quarterly*, and *Organization Science*.

Cite this article: Huang, KG., Jing, R., Xia, J., Zhang, CM., Zhong, W., & Zhu, DH. (2024). Coevolution of SOEs and the Chinese Economy: The Roles of SOE Heterogeneity from the Institutional, Strategic, and Organizational Perspectives. *Management and Organization Review* 20, 704–715. <https://doi.org/10.1017/mor.2024.68>