Essays on Political Connections and Financial Decisions of Households and Corporates

Xudong He

A thesis submitted for the degree of *Doctor of Philosophy in Finance*

Essex Business School

University of Essex

April 2024

Per Aspera ad Astra

Abstract

This thesis revolves around the examination of political connections in financial decisions, both at the household and corporate levels. This thesis comprises three main empirical chapters. Chapter 1 acts as the outline and introduction for the thesis.

Chapter 2 utilizes data from 28,113 Chinese households in 2013 to identify that political connection quality positively influences households' granted amounts of loans. This chapter also recognizes a positive relationship between political connections at the community level and loan amounts granted to households. Finally, the results show that sociability can positively mediate the relationship between political connection quality and the amount of bank loans.

Chapter 3 investigates the impact of CEOs with Party school education on corporate investment efficiency, applying data from 18,195 Chinese-listed firms spanning the period 2003 to 2020. The empirical findings demonstrate that both SOEs and private firms led by CEOs with Party school education exhibit more efficient investment practices, and reveal the mechanism that CEOs with Party school education display a regardless level of monetary compensation incentive in corporate investment decisions, alleviating potential agency conflicts. Finally, this chapter highlights that CEOs with Party school education can access more government resources through their connections to governments, thereby improving investment efficiency.

Chapter 4 delves into the impact of CEOs with party school education on the ESG performance of 8,104 SOEs from 2010 to 2020. The empirical analysis reveals a significant enhancement in the ESG performance of SOEs led by CEOs with party

school education. Furthermore, this chapter identifies a distinct pattern where this positive impact becomes more pronounced in regions experiencing higher economic development pressure. Finally, it identifies CEOs with political promotion incentives that can strengthen the baseline relationship.

Chapter 5 encapsulates critical observations, outlines limitations encountered during the research, and identifies potential avenues for future investigations.

Acknowledgments

For helping me in one way or another seeing this fearless and unflinching journey to its fulfillment, a great many thanks are due to a great many people.

First and foremost, I would like to appreciate my esteemed supervisors from the bottom of my heart, Dr. Udichibarna Bose and Dr. José Liñares-Zegarra for their endless patience, countless support, and peerless guidance throughout my studies, as well as their enthusiastic encouragement to venture into diverse academic endeavors. Without their faith and nurturing, this journey would not have come to fruition.

I would like to express my sincere thanks to the examiners, Dr. Deven Bathia and Dr. Chiara Banti. Their thorough evaluation, insightful feedback, and constructive questions during my viva were invaluable. They provided me with an amazing opportunity to review and share my research journey, and their expertise and critical analysis not only challenged me but also enhanced the quality of my work

Special thanks to Ms. Juliet Sexton for propping me up in every milestone in the journey. I extend my sincere gratitude to the China Scholarship Council (CSC) for its financial support.

A most heartfelt 'thank you' is due to two very important friends: to Dr. Shuang Yu for her tireless counsel, tracing back to my undergraduate, and Dr. Servanna Mianjun Fu for her wise criticism and encouragement all along. More thanks than can be expressed are due to my family, whose support remained unwavering even amidst their lack of full comprehension of my work. Finally, my greatest thanks to my parents, Mr. Jinhui He and Ms. Min Huang, for instilling in me a sense of wonder towards the world.

Despite the perception that this thesis may not fully reciprocate nearly three decades of their investment, I boldly dedicate it to them, with my everlasting love.

Declaration

I hereby declare that all material and results that are not original to this work have been fully cited and referenced. Except where explicit attribution is given to the work of others, this thesis is solely a product of my original outcome under the supervision of my supervisors and has not been proffered for any other degree at the University of Essex or any other institution.

The copyright of this thesis is reserved by the author. No quotations from this work should be disseminated in any format without the express written consent of the author. Any information extracted from this thesis should be duly acknowledged under the academic convention.

Table of Contents

List of Figures

List of Tables

List of Appendices

Chapter 1 Introduction

Research on political connections has long been pivotal in the field of finance, shedding light on the complex interplay between politics and economics that shapes societal structures. However, nowhere does this relationship become more fascinating and complex than in nations with unique political architectures, like China. Here, the interaction between politics and economics exerts a far-reaching influence, penetrating various sectors and shaping outcomes in ways not immediately perceptible to the casual observer.

This influence not only manifests itself fundamentally within Chinese households but also manifests itself, especially within the Chinese financial markets and corporate governance, where political affiliations and education play a significant role in determining their financing decisions. This thesis takes an in-depth look at these dynamics, focusing particularly on the impact of the Communist Party of China (CPC hereafter) membership at the household and the community levels, as well as the impact of CEOs with Party school education at the firm level.

In the global landscape of political economy, China stands out as a captivating subject owing to its distinctive socio-political and economic framework. The nation operates under a single-party political system directly controlled by the CPC. It features a rapidly growing market economy and a corporate sector encompassing both state-owned enterprises (SOEs hereafter) and private firms (Appleton et al., 2008; Li et al.,

2008; Chen et al., 2011b). A notable contrast between China and Western countries lies in the exclusive oversight exercised by the CPC over crucial economic resources facilitated through state-owned entities such as SOEs and state-owned banks (McMillan, 1997; Chen et al., 2017; Pan and Tian, 2017). This control is executed through a "top-down decision-making"[1] approach (Beladi et al., 2022). As a result, the Chinese financial market bears the imprint of a unique institutional background characterized by strong government intervention.

These characteristics render China a fertile ground for investigating the interplay between politics and economics. They offer the potential to comprehend the underlying mechanisms through which political factors impact financial decisions, both at the household and firm levels. Previous studies exploring the nexus of political connections and financial decisions, whether within households or firms, have primarily focused on the direct examination of the impact of political connections (e.g., Li et al., 2010; Guo et al., 2014), leaving the quality of these connections as an open research area. While mainstream attention to household financial decisions has been given to bank loans (e.g., Li et al., 2020; Ge et al., 2021), informal loans have not been adequately investigated. Additionally, the existing literature commonly employs CEOs' political affiliation (e.g., Li et al., 2008; Bhandari and Golden, 2021), government officials within firms (e.g., Fan et al., 2007; Wei et al., 2020; Yu et al., 2020), and firms' connections with government officials (e.g., Faccio, 2006; Krammer and Jiménez, 2020) as proxies for

---

[1] The "top-down decision-making" mode refers to the CPC at the central level takes the initiative to formulate national strategies, policies, or decisions, and then these directives are communicated and implemented by lower-level units or individuals.

political connections at the firm level. However, the unique and significant role of CEO's Party school education as a form of political connection remains understudied.

Hence, this thesis endeavors to bridge a significant research gap by conducting empirical analyses of the impact of political connections on formal and informal loans at the household level, as well as on corporate investment efficiency and environmental, social, and governance (ESG hereafter) performance at the firm level. Each empirical chapter is dedicated to contributing to a specific research question. Chapter 2 investigates the relationship between the quality of political connections and the amount of bank and informal loans granted at the household level. Moving onto Chapter 3, the focus turns to the firm, another fundamental organizational unit in financial markets. Chapter 3 explores the relationship between CEOs with Party school education and corporate investment efficiency. Chapter 4 analyses the impact of CEOs with Party school education on corporate ESG performance.

Chapter 2 empirically explores the role of political connection quality at the household level, specifically the size of CPC members within the specific household, in influencing households' granted amounts of formal and informal loans in China. The financial system in China is complex and multi-layered, with formal financial institutions coexisting with a vibrant informal financial sector (Pan and Tian, 2020). The thesis starts with household finance for several reasons. First, in China, the financial landscape for households significantly impacts economic stability and growth. Households' access to loans influences consumption, savings, and investment patterns, which are crucial for the overall economy (Cull et al.,2019). Second, while corporate

loans are larger, the aggregate impact of numerous small household loans can be substantial (Beck et al., 2012). Household borrowing behavior reflects broader economic trends and marketization in the economy, making it a critical area regarding the interplay between politics and finance in underdeveloped markets. Moreover, insights into household finance can complement corporate finance, offering a comprehensive view of the financial ecosystem. Notably, Chinese households hold more usage in informal loans than formal loans (Cull et al., 2019), yet the informal sector remains understudied. Given the underdeveloped formal finance market, informal loans in China are much easier to obtain, requiring fewer formalities and often being available through personal networks, including friends, family, and local lenders. Terms of informal loans are also typically more flexible regarding interest rates and repayment schedules, tailored to the borrower's situation. These reasons can be the nature of why informal loan dominates in the financial market[2] (Cull et al., 2019; Lei et al., 2024). The political affiliations of household members may significantly influence their borrowing decisions within this complex landscape (Li et al., 2008; Rithmire, 2014). While prior studies have established the effect of political connections on economic outcomes (Appleton et al., 2008; Markussen and Tarp, 2014; Cruz, Labonne, and Querubin, 2017), their interaction with both formal and informal credit within Chinese households remains largely unexplored. This knowledge gap warrants

---

[2] According to the work of Cull et al. (2019), they take advantage of nationally representative CHFS 2013 and find that Chinese households have a significant reliance on informal loans compared to formal loans. The summary statistics of informal loan amount are consistent with their work. The paper of Lei et al. (2024) further confirms this fact. They investigate the relationship between bank competition and household informal loans and employ data from the CHFS 2013, 2015, 2017, and 2019. Our statistics of informal loan amount (log) (Mean=6.451, Sd= 4.665) are consistent with their statistics of informal loan amount (mean=4.598, and Sd=4.689), suggesting the data structure regarding informal loan amount in 2013 is stable as comparted to the panel data of CHFS 2011, 2013, 2015 and 2019. Hence, the significance of informal loan amount of CHFS 2013 can be reliable.

investigation.

Chapter 2 uses a large sample of 28,113 Chinese households. The main goal is to examine how the quality of political connections affects households' outcomes of applying for bank loans and informal loans. To address the concern of self-selection bias, I apply the Heckman two-stage model (Piotroski and Zhang, 2014; Wei et al., 2020). Additionally, this chapter explores the impact of political connections at the community level on the amount of both bank and informal loans obtained by Chinese households. The findings indicate that the more CPC members in the household, the higher the amount of loans when applying for bank and informal loans. This empirical evidence highlights the quality of political connections in shaping the financial borrowing of households within the Chinese credit market. Additionally, the analysis uncovers a notable link between community-level political connections and the increase in loan amounts across both bank and informal lending channels. This significant observation contributes to existing research by emphasizing the widespread impact of political connections and their consequential influence on financial borrowing at the household level. Chapter 2 reveals an additional aspect involving households' social interactions. More specifically, the results highlight a positive mediating effect, indicating that the impact of political connection quality on households' bank loan amounts is indirectly influenced by households' sociability. This insightful discovery emphasizes the intricate interplay of social elements in the relationship between the quality of political connections and households' credit.

In conclusion, the empirical findings presented in Chapter 2 validate the

significant positive influence of CPC membership on households' credit (both bank and informal loans). Unlike past literature covering bank loans, the study comprehensively analyzes the impact of party memberships on the bank and informal loans. Also, to the best of my knowledge, the paper is the first to empirically study the impact of sociability as the mediation channel between political connections and household access to finance. By deepening the understanding of the relationship between political connections and the credit outcomes of households, this study significantly enriches the stream of literature on political connections and economic outcomes (see, e.g., Appleton et al., 2008; Markussen and Tarp, 2014; Cruz, Labonne, and Querubin, 2017; McLaughlin, 2017).

Chapter 3 shifts the focus to the role of Party school education, specifically political connections, in influencing corporate financial decisions, particularly investment efficiency. Central to this empirical examination is the CPC's distinctive institution of Party Schools, which are dedicated to ideological and leadership training for CPC members (Beladi et al., 2022). In addition to imparting political ideological education, the Party school serves as a pathway for potential political advancements within the party hierarchy (Chen et al., 2011a). The chapter examines how CEOs with Party School education impact corporate investment efficiency. By shedding light on this relationship, it contributes to the understanding of how firms' investment behaviors relate to firms' leadership characteristics and their connections to the ruling party.

Chapter 3 uses the party school education of the CEO as a proxy for political connections for several reasons. First, compared with Party affiliation, Party school

education is a novel form of political connection and has been scarcely investigated. Party school education is inherently tied to Party affiliation since these schools are institutions established by the CPC to cultivate political loyalty, ideological conformity, and leadership skills among its members (Shambaugh, 2008; Beladi et al., 2022). Party school graduates typically hold significant positions within the Party and the government, reflecting a deep-seated connection to the Party. The education provided at these institutions is not merely academic but also heavily imbued with Party ideology, promoting a strong allegiance to the CPC. CEOs who have attended Party schools have access to exclusive networks of Party officials and fellow graduates, which can be invaluable for political and business connections. These networks facilitate preferential treatment and access to resources that are crucial for business operations in China.

Second, while both Party school education and Party affiliation indicate a connection to the CPC, they differ in their implications. On the one hand, simply being a member of the CPC does not guarantee the same level of ideological training or political indoctrination as attending a Party school. On the other hand, all CEOs with Party school education must attain CPC membership before they are admitted to the schools. Party-affiliated CEOs have CPC membership only but may have less access to influential political networks compared with Party school CEOs.

In Chapter 3, I employ fixed effect models to examine the impact of CEOs with Party school education on the firms' investment efficiency in Chinese-listed firms from 2003 to 2020. The empirical analysis relies on manually collected data on CEOs' educational backgrounds and firm-level financial data from the China Stock Market

and Accounting Research Database (CSAMR hereafter). The empirical findings indicate that both SOEs and private firms led by CEOs with Party school education tend to make more efficient investment decisions. This efficiency is characterized by an increased sensitivity to investment opportunities. Notably, the influence of CEO's Party school education on investment efficiency is more pronounced in the SOEs, both in terms of statistical and economic significance. This chapter also finds that CEOs with Party school education exhibit a reduced inclination toward self-interest when making investment decisions, aligning with communist ideology. Additionally, the research finds that firms led by CEOs with Party school education are more likely to receive government resources, thereby improving firms' investment efficiency. Furthermore, the study observes that the impact of CEOs with Party school education on investment efficiency is especially noticeable in central SOEs. Importantly, these findings remain robust even after considering potential issues and conducting thorough sensitivity analyses.

In summary, Chapter 3 provides novel insights into how CEOs with Party school education benefit investment efficiency. Given that past evidence discusses the traditional education background of CEOs, to the best of my knowledge, this chapter is the first to investigate the causal relationship between the CEO Party education with a political focus and corporate investment efficiency in the institutional background of only one ruling party, which deepens the understanding of how firms' investment behaviors relate to its firm leader characteristics in general. These results also improve the understanding of how a firm's investment behaviors relate to CEOs' political

connections to the ruling party in particular.

Chapter 4 extends the exploration of CEO's Party school education by investigating its effects on corporate ESG performance. ESG performance has emerged as a significant area of concern for corporations worldwide in the face of increasing awareness about sustainable business practices (Garcia-Blandon et al., 2019; Aabo and Giorici, 2022). Corporate ESG performance is fundamentally affected by firms' leadership characteristics, such as CEO demographics, family characteristics, and political connections (Gillan et al., 2021), while Party school education has not been investigated in the existing studies. CEOs with Party school education have natural connections to the CPC and the government, so they are likely to make government-favored investments (Chen et al., 2011b; Beladi et al., 2022). ESG investing is highly advocated by the Chinese government, so whether and how CEOs with Party school education affect SOEs' ESG performance warrants investigation.

In Chapter 4, I apply fixed effect models to examine whether CEOs with Party school education affect Chinese SOEs' ESG performance. The empirical analysis relies on manually collected data on CEOs' educational backgrounds, ESG rating data from the Hexun database, and firm-level financial data from CSAMR. The results of Chapter 4 show that SOEs led by CEOs with Party school education have better ESG performance. Additionally, this chapter observes that the positive impact is more pronounced when local governments face more economic development pressures. This observation highlights the effect of CEO's Party school education in promoting a stronger commitment to social and environmental responsibility within corporate

practices. Furthermore, Chapter 4 reveals that SOEs led by CEOs with Party school education who have achieved political promotion in the past three years tend to demonstrate more pronounced ESG performance. This indicates an evident link between political promotion and CEOs' commitment to achieving ESG-related goals in the corporate setting. Notably, the influence of CEOs with Party school education on ESG performance seems to be especially pronounced among local SOEs. It's essential to emphasize that the study's findings remain robust even after considering additional factors and assessments for potential bias, affirming the reliability of the observed relationships.

In conclusion, Chapter 4 substantially contributes to the existing literature by providing the first empirical evidence on the relationship between CEOs with Party school education and corporate ESG performance. This groundbreaking research expands our overall understanding of how CEOs' political connections affect ESG performance in firms, with a specific focus on the Party school directly connecting to the ruling political party.

Overall, this thesis endeavors to offer thorough empirical investigations of the intricate interplays between political connections and financial decisions of households and corporates in China. By focusing on Chinese households' access to formal and informal loans, corporate investment efficiency, and corporate ESG performance, the thesis aims to offer a comprehensive understanding of the influence of political factors on different facets of corporate practices in China. Through its empirical investigation, this thesis aims to address a gap in the current literature by examining how the quality

of political connections influences financial decisions within households, considering both formal and informal credit markets within the context of a single ruling party. This thesis also contributes to the existing literature by exploring the impact of CEOs' political connections on corporate financial decisions, particularly in the under-explored form of Party education.

Chapter 2 Political connections, sociability, and household credit: Evidence from Chinese households[3]

2.1 Introduction

Recent literature in corporate finance documents that political connections can help to add value to firms (Banerji et al., 2018; Hao et al., 2020; Sharma et al., 2020 and Sun and Zou, 2021) by not only providing valuable resources such as business opportunities, government subsidies, and bailout (Houston et al., 2014; Piotroski and Zhang, 2014; and Banerji et al., 2018) but also by providing preferential access to lending from the government or politically connected banks (Khwaja and Mian, 2005). However, existing studies have mainly focused on firms, while the literature on household-level studies is relatively scarce. Hence, whether political connections could influence households' ability to raise bank and informal loans is still an open research question.

Empirical literature shows that households are unable to engage in profitable businesses or diversify their sources of income because of insufficient access to credit markets (Foltz, 2004; Boucher, Guirkinger, and Trivelli, 2009; Ghosh and Vinod, 2017). Further, households with credit constraints have fewer options for smoothing their spending and boosting their well-being (Coleman, 1999; Karlan and Morduch, 2009; Li, Huang, and Zhu, 2013). One of the most significant obstacles households encounter in securing bank loans is that financial intermediaries have incomplete information on

---

[3] A version of the study was presented at Workshop on social responsibility, banks and markets during the COVID-19 crisis and beyond, in July 2022

the likelihood of loan repayment (Stiglitz and Weiss, 1981). Households can escape this problem by demonstrating their ability to repay by putting up valuable collateral (Bester, 1985). Hence, politically connected households can use their contacts with local officials to build mutual trust and ease information asymmetry problems (Cole, 1998; Feng et al., 2015; Dong et al., 2016; Banerji et al., 2018) between themselves and loan providers, thereby increasing their probability of raising credit.

In Western political systems, different political parties compete for ruling power and are open to recruiting new members to chase funding (Appleton et al., 2008). However, the CPC is the only ruling party in China, so it is in power without any political competition. The party takes advantage of its membership to grip stable political powers for over seventy years under the one-party regimes of China (Markussen and Ngo, 2019). Hence, the CPC membership can be viewed as an important indicator of political connections, which is even more important in less-developed financial markets (Li et al., 2008). Party memberships in China, therefore, provide political status and, more importantly, represent an important link with the only ruling party in China (Li et al., 2008). As party members interact with government officials, bank managers, and managers of state-owned enterprises, they build up connections with crucial political and economic figures.

Meanwhile, the party membership status is more likely political connections rather than human capital due to the nature of the less-developed institutional background in China (Li et al., 2008)[4]. Therefore, understanding the role of CPC membership is

---

[4]Please see Li et al. (2008) regarding the discussion on the human capital and political capital of party memberships

essential to understanding the mechanism of how political connection benefits individuals and households in these less-developed financial markets. As a result, in the Chinese context, party membership—one of the most significant indicators of political connections—can be viewed as a means by which households accumulate mutual trust and reduce asymmetric information, thereby lowering the obstacles to borrowing.

Politically connected households can advantageously access party officials and bank officials (Li et al., 2020). Accordingly, the CPC membership may help households access government officials in the party-state political regimes of China. Political affiliation provides exclusive opportunities to attend political activities such as official meetings with other party and government members and to have frequent interactions with these members, thereby enriching the household's social interaction (McLaughlin, 2017). Previous literature (Hong et al., 2004; Li, 2014; Brown et al., 2014) suggests that social interactions, in the form of "word-of-mouth," might also serve as a channel to transmit financial-market-related information affecting households' credit decisions and outcomes in accessing finance. Therefore, understanding how households' access to credit is affected by social interactions has important implications for political connections and households' financial decisions.

This paper makes three contributions to the existing literature. First, unlike previous literature that applies a membership dummy, this chapter uses the number of party members as the quality measure of household political connections. The number

---

- party membership is a human capital indicator as its merit-based selection process. However, party memberships are more likely in form of political capital in less developed market.

of party members within certain organization units can be a quality measure of political connections. For example, Perdersen et al. (2004) propose that the number of party activists reflects the quality of local political connections. Cheng (2022) finds that the types of party branches in Chinese private enterprises depend on the number of Party members. Second, unlike past literature covering bank loans, the study comprehensively analyzes the impact of party memberships on bank and informal loans. This is motivated by the finding that informal loans are the most important credit source for Chinese households (Cull et al., 2019). Political connections can allow households to borrow money from local officials and officials to facilitate connections to lenders or act as guarantors for informal loans (Markussen and Tarp, 2014), implying that political connections may be positively associated with larger informal loan amounts. Therefore, this chapter fills the gap in a more comprehensive understanding of the role of CPC membership in households' financial decisions. The results show that party memberships generate larger amounts of both bank loans and informal loans to Chinese households.

Third, to the best of my knowledge, the paper is the first to empirically study the impact of sociability as the mediation channel between political connections and household access to finance. Social interaction can serve as an information channel that helps individuals and households collect financial market information (Hong et al.,2004; Brown et al., 2014; Liang and Guo, 2015), which is the information effect of social interaction. For instance, Jorgensen (2003) suggests that talking to friends can help individuals learn how to open a mutual fund or brokerage account more easily, lowering

the psychological fixed costs of investing that limit equity market participation. On the other hand, numerous studies also evidenced the social multiplier effect of social interaction: peers may influence individuals' behavior/characteristics in their social networks (Hong et al., 2004). For instance, Brown et al. (2008) estimate the causal relationship between individual and community stock market participation by showing that an individual is more likely to take part in the stock market when a higher fraction of individuals in the local community are stock market investors, which may be led by the comparison between the scarcity of local resources and relative sources the community (DeMarzo et al., 2004). This chapter not only shows that sociability might lead to larger amounts in securing findings (formal or informal) but also presents evidence that politically connected households with strong social ties exhibit an even larger amount in securing bank loans.

This study first explores the role of affiliation to the party in improving households' credit amounts regarding bank loans and informal loans conditional upon their applications. In particular, to address the concern of self-selection bias, the study employs the Heckman two-step model rather than a probit model, as loan applications are conditional on having financial needs (Heckman, 1979; Coady and Parker, 2009). We apply a unique nationwide survey of almost 30,000 Chinese households in 2013[5] and find that politically connected households with higher political connection quality

---

[5] The reason employing the CHFS 2013 data is that the sample covered in CHFS 2013 is more than triple than the sample covered in CHFS 2011 that consists of about 8,000 households only. Moreover, CHFS 2013 contains all the key information needed for the analysis. The survey was also updated and fielded in 2015, 2017 and 2019, but the questionnaire was changed on questions related to household debts, and the questionnaires do not provide information on if the household applied the informal loans, which is not suitable for us to correct selection biases by the Heckman two-step approach. Therefore, CHFS 2013 survey provides much more comprehensive information on household financial behaviors and decisions, therefore, is the most suitable data source to address the research hypotheses.

can secure larger amounts of bank loans and informal loans than their non-connected counterparts. This implies that the quality of the political connection can be an important selection criterion for both banks and informal loan providers. We then go a step further and find the positive mediating role of sociability in the relationship between political party membership and preferential bank loan amounts; a more sociable household with higher political connection quality can secure larger bank loan amounts.

The remainder of this paper's structure is as follows. Section 2.2 introduces the background of Party-State China and Party membership attainment. Section 2.3 presents the related background literature and develops research hypotheses on the role of Party membership, and Section 2.4 introduces the empirical strategies for each hypothesis. Section 2.5 describes the data and summary statistics. Section 2.6 empirically tests the hypotheses and reports the results. Section 2.7 provides robustness tests, and Section 2.8 provides the conclusion.

2.2 Background

2.2.1 The only ruling party in China

The Communist Party of China (CPC) was founded in 1927 and became the ruling party nationwide after establishing the People's Republic of China in October 1949. The CPC has maintained an over seventy-year monopoly through devoted Party memberships, rigorous screening, and continuous scrutiny. CPC's political dominance and fusion with the government imply that the Party membership can generate tangible economic

benefits for the individual (Appleton et al., 2009). Party membership in China, therefore, not only implies a measure of political status but also, more importantly, represents a most direct link with the only ruling party in China (Li et al., 2008).

As a highly centralized party-state with a one-party political system (Liu, 2003), the authoritarian regime of China ensures 'top-down decision-making' (Beladi et al., 2022), implying that the government or the ruling party exercises considerable control over key economic resources through state-owned enterprises and involvement in financial markets (i.e., state-owned banks) (McMillan, 1997; Chen et al., 2017; Pan and Tian, 2017). The Party-state, especially the Communist Party itself, keeps powerful levers to incentivize compliance with central directives and deter serious malfeasance. These include discretionary control over regulations and finance, the appointment, appraisal, and promotion of key personnel, and disciplinary mechanisms (Hameiri, 2018). Making an effort to join the Party and, in the process, subjecting oneself to a greater degree of political scrutiny and responsibility are part of the investment in political capital. The return from such investment may be higher income, greater career mobility, and easier access to valuable information (Li et al., 2007). Notably, the Party, through Chinese governments at all levels, extensively controls the core resource allocation like land, bank loans, and government contracts (Pan and Tian, 2020; Piotroski and Zhang,2014; Wei et al., 2020). Access to these party officials may indicate that a household has greater access to a larger pool of financial resources (Cruz, Labonne, and Querubin, 2017; Faccio and Hsu, 2017; Fafchamps and Labonne, 2017).

2.2.2 Attainment and recruitment of party members

In 2021, there were 95.148 million members of the CPC, a net increase of 3.5% since 2019 (Intra-Party Statistical Bulletin of the Communist Party of China, 2021), mirroring the rapid and comprehensive development in China (Appleton et al. 2009).

The attainment of party membership not only follows a rigorous selection process on 18-year-old or above applicants that generally involves five stages: self-selection, political participation, daily monitoring, closed-door evaluation, and probationary examination but also requires continuous political education in central (local) party school whose primary function is to rotate local party cadres to ensure that local remain loyal to the Communist Party as well as to provide them with the necessary skills for future administration (Uhalley, 1988; Beladi et al., 2022).

The selection process begins with an individual filing a formal application to a party branch in their work unit to express their desire to become a member. The applicant is then monitored daily for at least three years, during which time they must attempt to meet all the party standards. Each applicant is assigned two party members as liaisons who regularly monitor and assess the applicant's political loyalty, work performance, and collaboration with co-workers. When the party branch believes it is time to make a more thorough evaluation, usually about two years after the initial application, it seeks opinions about the applicant from non-CPC co-workers. It then has closed-door assessments involving all the branch party members. Any major doubt by a non-party co-worker or a party member could lead to a rejected application. In these cases, the applicant will be given time to improve before being considered for another closed-door evaluation. Suppose the potential candidate passes the closed-door

evaluation. In that case, they become a probationary party member and will be closely monitored by the party branch for another year before being afforded full membership.

Both these lengthy and extended selection processes and party school education ensure the political loyalty of applicants and the superior quality of party members. To become a party member, a person must show extraordinary ability by outperforming co-workers, good interpersonal skills by maintaining good relationships with co-workers, great persistence by performing well during the lengthy selection process, and a positive attitude toward society, work, and the communist ideology.

It is relatively rare for members to leave the party once they have attained it. However, suppose members fail to show satisfactory attendance at the party meetings or are without registration with their local party department. In that case, they may be judged to have left the party and are ineligible to be party members in their lifetime (Li et al., 2008; Appleton et al., 2009). Also, according to the studies of Uhalley (1988) and Li et al. (2022), party members leave the CPC very rarely in China[6].

Based on a rigorous selection of applicants' merit, party membership is viewed as an indicator of human capital or ability (Li et al., 2008). An extensive set of sociological literature (Szelenyi, 1987; Lin and Bian, 1991; Walder, 1995) presents that party membership as a credential, much like educational attainment, as workability, interpersonal skills, persistence, and a positive attitude are also qualities that are important for the success of an individual in their social life and career. Meanwhile,

---

[6] These facts can further alleviate the concerns of the change of party members within households if the chapter only include CHFS 2013 data, as the party affiliations within household are relatively static and the attainment of party membership takes a really long time.

since economic reform in the late 1970s, the party has removed applicants' family class origins from the selection criteria of party memberships and increased emphasis on applicants' educational credentials and expertise (Bian et al., 2001). Because of this change, Party members are now younger, better educated, and more likely to be engaged in knowledge-intensive occupations (such as teachers, researchers, and engineers) than in the past (Li et al., 2008).

2.3 Related literature and hypotheses development

2.3.1 Political connections and the role of Party membership in the context of finance

Prior literature finds that the values of political connections are generated by political elites' economic power (Baland and Robinson, 2008; Anderson, Francois, and Kotwal, 2015), ties of ethnicity and culture (Alesina, Baqir, and Easterly, 1999; Dunning and Harrison 2010; Munshi and Rosenzweig 2013), and political affiliations (Stokes et al. 2013). For example, Anderson, Francois, and Kotwal (2015) find that elite political minorities take advantage of extra-political means to undermine policies that redistribute income to the poor. Munshi and Rosenzweig (2013) assessed the role of caste networks in Indian local politics by using local public goods data at the root level and found that superior observed characteristics result from caste discipline in the political election and provide a significantly higher level of public goods.

Current empirical research finds that political connections based on party memberships are relatively strong, and party members have significant advantages in

earning valuable resources in China. Li et al. (2013) estimated the wage premium associated with having a cadre parent in China using a recent survey of college graduates carried out by the authors. The wage premium of having a cadre parent is 15%. Walder et al. (2000) show that joining the party is an essential condition for becoming a leader in China. Li and Walder (2001) find that joining a party in earlier periods of one's career significantly affects social advancement. Those who have become party members early in their careers are reported to have significantly higher chances of becoming social elites, whereas those who are already successful before joining the party do not experience a difference in their careers by joining the party. Rigorous evidence argues that party membership can be viewed as an indicator of human capital or ability because of its merit-based selection criteria (Li et al., 2008). For example, Bian et al. (2001) find that party members have higher chances than non-party members to become top managers in SOEs by controlling other human capital. Several institutional difficulties for firms characterize transition countries, so the Chinese setting can help investigate the impact of political connections on households' access to finance in an underdeveloped but strong government intervention context[7].

In recent years, political-connection-related issues within the fields of finance have been studied (Chen, 2018). The seminal paper by Fisman (2001) reports that Suharto's health-related events caused a significant loss in return on the price of the securities of politically connected firms. Faccio (2006) then extends the scope of the investigation

---

[7] The Chinese market is commonly acknowledged as an undeveloped market, as the impact of spillovers from China to other financial markets was commonly considered to be limited (see e.g., Arslanalp, et al.). In China, the government plays a significant role in economic activities, directly overseeing the distribution of limited resources like land, bank loans, and government contracts (Wei et al., 2020). As a result, having political connections is highly advantageous for access to financial resources in China.

to 47 countries and reveals that the announcement by officers or large shareholders of a company to enter politics is positively associated with cumulative abnormal returns, which vary depending on their political power. Following the studies of Fisman (2001) and Faccio (2006), this line of research has been further applied to various countries, including late-Victorian Britain (Braggion and Moore, 2013), a longitudinal dataset of Italian companies (Cingano and Pinotti, 2009), Russia's politically connected firms (Slinko et al., 2005), and US firms connected to Timothy Geithner as a nominee for Treasury Secretary by President Obama (Acemoglu et al., 2016).

The values of political connections in the context of (listed) firms have been widely studied in the current finance-related literature, while considerably less work has been done on the perspective of household finance. For instance, on the one hand, political connections provide related valuable resources like business opportunities, government subsidies, and bailout possibilities (Boubakri et al., 2008; Claessens et al., 2008; Ferguson and Voth, 2008; Houston et al., 2014; Piotroski and Zhang, 2014). On the other hand, political connections can help firms obtain bank credit because firms face financial constraints and higher levels of asymmetric information. (Claessens, Feijen, and Laeven, 2008; Infante and Piazza, 2014; Leuz and Oberholzer-Gee, 2006). For instance, Khwaja and Mian (2005) use a dataset of Pakistani firms and find that politically connected firms can borrow 45% more than firms without political connections. The findings of Johnson and Mitton (2003) and Faccio et al. (2006) also suggest that political connections affect government or bank decisions. The former paper shows that political connections provide preferential access to lending from the

government or politically connected banks (Khwaja and Mian, 2005), whereas the latter paper shows that politically connected firms are more likely to be bailed out. Thus, to be treated preferentially by the government and gain a competitive advantage, firms have strong incentives to stay close to the government through formal and informal personal channels in exchange for contracts and opportunities for private gains (Ngo, 2008; Cai et al., 2011).

Political connections and associated economic performance among Chinese firms have also attracted the attention of economists, as political connections are often associated with political power, which is still an important factor in markets of many transition economies (Khwaja and Mian, 2005; Faccio, 2006; Fisman and Wang, 2015; Asher and Novosad, 2017). On the one hand, the extant literature has explored the benefit of political connections in accessing capital market financing (Wei et al., 2020). For instance, Peng and Luo (2000), Francis et al. (2009), and Feng et al. (2013), looking at listed firms, find that political ties are beneficial to firms in terms of obtaining resources that enhance efficiency or improve performance. Chen et al. (2011b) and Wu et al. (2022) find that the performance of SOEs is negatively affected by political connections, whereas that of private firms is slightly or positively affected by political connections. On the other hand, some studies in the Chinese context also show that political connections can help firms obtain bank credit (Zhou, 2009; Feng et al., 2014; Guo et al., 2014; Feng et al., 2015; Cheng, 2018; Kung and Ma, 2018). In addition, Chinese firms with political connections experience several economic benefits during the process of going public, such as higher offering prices, lower underpricing, lower

fixed costs, preferential tax treatment, more government subsidies, and superior access to regulated industries through corporate deals (Feng et al., 2015; Francis et al., 2009). For instance, Feng et al. (2014) focus on Chinese listed firms; they find that political connections contribute to firms' post-IPO stock values and accounting performances. These outcomes help explain why firms are encouraged to actively develop political connections (Yueh, 2009; Dong et al., 2016; Feng et al., 2015; Banerji et al., 2018).

The values of political connections at the household level have also been studied sufficiently in the current economic literature, while considerably less work has focused on the perspective of household finance. Recent studies emphasize the importance of investigating political connections at the household level since the family is the fundamental unit of social organization (Cruz, Labonne, and Querubin, 2017). Also, recent empirical evidence presents that having access to local party officials may mean that a household has access to larger pools of resources associated with political connections (Li et al., 2020). Cruz, Labonne, and Querubin (2017) find that more central families are more likely to run for office as those can promote relationships of political exchange (political elections). Faccio and Hsu (2017) adopted an administrative dataset of 20 million individuals in the Philippines and presented robust evidence that relatives of current officeholders are more likely to be employed in better-paying occupations. Fafchamps and Labonne (2017) find that politically connected private equity firms create higher job creation through government contracts and grant awards. Specifically, on average, politically connected private equity buyout firms increase employment at their existing establishments following a buyout. In the context

of Chinese households, the findings of Han and Gao (2019) show that political elite capture effects are evident in welfare program participation and transfer value, and also further suggest that elite political capture may be one important reason for targeting errors in developing countries' community-based targeting welfare programs such as China's rural Dibao.

Moreover, some past literature on household finance investigates the relationship between political values and local household investment behaviors. For example, Ge et al. (2021) argue that political background significantly affects household financial market participation because households with a political background can generate higher wealth, greater social capital, and fewer financial constraints than those without a political background. Markussen and Tarp (2014) suggest that household connections to local government officials help households expand their land-related investment and strengthen their de facto land property rights and access to credit and transfers.

2.3.2 Party membership and households' access to credit

Following a vast of literature, as presented above, despite the ample evidence of the role of political connections in market financing and firm performance, we know relatively little about how political connections may affect access to finance for politically connected households. From the borrower's side, previous studies have investigated political connections at the firm level in securing larger amounts of funding from the government or politically connected banks. For example, Claessens et al. (2008) find that Brazilian firms substantially enhance their bank financing by benefiting

federal deputies compared with a control group after elections; firms contributing to winning candidates enjoy better access to finance. Khwaja and Mian (2005) show that firms with political power can obtain rents from government banks by threatening bank officers with job transfers and removals or rewarding them with appointments and promotions. Infante and Piazza (2014) find robust evidence that politically connected firms benefit from lower interest rates when the political link is at a local level. Moreover, Li and Zhou (2015) also show that, for Chinese firms, political connections facilitate higher IPO approval probability from the central government to regulated industries through corporate deals. From the lender's side, Faccio et al. (2006) also find that banks may be more willing to provide funds to politically connected firms as those politically connected are more likely to be bailed out than their non-connected peers when they suffer economic distress.

In line with the firm-level evidence, we have found a few studies regarding how political affiliation provides exclusive opportunities to attend political activities, such as official meetings with other Party members. Frequent interactions with these members help enrich the household's social network (McLaughlin, 2017). Having access to local party officials may indicate that a household has access to larger pools of resources associated with political networks (Cruz, Labonne, and Querubin, 2017; Faccio and Hsu, 2017; Fafchamps and Labonne, 2017). This may reduce the reluctance of banks to extend credit (Li et al., 2020). Moreover, developing relationships with party officials may help households overcome regulatory constraints and receive preferential treatment from the government (Feng et al., 2014; Kung and Ma, 2018). Concerning

access to bank loans, connections to bank officers who are party officials may be instrumental in more successfully negotiating access to bank loans (Dickson, 2003).

Existing literature also offers empirical evidence between political connections and households' access to loans. Li et al. (2020) used data from Chinese households to investigate political connections on access to bank loans. They identified political connections as household heads' affiliations to all existing political organizations rather than exclusively focusing on the ruling Party membership. This study differs from Li et al. (2020) for several reasons.

First, the chapter corroborates their results but goes further by using the number of Party members as a quality measure of political connections rather than a binary affiliation dummy, capturing the strength of political connections within households (Perdersen et al., 2004; Cheng, 2022).

Second, while the work of Li et al. (2020) focuses primarily on formal bank loans, the findings indicate that political connections also facilitate larger amounts of informal loans. This distinction is critical as it expands the scope of understanding regarding the influence of political affiliations on household financial behavior in China as I discussed above. By demonstrating that Party memberships can lead to larger amounts of both bank and informal loans, this study suggests that political connections play a broader role in household credit access than previously documented.

Third, this chapter develops the work of Li et al. (2020) and further investigates the political connection at the community level and further explores of mediate role of

sociability, uncovering the specific mechanism behind the main effect of political connections on both bank and informal loan amounts.

Moreover, their paper does not distinguish the political perspectives of Party memberships from their human capital perspectives, according to Li's (2008) findings. As discussed above, CPC party memberships in underdeveloped markets like China can be one form of political connection rather than human capital value in discussing its causal inference. Li et al. (2008) argue that if party membership represents human capital, one would expect it to be more valuable in more developed market environments. However, they find that Party membership is more important when the market is less developed, which seems to suggest that Party membership probably leads to establishing political connections that are more significant in a weak market environment. This may be particularly true for households in emerging and developing economies, where financial markets are less developed and information problems are more prevalent (Li et al., 2020).

In addition to the findings of Li et al. (2020), Cull et al. (2019) use a representative data set of Chinese household finance to find that better political connections (Party membership dummy) are associated with higher bank credit usage in the dual credit market which is emerging in China. However, their findings do not support their hypotheses that affiliation with the Communist Party is significantly associated with larger informal loan amounts. The coefficients of both the informal loan dummy and informal loan amount are statistically insignificant, which may cause inattention self-selection errors. This is because the sample in their probit regressions may not be

randomly assigned and covers households with credit needs, which may lead to biased outcomes (Heckman, 1979; Coady and Parker, 2009). Furthermore, Perdersen et al. (2004) argue that the number of Party members should imply the number of party activists, and Cheng (2022) finds that, in China, types of party branches in private enterprises depend on the number of Party members, which both lead to the argument that the number of Party members can be an important measure of political connection quality as a complementation to measures of Cull et al. (2019). Therefore, we apply the number of CPC members in this paper to measure household political connection quality.

It is essential for households to take borrowing constraints into consideration when discussing household access to bank loans (Campbell, 2006), and numerous prior studies identify that the existence of borrowing constraints is associated with some human capital factors: age, education, income, and financial literacy (Campbell 2006; Guiso, Sapienza, and Zingales 2008; Jia et al. 2019; Zhou and Xiao 2018). However, CPC membership status is more likely a form of political connections rather than human capital providing Party memberships due to the nature of the less-developed institutional background in China (Li et al., 2008), so this study goes step on to investigate what political capital the party membership may imply.

Asymmetric information concerning the probability of repayment can be an important reason that households consider obtaining bank loans because of asymmetric information (Stiglitz and Weiss, 1981). Banks do not have sufficient information about the creditworthiness of households, and often, they are unwilling to invest in collecting

information because of the small sizes of the loans and the fixed-cost nature of collecting information (Beck, Buyukkarabacak, Rioja, and Valev, 2012), which motives the first argument that political connection quality (that is the number of Party members within the household) reflecting household political connection quality can benefit households in easing information asymmetry problems thereby significantly improving household access to bank loans.

The fact that a household is politically affiliated with the political party may be an indicator of the household having access to both party officials and bank officials (Li et al., 2008), which further implies the Party membership may also be an indicator of the household having access to government officials as the Party-state political regimes of China. Political affiliation provides exclusive opportunities to attend political activities, such as official meetings with other party and government members, and to have frequent interactions with these members (McLaughlin, 2017). Hence, this study further argues that not only does political connection quality allows households to frequently contact local officials and so strengthen household's creditworthiness, thereby being granted preferential treatment once their bank loan applications have been granted, but also a higher quality of the political connection can further enhance both the mutual trust and the alleviation of information asymmetry between households and loan providers. The above two arguments lead to the first hypothesis regarding bank loans are as follows.

H1A. Political party membership significantly improves households' bank loan amounts.

Furthermore, in the context of informal loans, it is commonly acknowledged that the most important source of informal loans is from friends or relatives (Markussen and Tarp, 2014; Karaivanov and Kesslerm,2018). Political connections can allow households to borrow money from local officials and officials to facilitate connections to lenders or act as guarantors for loans (Markussen and Tarp, 2014), implying that political connection may be positively associated with informal loans' preferential amounts.

Additionally, Party memberships link individuals' political capital and social status in the Chinese context (Li et al., 2008). Households with higher social status have low financial and business risk (Turvery and Kong, 2010), thus decreasing the transaction cost of credit (Casson et al., 2010), implying that these households may be granted preferential loan amounts. Based on the above arguments, I present the first hypothesis regarding informal loans as follows.

H1B. Political party membership significantly improves informal loan amounts.

2.3.3 Effect of community-level party membership

The fact that a household head is politically affiliated with the political party may indicate that the household has access to party officials, such as local party leaders, bureaucrats, and bank officers of state-owned banks. Political affiliation provides exclusive opportunities to attend political activities such as official meetings with other Party members and to have frequent interactions with these members, thereby enriching the household's social interaction (McLaughlin, 2017), which leads to the argument that

households living in a community with more Party members may have more private information about bank loans thereby incentivizing households to borrow bank loans.

Existing studies investigating social networks have established a positive effect of social interactions on individuals' and households' financial behaviors, like stock market participation (Brown et al., 2008; Hong et al., 2004). It is shown that an individual is more likely to participate in the stock market, provided that a higher fraction of individuals in the neighborhood are stock market investors (Brown et al., 2008). Hong et al. (2004) and Brown et al. (2008) both suggest a stronger relationship between community-level variables and individual participation regarding higher socially interacted communities, which both serve to motivate the argument that social multiplier effects in terms of Hong et al. (2004) also exist in the context setting of community Party memberships.

Recent studies also evidenced that social network information positively affects households' access to credit (Bose et al., 2021). According to Manski (1993), this social multiplier effect could also be driven by common topic pleasure and social norms, implying that the effect may exist in a community that gathers more Party members because of the common party affiliation.

Additionally, I argue that community political connection may be associated with households' preferential loan amounts regarding bank loans and informal loans conditional on their applications, as households may not take advantage of the community effect without submitting their applications. The above arguments further

motivate us to state the second hypothesis as follows.

H2A. Households that live in a community with more party members receive larger bank loan amounts.

H2B. Households that live in a community with more party members receive larger informal loan amounts.

2.3.4 Mediating role of households' sociability

Past studies have documented that one's sociability can serve as an information channel helping individuals and households collect financial market information (Shiller, 1989; Hong et al.,2004; Ivkovic and Weisbenner, 2007; Brown et al., 2008; Liang and Song, 2015; Liu et al., 2021). Mainstream literature also commonly acknowledged that the information exchange mechanism behind social interaction is observational learning (Ellison and Fudenberg, 1995) or word-of-mouth communication.

Individuals' sociability may be used as their instrument to collect information (Liang and Guo, 2015), implying there exist information effects that sociable individuals may be more likely to gather relevant information. So, individuals' sociability may contribute to their credit involvement. Furthermore, more sociable individuals may more actively interact with their friends and relatives. So, they are more likely to gather the information they need, indicating that sociable party members may more actively interact with the bank, party, and government officials, strengthening the mutual trust and alleviating information asymmetry between households and household loan providers. I exclude informal loans here as the households' sociability is reviewed

as a mediation channel in collecting financial-related information. Hence, regarding the information effect of social interaction, I propose the second hypothesis as follows.

H3. Households' sociability improves the relationship between political party membership and bank loan amounts.

2.4. Data and variables

2.4.1 Data

This study uses the data from the China Household Finance Survey 2013[8] (CHFS 2013) conducted by the Southwestern University of Finance and Economics (SWUFE). CHFS 2013 covers detailed information on household financial behaviors and decisions of 28,113 households in 1,028 communities (villages) across 29 provinces (autonomous regions and municipalities) at the end of 2013. The covered areas are presented in Figure 2.1.

[INSERT FIGURE 2.1 HERE]

2.4.2 Variables

The study focuses on political connections and households' financial decisions. The list of variables and their definitions are all from the questionnaires in CHFS 2013[9] and are presented in Table 2.1 as follows.

---

[8] The CHFS database releases four rounds of data to the public in 2011, 2013, 2015, and 2017 respectively. The CHFS data has been widely recognized as representative since it is consistent with the data of the Chinese National Bureau of Statistics in most aspects, such as the age structure of the population, the urban and rural population structure, and the gender structure (Gan, Yin, and Tan, 2015). The respondents would receive a small gift which is equivalent to 15 US dollars for attending the survey, and the average interview time for each household is about 2 hours.

[9] Please see http://chfs.swufe.edu.cn/upload/files/CHFS-English.pdf for CHFS 2013 questionnaire in English version.

[INSERT TABLE 2.1 HERE]

The CHFS 2013 dataset includes information on household holdings of both bank loans and informal loans. *Bank loan dummy* is a dummy variable indicating that if the household has applied for at least one bank loan and the application has been granted. I rely on the questions [10] (Question B3001, C2024, C7017, and E1001) asking respondents if they have at least one outstanding bank loan (for business/agricultural, housing, car, and education use) to identify households' status of bank loans. *Informal loan dummy* is a dummy variable indicating if the household has applied for at least one informal loan and the application has been granted. I rely on the questions (Question B3030, C3001, C7047, E1020, E3001) asking respondents if they have at least one outstanding informal loan (for business/agricultural, housing, car, education, and other use) to identify households' status of informal loans.

The study also constructs measures of bank and informal loan amounts[11] by the corresponding sub-questions of the above questions. *Bank loan amount* represents the logarithm of the household's total bank loan amounts (including bank loans for business/agricultural, housing, car, and education use) plus one and *Informal loan amount* represent the logarithm of the household's total bank loan amounts (for business/agricultural, housing, car, education, and other use) plus one.

The CHFS 2013 dataset covers information on the party affiliation of household

---

[10] The CHFS 2013 survey asks respondents if they have outstanding bank loans for business/agricultural, housing, car, and education use, respectively, and asks respondents if they have outstanding informal loans for business/agricultural, housing, car, education, and other use, respectively.

[11] The units of both bank and informal loan amounts are Chinese Yuan (CNY), and the currency with the Great British Pounds is 1:0.099 (1 CNY=0.099 GBP at the current currency)

members, which is the question (Question A2015[12] in the CHFS 2013 questionnaire) asking respondents if they are CPC party members. The study uses the total number of CPC members within the household to measure *Political connection quality* . Following rigorous literature (Townsend, 1994; Angrist, 2014; Huang and Zhu, 2020), the study applies the leave-out mean (LOM) measure of the leave-out mean (LOM) to capture *Community Political connection*. Townsend (1994) applies the LOM of average village consumption, excluding the household itself, as one of the empirical strategies to capture the corresponding risk-sharing. Angrist (2014) identifies the LOM of student performance by excluding the student himself to capture the peer effect. *Community*[13] *political connection* is, therefore, constructed as,

$$\overline{PC}_{i,j} = \frac{N_j \overline{PC}_j - PC_{i,j}}{N_j - 1}$$

Where $\overline{PC}_{i,j}$ is the variable Peer political connection of household i in community j; N_j is the size of households in the community j, $\overline{PC}_j$ is the average of party members in the community j; $PC_{i,j}$ is the number of party members of household i in community j (i.e., the household political connection quality).

The expenditure on social networks reflects that a household tends to favor exchange in Chinese society (Yang et al., 2011; Ma and Yang, 2011). and it has been numerously employed to measure the size of a household's social network in China (Liang and Song, 2015; Li and Qian, 2021). In the CHFS (2013) survey, the respondents

---

[12] The codes are identifiers of original questions directly related to the variable construction in the questionnaire. They are provided for better identification for the readers.

[13] The community refers to either neighborhood committee or a village in rural areas in urban areas, and the community is regarded as the most basic unit of social networks in China (Cull et al., 2019). The CHFS 2013 provide identification code of communities.

answered the amounts of dining-out expenditure (Question G1002); entertainment expenditure (Question G1010); cash-gift expenditure (Question G2004); communication expenditure (Question G1009), and transportation expenditure (Question G1008) in 2012. Hence, following the paper of Li and Qian (2021), the study first defines households' social networks by households' annual expenditure consisting of dining-out expenditure, entertainment expenditure; cash-gift expenditure; communication expenditure, and transportation expenditure. Further, the study defines social networks by the ratio of total expenditure in the above five fields to household income, as expenditures for social events may be significantly associated with family richness (Liang and Song 2015). Last, the study pre-treats *Sociabilty* as a dummy variable that equals one if the ratio of annual household expenditure for social networks to total family income is above the sample median. Otherwise, it equals zero.

Age is a fundamental indicator for considering human capital (Castell´o-Climent, 2019) in household-level studies. The study constructed it by the logarithm of the household leader's age. Party members are now younger (Li et al., 2008) and generate higher wage returns (Castell´o-Climent, 2019), thereby promoting their repayment ability. *High school* is measured as a dummy variable equal to 1 if the household head has a high school (or above) diploma, which is crucial for revealing the stock of human capital (Barro and Lee, 1996). The study expects a positive sign on education as the high school diploma returns an individual to a higher wage due to better employment and working experience (Crane et al., 2021), strengthening the trust between banks and households.

Households with little extra work time may not have sufficient time to participate in financial activities and interact with neighbors and friends (Liang and Guo, 2015). CHFS 2013 gives information on the ages (Question A2005) and employment (Question A3000) of household members and household sizes (Pline). Hence, the study includes ratios of the number of children/elder members to the household size as the proxy for the $Child$ ratio and $Elder$ ratio and employment status as the proxy for $Work$.

The CHFS 2013 includes information on dual identification of households (Rural/Urban) and information on farmable land of rural households (Question C5001). *Rural household* is a dummy variable that equals one if the household lives in rural areas, and zero for household lives in cities. $Rural$ is employed as a dummy as rural households are more likely to need credit due to the instability of funding sources (Brau and Woller, 2004; Banerjee, 2013). Credit resources are also more inclined to rural households after targeted poverty alleviation in 2014 (Ding, Qin, and Shi, 2015). $Land$ is considered one of the large purchases that households may target and also serves as informal insurance for a household's financial setback (Cull et al., 2019), thereby the study would expect a positive sign for it.

The CHFS 2013 provides pre-treated data on household assets and household income. *Household assets* is described by the dataset as the sum of household financial assets and non-financial assets at the end of 2012 and is the core part showing both individual's past financial success and productivity (White and Alam, 2013) and the essential repayment ability (Sangwan et al., 2020), further improving the trust

between banks and households. *Household income* is described by the dataset as all income-related parts in 2012, including wage income, agricultural income, industrial and commercial income, transfer income, and investment income, and is an important indicator for enhancing the trust between banks and households, as it reflects the key repayment ability (Sangwan et al., 2020) that the banks can consider while reviewing loan applications. A household having a stable income is more unlikely to default in group repayment (Dorfleitner, Just-Marx, and Priberny, 2017), and households with high income also present greater repayment capability and tend to incentivize the repayment propensities among their fellow members (Ghatak, 1999).

Risk preference is applied as the exclusion variable for Heckman two-stage approach. The study argues that risk preference will not affect decisions from banks or informal loan providers, as it differs in subjective beliefs (Barseghyan et al., 2018). In CHFS 2013, question A4006 asks respondents "what would you choose between a lottery with 100% shot at 4,000 CNY and another with 50% shot at 10,000 CNY)?" and so a respondent is given three options in a lottery 4,000 CNY, and 10,000 CNY (2.5 times larger than the first lottery) with probabilities 100%, and 50%. Following the paper of Cull et al. (2019), the study regards respondents prefer high risk and higher return if they choose the latter option. The study uses a probit model to check its relationships with loan dummy and loan amount to examine the validity of the exclusion variable risk for return. The results show that risk for return is significant in both loan dummies while insignificant in both loan amounts. Thus, the study argues that the exclusion variable impacts household loan application decisions while not impacting

corresponding loan amounts.

Table 2.2 presents correlations between the main variables in the paper. First, the household-level variable Political connection quality is positively correlated with bank loan dummy (0.06) and bank loan amount (0.20), while it is negatively correlated with informal loan dummy (-0.09) and positively correlated with informal loan amount (0.10). Second, the community-level variable Community political connection is positively correlated with bank loan dummy (0.05) and bank loan amounts (0.41), while it is negatively correlated with informal loan dummy (-0.17) and positively correlated with informal loan amount (0.09). Notably, the negative correlations between political connection quality (community political connection) and informal loan dummy may be due to loan applications being conditional on having financial needs (Coady and Parker, 2009; Heckman, 1979), which further motivates the rationale for applying Heckman two-stage approach.

Meanwhile, $Bank\ loan\ amount$ is positively correlated with $Female$, $High\ school$, $Household\ assets$, $Household\ income$, and $Risk\ for\ return$ and negatively correlated with Age, $Rural$, $Land$, $Household\ scale$, $Child\ ratio$, and $Elder\ ratio$. The informal loan amount is positively correlated with $Household\ assets$ and $Household\ income$, and $Risk\ for\ return$ and negatively correlated with Age, $Rural$, and $Land$.

Sociability is only positively correlated with the bank loan dummy and bank loan amount, while it is only positively correlated with the informal loan amount. Also,

Sociability is positively correlated with both *political connection quality* and *community political connection*. It seems to capture the mediation channel of social interactions.

[INSERT TABLE 2.2 HERE]

2.5 Empirical strategies

2.5.1 The impact of the political connection quality on households' access to credit

This section examines the impact of the political connection quality on households' access to credit by employing the Heckman two-stage approach. The Heckman two-stage model is suitable for addressing endogeneity issues caused by sample selection bias. When the study considers the impact of political connection quality on households' access to credit, previous studies (Cull et al., 2019) directly run Probit regression on political connections dummy and bank loan results with controls of household demographic attributes and financial characteristics. However, all households respond to the questions regarding bank/informal loan amounts being granted corresponding loans - many households with higher political connection quality may not have financial needs, so they do not apply for credit. This part of the sample is not counted, so the sample loses randomness. This leads to a model that only uses households with granted credit, and the estimates are biased. Hence, it is essential to consider the part of the sample that does not apply for credit as unobserved factors that may lead to biased estimation regarding the loan selection stage. The Heckman two-step model addresses the sample selection bias by estimating the Inverse Mill's ratio based on following the

Heckman correlation.

$$Loan\ dummy_{it} = \alpha_1 + \beta_1 PCQ_{it} + \beta_2 Risk_{it} + X_{it}\beta + \varepsilon_{it} \qquad (2.1)$$

$$Loan\ amount_{it} = \alpha_2 + \theta_1 PCQ_{\ jt} + \theta_2 Y_{jt} + Mill's Ratio + \varepsilon_{jt} \qquad (2.2)$$

Where PCQ_{it} is the Political connection quality representing the number of party members in the household i; $Loan\ dummy_{it}$ represent if household i have applied and have been granted bank loans and/or informal loans at the time t; $Loan\ amount_i$ represent the logarithm of the amount of granted bank loans and/or informal loans; and the vector X_{it} and Y_{it} represents a set of control variables used in regressions capturing demographic attributes, economic conditions, and financial characteristics within households (Age, Female, High school, Work, Rural, Household scale, Child ratio, Elder ratio, Land, Household asset, Household income[14]) in equation (2.1) and equation (2.2), respectively. The study also includes the province fixed effect in the regression.

In Equation (2.1), the first stage, the study uses a Probit model with the full sample of 26,408 households, which estimates the probability that a household will be granted at least one bank/informal loan, and the estimates can be used to predict each household's probability of being granted a bank and/or informal loan. The selection stage of loan applications will be affected by good controls (Age, Female, High school, Work, Rural, Household scale, Child ratio, Elder ratio) and "bad" controls (Land, Household asset, Household income). The exclusion variable Risk for return will also

---

[14] Following the paper of Angrist and Pischke (2009), in equations (1)- (2), the study includes Age, Female, Education, Work, Rural, Household scale, Child ratio, Elder ratio as good controls with strict endogeneity, and variables Land, Household assets, and Household income are considered as 'bad controls' with exogeneity.

affect households' incentives to apply for bank/informal loans. It will not affect the specific amounts of granted loans, as at least one exclusion variable needs to be applied in the selection stage (Equation (2.1)) but not be taken into account in the outcome stage (Equation (2.2)) (Heckman and Navarro-Lozano, 2004). Then, according to the Probit model, Mill's Ratio1 is calculated to correct the sample selection bias for each household.

In Equation (2.2), using the selected sample[15] (Loan dummy=1) from the first stage, the study further deletes the exclusion variable from controls and adds Inverse Mill's ratio into the controls at the outcome stage. Suppose coefficients to Inverse Mill's ratio are significant. In that case, the estimates indicate that sample selection bias does exist. So, applying Heckman's two-stage approach is essential to correcting sample selection bias. Otherwise, it indicates that the estimates in the outcome stage are robust as the sample selection bias does not exist.

2.5.2 Exploring the role of community political connection on households' access to credit

Political affiliation provides exclusive opportunities to attend common political activities such as official meetings with other party members and to have frequent interactions with these members, thereby enriching the household's social networks (McLaughlin, 2017). Past empirical evidence also shows that information from social networks positively affects households' access to credit (Bose et al., 2021). According

---

[15] There are a selected sample of 3,474 households regarding bank loans and a selected sample of 5,492 households regarding informal loans.

to Manski (1993), this social multiplier effect could also be driven by common topic pleasure and social norms, implying that the effect may exist in a community that gathers more party members because of the common party affiliation. This motivates us to examine further the effect of community-level political connections on households' access to credit based on the baseline model.

$$Loan\ dummy_{it} = \alpha_1 + \beta_1 PCQ_{it} + \beta_2 CPM_{it} + \beta_3 Risk_{it} + X_{it}\beta + \varepsilon_{it} \qquad (2.3)$$

$$Loan\ amount_{it} = \alpha_2 + \theta_1 PCQ_{jt} + \theta_2 CPM_{jt} + Y_{jt}\theta_3 + Mill'sRatio2 + \varepsilon_{jt} \quad (2.4)$$

Where CPM_i is Community political connection representing the LOM of community party members regarding household i. Mill's Ratio2 is the inverse Mill's ratio obtained from Equation (2.3). The model also includes province fixed effects in Equations (2.3) and (2.4).

In Equation (2.3), the study uses a Probit model with the full sample of 26,408 households, which estimates the probability that a household with a bank (informal) loan dummy. Then, according to the Probit model, Mill's Ratio2 is calculated to correct the sample selection bias for each household. In Equation (2.4), using the selected sample (Loan dummy=1) from the first stage, the study deletes the exclusion variable from controls and adds Mill's Ratio2 into the controls at the outcome stage. Suppose coefficients to Mill's Ratio2 are significant; in that case, the estimates indicate that sample selection bias does exist, and so it is essential to apply Heckman two-stage approach to correct sample selection bias. Otherwise, it indicates that the estimates in the outcome stage are robust as the sample selection bias does not exist.

2.5.3 Exploring the mediating effect of sociability on political party membership and households' access to credit

Past papers on social capital theory identify that a social network, in the form of social investment or social capital, can help individuals and households maintain relationships and gain resources (Xin and Pearce 1996). Thus, the study further introduces the interaction term sociability∗ political connection quality based on the baseline model.

$$Loan\ dummy_{it} = \alpha_1 + \beta_1 PCQ_{it} + \beta_2 CPC_i * Sociablity_i + \beta_3 Sociablity_i +$$
$$\beta_3 Risk_{it} + X_{it}\beta + \varepsilon_{it} \tag{2.5}$$

$$Loan\ amount_{it} = \alpha_2 + \theta_1 PCQ_{jt} + \theta_2 CPC_{jt} * Sociablity_{jt} + \theta_3 Sociablity_{jt} +$$
$$Y_{jt}\theta + Mill'sRatio3 + \varepsilon_{jt} \tag{2.6}$$

Where $Sociabilty_i$ is a dummy variable that equals one if the ratio of annual household expenditure for social networks to total family income is above the sample median. Otherwise, it equals zero.

In Equation (2.5), the study uses a Probit model with the full sample of 26,408 households, which estimates the probability that a household with a bank (informal) loan dummy. Then, according to the Probit model, Mill's Ratio2 is calculated to correct the sample selection bias for each household. In Equation (2.6), using the selected sample (Loan dummy=1) from the first stage, the study deletes the exclusion variable from controls and adds Mill's Ratio3 into the controls at the outcome stage. Suppose coefficients to Mill's Ratio3 are significant; in that case, the estimates indicate that sample selection bias does exist, and so it is essential to apply Heckman two-stage

approach to correct sample selection bias. Otherwise, it indicates that the estimates in the outcome stage are robust as the sample selection bias does not exist.

2.6 Descriptive statistics and empirical results

2.6.1 Descriptive statistics

Table 2.3 provides the summary statistics for all the variables applied in this paper. I report observations of variables in Column (1), means, and standard deviations for the whole sample in Columns (2) and (3), respectively. Min and max values for each variable are presented in Columns (4) and (5), respectively.

As shown in Column (2), 13.1% of households have applied for and been granted bank loans, and 31.1% of households have applied for and been granted informal loans in the CHFS 2013 dataset. The average bank loan amount (log) and informal loan amount (log) are 2.312 and 6.451. It is noteworthy that informal loans are the most important sources in the Chinese credit market and provide larger amounts to households, further confirming the necessity of understanding household financial decisions on informal loans. Regarding the two proxy variables measuring political connection at the household level and community level, the variable Political connection quality takes a value of 0-4, and the average number of party members in the household is 0.219. The variable Community political connection takes a value of 0-1.086, and the average number of party members in the community is 0.256. The study uses Sociability to measure households' social networks; the average (log) is

0.071.

The dataset includes demographic attributes for all household members. The average household scale is 3.48, which takes values 1-19. Following Cull et al. (2019), the study uses household leaders' logarithm of age and education level as household "age" and "education" - the average (log) of household "age" is 3.898, and 36.5% of households hold education dummy "High school." In the dataset, 24.3% of households are headed by females, and 67.4% of households work. 31.8% of households live in rural areas, and 68.2% of households live in cities. Two proxy variables measuring households' work time: Child ratio and Elder ratio, with an average of 0.122 and 0.149, respectively. Also, 46% of households have farmable land in the dataset.

The study uses household assets and household income to measure the wealth level of households. The average (log) of household assets and household income are 12.473 and 10.351, respectively. Also, only 26.8% of households prefer high risk and high return in the dataset.

[INSERT TABLE 2.3 HERE]

I further report the characteristics of politically connected and non-connected households and the t-test of the differences between the two groups in Table 2.4. Panel A describes the difference in dependent variables between politically connected and non-connected households. Panel B provides the difference of dependent variables between politically connected and non-connected households after interacting with the mediation variable Sociability. Panel C presents the difference in controls between

politically connected households and non-connected households.

In the last column of Panel A, the results show that the politically connected households have a higher probability of successfully applying for bank loans at 1% level while those have a lower probability of obtaining informal loans at 1% level. However, politically connected households can obtain larger amounts of both bank loans and informal loans at 1% level. In the last column of Panel B, the results show that, after interacting with sociability, politically connected households have a higher probability of successfully applying for bank loans at 1% level and can gain larger amounts of informal loans over their counterparts at 1% level.

As shown in the last column of Panel C, politically connected households are headed by younger leaders at 1% level and hold more high school diplomas at 1% level, which confirms the results of Li et al. (2008). Moreover, at 1% level, the results show politically connected households have a higher elder ratio, higher household assets, and higher income while they are less likely to have work, being rural, with a larger household scale, and have less land than non-connected households. The following sections provide the main results of the three hypotheses.

[INSERT TABLE 2.4 HERE]

2.6.2 The impact of political connection quality on households' access to credit

Table 2.5 shows the results of the Heckman regressions of the household-level political connection quality on households' access to credit with province-fixed effect. The study uses the Loan dummy in the selection stage and Loan amount in the outcome stage as

the dependent variables and adds the Inverse Mill's ratio1 from Equation (2.1) as an additional regressor. Column (1) presents the results from Equation (1) which examine the impact of households' political connection quality on bank loan dummy, and Column (2) presents the results from Equation (2), which examine the impact of households' political connection quality on bank loan amounts. In Column (2), I calculate Average Marginal Effects at means; Columns (3) present the results from Equation (1) that, examine the impact of households' political connection quality on informal loan dummy, and Columns (4) present the results from Equation (2) that examine the impact of households' political connection quality on informal loan amounts. In Column (4), I calculate Average Marginal Effects at means; Meanwhile, the results show that the variable Risk for return as the exclusion variable is statistically significant in all models, which indicates that sample selection bias does exist in the sample and so it is essential to apply for Heckman two-stage approach correct sample selection bias.

To begin with, the baseline regressions describe the relationship between political connection quality and households' amounts regarding bank loans. The exclusion variable Risk for return is significant at the 10% level. At the selection stage, the coefficient of variable political connection quality in column (1) is statistically significant with a positive sign at 1% level, suggesting that the households with a higher political connections quality are more likely to apply for a bank loan; At the stage of the outcome, the coefficient of the variable political connection quality in column (2) is statistically significant with a positive sign at 1% level, suggesting that the

households with one unit more party member are granted a larger amount (6.0%) of bank loan, which supports the H1A - political party membership significantly improves bank loan amounts to households conditional on their bank loan applications. Higher political connection quality helps households be in a better position to develop private relationships with other Party members and bank officials based on mutual trust and support. Households with higher political connection quality may thus gain preferential treatment when applying for a loan. Regarding the good controls and "bad" controls alleviating omitted variable issues, the coefficients of female work, household assets, and household income are all significant with positive signs, while age and land are both significant with a negative sign at 1% level. This implies that households with female household heads, work, higher household assets, higher household income, younger heads, and few lands can receive larger amounts of bank loans, which is consistent with the expectation in the part of Variables.

Next, regarding informal loans, the exclusion variable Risk for return is significant at the 5% level. At the selection stage, the coefficient of variable political connection quality in column (3) is statistically significant with a negative sign at 1% level, suggesting that the households with a higher quality of political connections are less likely to apply for an informal loan, which may be led by the unwillingness of applying in terms of households with higher political connection quality; At the stage of the outcome, the coefficient of the variable political connection quality in column (4) is statistically significant with a positive sign at 1% level, suggesting that the households with one unit more party member are granted a larger amount (79.2%) of informal loan,

which supports the H1B - political party membership significantly improves informal loan amounts to households conditional on their informal loan applications. Party memberships link individuals' political capital and social status in China (Li et al., 2008) and so decreasing the transaction cost of credit (Casson et al., 2010), implying that these households may be granted preferential loan amounts. Regarding the controls, the coefficients of age, high school, child ratio, elder ratio, and household assets are all significant with positive signs, while the household scale and rural land are significant with negative signs. This implies that households with elder household heads, more children, more elders, higher household assets, smaller household scales, not being rural, and few lands can receive larger amounts of informal loans.

[INSERT TABLE 2.5 HERE]

2.6.3 Exploring the role of community political connection on households' access to credit

Table 2.6 shows the results of the Heckman regressions regarding the effect of community-level political connection on households' access to credit, including the province-fixed effect. I use the Loan dummy in the selection stage and Loan amount in the outcome stage as the dependent variables and add the Inverse Mill's ratio2 from Equation (3) as an additional regressor. Column (1) presents the results from Equation (3), which examine the impact of the community political connection on the bank loan dummy, and Column (2) presents the results from Equation (4), which examine the impact of community political connection on bank loan amounts. In Column (2), I

calculate Average Marginal Effects at means; Column (3) presents the results from Equation (3) that examine the impact of community political connection on informal loan dummy, and Column (4) presents the results from Equation (4) that examine the impact of community political connection on informal loan amounts. In Column (4), I calculate the Average Marginal Effects at means. Meanwhile, the results show that the variable Risk for return as the exclusion variable is statistically significant in all models, which indicates that sample selection bias does exist in the sample and so it is essential to apply for Heckman two-stage approach to correct sample selection bias.

To begin with, I test the effect of community political connections on households' bank loan amounts. It shows that community political connection is significantly positively associated with larger amounts of household bank loans, and the exclusion variable Risk for return is significant at the 10% level. At the selection stage, both the coefficient of variable political connection quality and community political connection in column (1) are statistically significant with a positive sign at 1% level, suggesting that the households with a higher political connections quality are more likely to apply for and obtain a bank loan; At the stage of the outcome, the coefficient of variable Political connection quality is statistically significant with a positive sign at 1% level and the coefficient of variable Community political connection in column (2) is significant with a positive sign at 1% level, suggesting that, after correcting the self-selection error by the Mill's ratio, the households with one unit more party member and the households are with more political-connected neighbours are more likely (25.6%) to be granted a larger amount of bank loan, which supports the H2A Households that

live in a community with more party members receive larger bank loan amounts conditional on their bank loan applications. Higher community political connection helps households be better positioned to gather private information from other party members within the same community based on mutual trust and support. Households with higher community political connections may thus gain preferential treatment when applying for a bank loan. Regarding the good controls and "bad" controls alleviating omitted variable issues, the coefficients of work, household assets, and household income are all significant with positive signs, while age, elder ratio, and land are significant with negative signs. This implies that households with work, higher household assets, higher household income, younger heads, lower elder ratio, and few lands can receive larger amounts of bank loans.

Next, regarding the results of the community political connection on informal loans, the exclusion variable Risk for return is significant at the 5% level. At the selection stage, the coefficient of variable political connection quality in column (3) is statistically significant with a negative sign at 1% level, suggesting that the households with higher political connection quality have fewer incentives to apply for an informal loan, which may be led by the fact that party members' political and social status prevent themselves to borrowing informal loans; At the stage of the outcome, after correcting self-selection error by the Mill's ratio, the coefficient of the variable political connection quality in column (4) is statistically significant with a positive sign at 1% level, suggesting that the community political connection is positively associated with larger amounts (382.1%) of households' informal loans, which supports the H2B

Households that live in a community with more party members receive larger informal loan amounts conditional on their informal loan applications and further empirically fills the gap that the context of informal loans are not covered in current literature. Regarding the controls and "bad" controls, the coefficients of age, child ratio, elder ratio, household asset, and household income are all significant with positive signs, while household scale, rural, and land are significant with negative signs. This implies that households with elder heads, more children, more elders, higher household income and household assets, smaller household scale, and few lands and living in rural areas can receive larger amounts of informal loans.

[INSERT TABLE 2.6 HERE]

2.6.4 Exploring the mediating effect of sociability on political connection quality and households' access to credit

Table 2.7 shows the results of the Heckman regressions examining the mediating role of households' sociability that includes province fixed effect. To empirically check the mediating effects of the households' sociability, the study adds the interaction term between a social network and political connection quality into the regressions. I use the Loan dummy in the selection stage and Loan amount in the outcome stage as the dependent variables and add the Mill's ratio3 from Equation (5) as an additional regressor. Columns (1) present the results from Equation (5) that examine mediating effects of the households' sociability on the bank loan dummy, and Columns (2) presents the results from Equation (6) that examine mediating effects of the households'

sociability on bank loan amounts. In Column (2), I calculate the Average Marginal Effects at means; Column (3) presents the results from Equation (5), which examine the mediating effects of the households' sociability on informal loan dummy, and Column (4) presents the results from Equation (6) that examine the mediating effects of the households' sociability on informal loan amounts. In Column (4), I calculate the Average Marginal Effects at means. Meanwhile, the results show that the variable Risk for return as the exclusion variable is statistically significant in all models, which indicates that sample selection bias does exist in the sample and so it is essential to apply for Heckman two-stage approach to correct sample selection bias.

Regarding the bank loan, at the outcome stage, the moderating effects of households' sociability are statistically significant with a positive sign at the 5% level, indicating that household social network positively moderates the relationship between political connection quality and households' access to bank loans. More sociable households with higher political connection quality can be granted larger amounts of bank loans, which supports the H3 - Households' sociability improves the relationship between political party membership and bank loan amounts. I find that the coefficients of work, household assets, and household income are all significant with positive signs, while age, elder ratio, and land are significant with negative signs. This implies that households with work, higher household assets, higher household income, younger heads, fewer elders, and few lands can receive larger amounts of bank loans.

Regarding the informal loan, at the outcome stage, the moderating effects of the household social network are statistically insignificant, indicating that the household

social network does not necessarily moderate the relationship between political connection quality and households' access to informal loans.

[INSERT TABLE 2.7 HERE]

2.7. Robustness tests

2.7.1 Alternative measure of political connection quality

In the main models, political connection quality is employed as the quality measure of the household-level political connection. In this section, I use household party member percentage as an alternative quality measure of the household-level political connection, defined as the ratio of the household's party members to the household scale. The quality of the political connection may be associated with household scale – different households have different household scales, although the numbers of party members within the households are the same. The variable household party members percentage takes a value of 0-1, and the average is 8% in the full sample. I estimate the impact of household party member percentage following the baseline model as sample selection issues may also exist.

Table 2.8 shows the Heckman regression results regarding the effect of household party members' percentage on households' access to credit, including the province fixed effect for the three hypotheses. I use the loan dummy in the selection stage and the loan amount in the outcome stage as the dependent variables, and I add the Inverse Mill's ratio as an additional regressor. Column (1) presents the results that examine the impact of the party member percentage on bank loan dummy, and Column (2) presents

the results that examine the impact of party member percentage on bank loan amounts;

Column (3) presents the results that examine the impact of party member percentage on

informal loan dummy, and Column (4) presents the results that examine the impact of

party member percentage on informal loan amounts. Meanwhile, the results show that

the variable $Risk\ for\ return$ as the exclusion variable is statistically significant in all

models, which indicates that sample selection bias does exist in the sample. So, it is

essential to apply Heckman two-stage approach to correct sample selection bias.

Table 2.8 shows that the coefficients of party member percentage are both highly

significant and even larger than the main analyses. All other control variables behave

as expected. In conclusion, the Heckman two-stage results from using an alternative

quality measure of the household-level political connection also support the main

results

[INSERT TABLE 2.8 HERE]

2.7.2 Instrumental variable (IV) method

In the main analyses, the Heckman two-stage approach addresses the self-selection bias.

I now use an alternative estimation approach of two least squares (2SLS) with

instrumental variables (IV) to address the identification challenge caused by

unobservable characteristics. The OLS regression regarding the impact of party

memberships is also employed in recent empirical studies (Li et al., 2008; Cull et al.,

2019; Ge et al.,2021), which can be constructed as,

$$Loan\ amount_i = \alpha_1 + \beta_1 PCQ_{\ i} + \beta_2 X_i + \varepsilon_i \qquad (2.7)$$

Where $Loan\ amount_i$ is the dependent variable representing household i's granted amount of bank/informal loans and PCQ_i is the explanatory variable representing household i's political connection quality. X_i are the exogenous controls and ε_i is the error item. I can run an unbiased OLS estimation if the error item is independent of political connection quality. However, model (2.7) may omit some unobserved characteristics regarding the relationship between political connection quality and households' credit amounts, and the unobserved characteristics are associated with PCQ_i, the OLS estimation would be biased and further trigger the endogeneity problem.

To address the identification challenge, one or more exogenous variables need to be introduced into the regressions, and the variable should be independent of the loan amount but be associated with political connection quality. Following the studies of Appleton et al. (2005) and Song (2017), where both employ the father's party membership as an exogenous instrument for their own party membership, I apply for paternal party membership (father's party membership and/or mother's party membership) as an IV for political connection quality regarding the first hypotheses. The causal link between paternal party membership and households' party membership comes from the screening process of party membership, which is discussed in Section 2.2. Parental membership status and family political records are heavily taken into the criteria for political loyalty, and a father's party membership can decrease individuals' marginal effect of being affiliated as a Party member (Liu, 2003; Appleton et al., 2005; Song, 2017), while the paternal party membership is excluded from the screening

process of loan providers. Thus, parental party membership (PPM) only affects loan amount by political connection, thereby I obtain that $Cov(PPM, PCQ) \neq 0; Cov(PPM, \varepsilon) = 0$.

Then I know that $Cov(PPM, Loan\ amount) = \beta_1 Cov(PPM, PCQ) + \beta Cov(PPM, X) + Cov(PPM, \varepsilon)$. Further, I obtain the unbiased estimator $\hat{\beta}_1$ as follows,

$$\hat{\beta}_1 = \frac{\sum_{i=1}^{n}(PPM_i - \overline{PPM})\,(Loan\ amount_i - \overline{Loan\ amount})}{\sum_{i=1}^{n}(PPM_i - \overline{PPM})\,(PCQ_i - \overline{PCQ})} \qquad (2.8)$$

To solve the potential endogeneity of the second hypothesis, I consider the upper-cluster level data[16] as the IV, as it has been universally applied in studies about peer effects and social networks. For instance, Brown et al. (2008) find that social networks have established a positive effect of social interactions on individual-level and household-level stock market participation by employing the community-level response rate as an exogenous instrument, and Bentolila et al. (2010) apply the state-level employment rate as an IV to examine the impact of the usage of social networks on individual income. Hence, I employ the city political connection (leave-out means of party members in the same city) as an IV for the community political connection. Similar to the economic rationale regarding the IV used for the first hypotheses, city political connection has no direct effect on the households' loan amounts, while the community political connection may be affected by the city political connection – the

---

[16] Utilizing the number of party members in the city level as an example, it is important to note that while it may be associated with party members in the community, it does not directly influence household borrowing behavior. The existing literature (Card and Krueger,1996; Bentolila et al., 2010)often employs the upper-cluster level at broader geographical levels such as the state, county, or metropolitan area. These broader data sets serve as instrumental variables for explanatory variables at the more granular levels of schools, families, and neighborhoods. This approach helps account for the fact that individuals tend to select schools, jobs, and political affiliations based on their personal traits and preferences.

number of party members within the community should be affected by the numbers within the city - as the number of party activists reflects local political connection quality (Perdersen et al., 2004).

Table 2.9 reports the first-stage estimation of instrumental variable regressions. Column (1) presents the results of bank loans, and Column (2) presents the results of informal loans, respectively.

[INSERT TABLE 2.9 HERE]

Table 2.10 shows the results of 2SLS estimations. In Columns (1) and (2) of Panel A, the results validate a positive and significant effect of political connection quality on larger amounts of both bank loans and informal loans. In Columns (1) and (2) of Panel B, the results validate a positive and significant effect of community political connection on larger amounts of both bank loans and informal loans. The remaining control variables maintain their significance and expected signs.

Regarding the validity and relevance of the instrumental variable (IV), I report the Anderson–Rubin and Stock–Wright LM statistics that are weak instrument-robust inference tests, distributed as F-test and chi-square, respectively, under the null that coefficients of the endogenous regressors in the structural equation are jointly equal to 0, and the over identifying restrictions are valid. Finally, the Hansen J statistic is used as a test of the overidentifying restrictions, distributed as chi-square under the null of instrument validity. The p-values for all these statistics are reported in Table 2.10.

In conclusion, the estimated results from the 2SLS regressions support the main

results as an alternative approach addressing the identification challenge.

[INSERT TABLE 2.10 HERE]

2.7.3 Propensity Score Matching (PSM) method

The main empirical results could be affected if politically connected households can obtain larger amounts of bank/informal loans with comparable characteristics between the treated (politically connected) and control (non-politically connected) groups. To address this potential endogeneity concern, I apply the Propensity Score Matching (PSM) method (Rosenbaum and Rubin, 1983) and use kernel matching with a bandwidth of 0.06 as the matching approach. I estimate the propensity score defined as $P(X) = \Pr(D = 1|X)$, where $D = \{0, 1\}$ denotes whether the household is treated, and X is the set of comparable characteristics, including Age, Female, High school, Work, Household scale, Child ratio, Elder ratio, Rural, Land, Household assets, and Household income. To ensure the accuracy of matching results, I check the balancing properties of household-level characteristics, which are reported in Table 2.11. Table 2.11 shows that, before the matching, there are significant differences between the treated and control groups regarding variable Household Scale, Chile ratio, Rural, Land, Household assets, and Household income, while the matched sample turned balanced. Column (7) shows that the p-values of all variables are larger than 0.1. Thus, the matched sample passes the balancing tests.

[INSERT TABLE 2.11 HERE]

Table 2.12 reports the propensity score matching estimation results with the province fixed effects. The matching samples are chosen on a one-to-one basis, where each politically connected household is matched with a non-politically connected household of comparable household-level characteristics reported in Table 2.11. The ATET is the computation of the average treatment effect of the treatment. That is, for a household, on average, the effect of being politically connected on the likelihood of obtaining larger loan amounts. In Panel A, Columns (1) and (2) validate the positive and significant effects of political connection quality on larger amounts of bank and informal loans, respectively. In Panel B, Columns (1) and (2) show positive and significant effects of community political connection quality on larger amounts of bank loans and informal loans, respectively. In Column (1) of Panel C, I find positive and significant mediating effects of households' sociability on larger amounts of bank loans. The other controls maintain their significance and signs as expected. In sum, as an alternative approach addressing the potential endogeneity concern, the estimated results from the PSM estimation provide further robust evidence supporting the main empirical results.

[INSERT TABLE 2.12 HERE]

2.8 Conclusion

I use a nationally representative sample of Chinese households to investigate the impact of the household-level political connection quality and the community-level political connection on households' access to bank and informal loan amounts in China. I further

explore the mediating role of household sociability, in the form of social networks, in influencing the relationships between household/community-level political connections and household access to bank loans.

The results present significantly positive effects of household and community-level political connections on larger amounts of bank loans and informal loans. Conditional upon households' application for credit, the more units of party members are within the household, the larger amounts of bank loans and informal loans households can obtain. As the mediating role, households' sociability also improves the significantly positive relationship regarding bank loans, aligning with a growing body of literature focused on community effects (or social interaction) (Hong et al.,2004; Brown et al., 2008).

The empirical results offer evidence that conditional on households' financial needs, becoming a party member and gathering more party members can help households obtain larger amounts of bank loans and informal loans. The results also provide crucial policy implications on households' financial decision-making among only one ruling-party regime. Party affiliations can be an important indicator of the loan provider's screening process. Thus, politically connected households in only one ruling-party regime can take advantage of their party memberships to apply for bank and informal loans once financial needs come to the table.

Figure 2.1 Survey covered areas[17]

Table 2.1 Definitions of variables

Variables	Definition	CHFS 2013 code
Bank loan dummy	Dummy variable =1 if have applied and been granted a bank loan	B3001, C2024, C7017, E1001
Bank loan amount	Log (1+bank loan amount)	B3003ait, C2041it, C7015ait, e1007bit
Informal loan dummy	Dummy variable =1 if have applied and been granted an informal loan	B3030, C3001, C7047, E1020, E3001
Informal loan amount	Log (1+informal loan amount)	B3031it, C3002it, E1021it, E3007ait, E3008a
Political connection quality	The numbers of Communist Party members within the household	A2015
Community Political connection quality	The mean of number of party members within the same community excluding the household itself.	A2015
Sociability	Dummy variable =1 if the ratio of household annual expenditure for social networks to total family income is above the sample median.	G1002, G1010, G2004, G1009, G1008
Age	The log (age) of the household head	A2005
Female	Dummy variable =1 if the household head is female	A2003
High school	Dummy variable =1 if the household head has high school (or above) diploma	A2012
Work	Dummy variable =1 if the household head has employment.	A3000
Household scale	The numbers of household members	Pline
Child ratio	The ratio of the number of population at the age of 0–15 years old to the number of labor population at the age of 16–65 years old in the household	A2005
Elder ratio	The ratio of the number of population at the age of above 65 years old to the number of labor population at the age of 16–65 years old in the household	A2005
Land	Dummy variable =1 if household have farmable land	A5001
Rural	Dummy variable =1 if the household is rural household	
Household asset	Log (total household asset)	
Household income	Log (total household income)	
Risk for return	Dummy variable =1 if the respondent prefers higher risk and higher return.	A4006

Note: The CHFS 2013 codes are the survey question identifiers for each variable's construction.

Table 2.2 Correlation of main variables

	Bank loan dummy	Bank loan amount	Informal loan dummy	Informal loan amount	Political connection quality	Community political connection	Sociability	Age	Female	High school	Work	Rural	Household scale	Child ratio	Elder ratio	Land	Household asset	Household income	Risk for return
Bank loan dummy	1																		
Bank loan amount	0.0878***	1																	
Informal loan dummy	0.1230***	-0.2863***	1																
Informal loan amount	0.1017***	0.1801***	0.2123***	1															
Political connection quality	0.0567***	0.2024***	-0.0861***	0.0965***	1														
Community political connection	0.0539***	0.4062***	-0.1685***	0.0855***	0.2807***	1													
Sociability	0.0367***	0.0549***	0.0043	0.0563***	0.0719***	0.0726***	1												
Age	-0.1614***	-0.2858***	-0.0554***	-0.0217*	0.0714***	-0.0540***	0.0260***	1											
Female	-0.0093	0.1550***	-0.0651***	0.0099	0.0139*	0.1456***	0.0321***	-0.0200***	1										
High school	0.0012	0.0644***	-0.0631***	0.0069	0.0532***	0.1221***	0.0451***	-0.0480***	0.0284***	1									
Work	0.1197***	0.0107	0.1166***	-0.0108	-0.0821***	-0.1452***	-0.0788***	-0.4419***	-0.2398***	-0.0386***	1								
Rural	-0.0081	-0.4881***	0.1945***	-0.1182***	-0.1604***	-0.4405***	0.0492***	0.1301***	-0.1994***	-0.1614***	0.2219***	1							
Household scale	0.0584***	-0.1701***	0.1813***	0.0205	-0.0614***	-0.1908***	0.0588***	-0.0624***	-0.1703***	-0.0470***	0.1770***	0.2271***	1						
Child ratio	0.0623***	-0.0122	0.1080***	0.0027	-0.0764***	-0.1206***	-0.0031	-0.2168***	-0.0915***	-0.0580***	0.1671***	0.1368***	0.6650***	1					
Elder ratio	-0.1239***	-0.1024***	-0.0774***	0.0178	0.1002***	0.0008	0.0227***	0.4650***	-0.0136*	-0.0482***	-0.3026***	0.0543***	0.0348***	-0.1071***	1				
Land	-0.0016	-0.4290***	0.2099***	-0.0917***	-0.2131***	-0.4386***	0.0215***	-0.0107	-0.2216***	-0.1590***	-0.3149***	0.5831***	0.2741***	0.1927***	-0.0256***	1			
Household asset	0.1772***	0.6860***	-0.0724***	0.3645***	0.2179***	0.3015***	-0.1527***	-0.1281***	0.0107	0.1162***	0.0263***	-0.3116***	0.0746***	0.0205***	-0.0889***	-0.2255*	1		
Household income	0.1264***	0.4727***	-0.1143***	0.1421***	0.2233***	0.2773***	-0.4598***	-0.1366***	0.0145*	0.1123***	0.0553***	-0.2900***	0.0933***	-0.0008	-0.0614***	-0.2436*	0.4790***	1	
Risk for return	0.0428***	0.0787***	-0.0172*	-0.0138	0.005	0.0139**	-0.0181**	-0.1154***	-0.0354	0.0236***	0.0694***	-0.0213*	0.0201***	-0.0546***	-0.0076	0.0023	0.0577***	0.0501***	1

Note: This table provides correlations between main variables. *P <0.1, **P <0.05, ***P <0.01.

Table 2.3 Summary statistics

Variables	Observations	Mean	Standard Deviation	Min	Max
	(1)	(2)	(3)	(4)	(5)
Dependent variable					
Bank loan	28113	0.131	0.337	0	1
Bank loan amount	4285	2.312	1.317	0.005	11.983
Informal loan	28113	0.311	0.463	0	1
Informal loan amount	6187	6.451	4.665	0.005	14.22
Independent variable					
Political connection quality	28113	0.219	0.413	0	4
Community political connection	28113	0.256	0.187	0	1.086
Mediating variable					
Sociability	28113	0.071	0.257	0	1
Good controls					
Age	28111	3.898	0.299	2.773	4.727
Female	28112	0.243	0.429	0	1
High school	28111	0.365	0.481	0	1
Work	28112	0.674	0.469	0	1
Rural	28113	0.318	0.466	0	1
Household scale	28113	3.480	1.628	1	19
Child ratio	28113	0.122	0.163	0	0.8
Elder ratio	28113	0.149	0.295	0	1
'Bad' controls					
Land	28104	0.460	0.498	0	1
Household asset	28107	12.473	1.684	1.386	16.811
Household income	27090	10.351	1.393	0	14.914
Exclusion variable					
Risk for return	27416	0.268	0.443	0	1

Note: The bank/informal loan dummy is proxied by whether the household has applied for and been granted a bank/informal loan. Bank/informal loan amounts are proxied by the logarithm of the household's granted amounts of bank/informal loans. The exclusive restriction used is Risk for return. Other variables' definitions are consistent with Table 2.1.

Table 2.4 Summary statistics: Politically connected versus non-connected

Variables	Politically connected	Non-connected	Difference
	Mean (S.D.)	Mean (S.D.)	Mean (S.D.)
	(1)	(2)	(1) – (2)
Panel A: Dependent variables			
Bank loan	0.165	0.121	0.044***
	(0.371)	(0.326)	(0.005)
Bank loan amount	2.736	2.164	0.572***
	(1.214)	(1.319)	(0.045)
Informal loan	0.24	0.331	-0.091***
	(0.427)	(0.471)	(0.007)
Informal loan amount	7.386	6.278	1.102***
	(4.532)	(4.670)	(0.162)
Panel B: Interacting with sociability			
Bank loan	0.133	0.096	0.037***
	(0.340)	(0.295)	(0.008)
Bank loan amount	2.317	2.229	0.088
	(1.316)	(1.338)	(0.089)
Informal loan	0.312	0.301	0.011
	(0.463)	(0.459)	(0.011)
Informal loan amount	6.509	5.684	0.825***
	(4.650)	(4.805)	(0.233)
Panel C: Independent variables			
Age	3.943	3.885	0.058***
	(0.300)	(0.298)	(0.004)
Female	0.244	0.243	0.001
	(0.429)	(0.429)	(0.006)
High school	0.629	0.291	0.337***
	(0.483)	(0.454)	(0.007)
Work	0.600	0.694	-0.094***
	(0.490)	(0.461)	(0.007)
Rural	0.184	0.335	-0.171***
	(0.387)	(0.479)	(0.007)
Household scale	3.290	3.533	-0.243***
	(1.484)	(1.662)	(0.023)
Child ratio	0.101	0.127	-0.027***
	(0.147)	(0.167)	(0.002)
Elder ratio	0.207	0.133	0.073***
	(0.346)	(0.277)	(0.004)
Land	0.271	0.513	-0.243***
	(0.444)	(0.500)	(0.007)
Household asset	13.126	12.289	0.836***
	(1.492)	(1.689)	(0.024)
Household income	10.898	10.195	0.703***

	(1.183)	(1.409)	(0.020)
Risk for return	0.271	0.267	0.004
	(0.445)	(0.442)	(0.006)

*Note: S*ignificance levels 0.1, 0.05, and 0.01 are noted by ∗, ∗∗, and ∗∗∗, respectively. The bank/informal loan dummy is proxied by whether the household has applied for and been granted a bank/informal loan. Bank/informal loan amounts are proxied by the logarithm of the household's granted amounts of bank/informal loans. The exclusive restriction used is Risk for return. Other variables' definitions are consistent with Table 2.1.

Table 2.5 Heckman two-stage selection model examining the impact of the political connection quality on households' loan amounts

Variables	Bank loan		Informal loan	
	Loan dummy	Loan amount	Loan dummy	Loan amount
	(1)	(2)	(3)	(4)
Independent variable				
Political connection quality	0.104***	0.060***	-0.099***	0.792***
	(0.019)	(0.011)	(0.020)	(0.150)
Good controls				
Age	-0.659***	-0.402***	-0.149***	0.942***
	(0.042)	(0.027)	(0.038)	(0.294)
Female	0.031	0.032**	0.001	0.018
	(0.026)	(0.015)	(0.023)	(0.175)
High school	-0.022	-0.024	-0.064***	0.360**
	(0.026)	(0.015)	(0.024)	(0.183)
Work	0.209***	0.092***	0.010	-0.045
	(0.030)	(0.017)	(0.024)	(0.185)
Household scale	0.072***	-0.000	0.141***	-1.000***
	(0.009)	(0.006)	(0.008)	(0.059)
Child ratio	-0.099***	0.006	-0.116***	0.853***
	(0.018)	(0.011)	(0.015)	(0.113)
Elder ratio	-0.149***	-0.028*	-0.185***	1.370***
	(0.020)	(0.012)	(0.016)	(0.120)
'Bad' controls				
Rural	0.250***	-0.023	0.180***	-1.322***
	(0.031)	(0.022)	(0.024)	(0.181)
Land	-0.009	-0.088***	0.260***	-1.932***
	(0.028)	(0.019)	(0.024)	(0.180)
Household asset	0.237***	0.228***	-0.028***	0.885***
	(0.010)	(0.016)	(0.007)	(0.057)
Household income	0.037***	0.042***	-0.075***	0.497***
	(0.010)	(0.007)	(0.007)	(0.057)
Exclusion variable				
Risk for return	0.023*		-0.002*	
	(0.012)		(0.001)	
Constant	-2.758***	-5.222***	0.295	1.681
	(0.225)	(0.521)	(0.190)	(1.615)
Province FE	Yes	Yes	Yes	Yes
Athrho	1.336***		-3.678***	
	(0.121)		(0.065)	
ρ	0.871		-0.999	
Observation	26408	26408	23720	23720

Log pseudolikelihood	-13320.26	-26178.74
Wald test of indep. Eqns ($\rho = 0$)	122.42	3195.27
Prob > chi2	0.0000	0.0000

Notes: The table reports the results from Heckman two-stage approach with province fixed effect regarding the first hypotheses. The dependent variables in Columns (1), (2), (3), and (4) are bank loan dummy, bank loan amount, informal loan dummy, and informal loan amount, respectively. The bank/informal loan dummy is proxied by whether the household has applied for and been granted a bank/informal loan. Bank/informal loan amounts are proxied by the logarithm of the household's granted amounts of bank/informal loans. The exclusive restriction used is Risk for return in model (1). Other variables' definitions are consistent with Table 2.1. The p-values refer to the test of equality among different levels of the household's political connection quality. Robust standard errors are in parentheses. Significance levels 0.1, 0.05, and 0.01 are noted by ∗, ∗∗, and ∗∗∗, respectively. In column (2) and column (4), Average Marginal Effects are calculated at means.

Table 2.6 Heckman two-stage selection model examining the effect of community political connection on households' credit amounts

Variables	Bank loan		Informal loan	
	Loan dummy	Loan amount	Loan dummy	Loan amount
	(1)	(2)	(3)	(4)
Independent variables				
Political connection quality	0.095***	0.050***	-0.075***	0.619***
	(0.020)	(0.011)	(0.020)	(0.152)
Community political connection	0.188***	0.256	-0.513***	3.821***
	(0.066)	(0.040)	(0.064)	(0.494)
Good controls				
Age	-0.658***	-0.399***	-0.161***	1.030***
	(0.042)	(0.027)	(0.038)	(0.295)
Female	0.028	0.027*	0.010	-0.046
	(0.026)	(0.015)	(0.023)	(0.175)
High school	-0.021	-0.021	-0.058**	0.319*
	(0.026)	(0.015)	(0.024)	(0.183)
Work	0.210***	0.096***	0.008	-0.028
	(0.030)	(0.017)	(0.024)	(0.184)
Household scale	0.075***	0.004	0.135***	-0.955***
	(0.010)	(0.006)	(0.008)	(0.059)
Child ratio	-0.100***	0.003	-0.112***	0.822***
	(0.018)	(0.011)	(0.015)	(0.113)
Elder ratio	-0.151***	-0.030**	-0.181***	1.346***
	(0.020)	(0.012)	(0.016)	(0.120)
'Bad' controls				
Rural	0.269***	0.004	0.139***	-1.012***
	(0.031)	(0.021)	(0.024)	(0.184)
Land	0.004	-0.072***	0.227***	-1.680***
	(0.029)	(0.019)	(0.024)	(0.182)
Household asset	0.234***	0.223***	-0.022***	0.843***
	(0.010)	(0.016)	(0.007)	(0.058)
Household income	0.035***	0.039***	-0.070***	0.456***
	(0.010)	(0.007)	(0.007)	(0.057)
Exclusion variable				
Risk for return	0.023*		-0.002**	
	(0.012)		(0.001)	
Constant	-2.791***	-5.343***	0.434**	0.564
	(0.225)	(0.521)	(0.191)	(1.622)
Province FE	Yes	Yes	Yes	Yes
Athrho	1.341***		-3.676***	

	(0.120)		(0.065)	
ρ	0.872		-0.999	
Observation	26408	26408	23720	23720
Log pseudolikelihood	-13298.69		-26145.57	
Wald test of indep. Eqns ($\rho = 0$)	124.09		3166.34	
Prob > chi2	0.0000		0.0000	

Notes: The table reports the results from Heckman two-stage approach with province fixed effect regarding the second hypothesis. The dependent variables in Columns (1), (2), (3), and (4) are bank loan dummy, bank loan amount, informal loan dummy, and informal loan amount, respectively. The bank/informal loan dummy is proxied by whether the household has applied for and been granted a bank/informal loan. Bank/informal loan amounts are proxied by the logarithm of the household's granted amounts of bank/informal loans. The exclusive restriction used is Risk for return in model (3). The p-values refer to the test of equality among different levels of both the household's political connection quality and community political connection. Robust standard errors are in parentheses. Significance levels 0.1, 0.05, and 0.01 are noted by ∗, ∗∗, and ∗∗∗ respectively. In column (2) and column (4), Average Marginal Effects are calculated at means.

Table 2.7 Heckman two-stage selection model examining the mediating role of households' sociability

Variables	Bank loan		Informal loan	
	Loan dummy	Loan amount	Loan dummy	Loan amount
	(1)	(2)	(3)	(4)
Political connection quality	0.090***	0.126***	-0.071***	0.632***
	(0.020)	(0.031)	(0.020)	(0.165)
Sociability	0.165**	0.633***	-0.279***	2.157***
	(0.065)	(0.107)	(0.051)	(0.418)
Sociability* Political connection quality	0.134	0.436**	-0.050	0.136
	(0.129)	(0.207)	(0.120)	(1.019)
Community political connection	0.181***	0.703***	-0.501***	3.992***
	(0.066)	(0.118)	(0.064)	(0.529)
Good controls				
Age	-0.648***	-1.105***	-0.177***	1.223***
	(0.042)	(0.103)	(0.038)	(0.316)
Female	0.028	0.081*	0.011	-0.059
	(0.026)	(0.042)	(0.023)	(0.188)
High school	-0.022	-0.065	-0.059**	0.343*
	(0.026)	(0.042)	(0.024)	(0.196)
Work	0.211***	0.271***	0.004	-0.002
	(0.030)	(0.055)	(0.024)	(0.197)
Household scale	0.074***	0.006	0.137***	-1.033***
	(0.010)	(0.017)	(0.008)	(0.063)
Child ratio	-0.100***	0.010	-0.112***	0.879***
	(0.018)	(0.030)	(0.015)	(0.121)
Elder ratio	-0.151***	-0.086**	-0.180***	1.430***
	(0.020)	(0.036)	(0.016)	(0.128)
'Bad' controls				
Rural	0.272***	0.023	0.134***	-1.040***
	(0.031)	(0.061)	(0.025)	(0.198)
Land	0.005	-0.199***	0.222***	-1.763***
	(0.029)	(0.049)	(0.024)	(0.196)
Household asset	0.229***	0.608***	-0.019***	0.878***
	(0.010)	(0.030)	(0.007)	(0.062)
Household income	0.051***	0.173***	-0.095***	0.681***
	(0.011)	(0.020)	(0.009)	(0.070)
Exclusion variable				
Risk for return	0.022*		-0.002**	
	(0.012)		(0.001)	

Constant	-2.942***	-5.801***	0.720***	-1.678
	(0.231)	(0.529)	(0.198)	(1.664)
Province FE	Yes	Yes	Yes	Yes
Athrho	1.338***		-3.669***	
	(0.122)		(0.066)	
ρ	0.871		-0.999	
Observation	26408	26408	23720	23720
Log pseudolikelihood	-13271.65		-26127.44	
Wald test of indep. Eqns ($\rho = 0$)	121.07		3129.77	
Prob > chi2	0.0000		0.0000	

Notes: The table reports the results from Heckman two-stage approach with province fixed effect regarding the third hypothesis. The dependent variables in Columns (1), (2), (3), and (4) are bank loan dummy, bank loan amount, informal loan dummy, and informal loan amount, respectively. The bank/informal loan dummy is proxied by whether the household has applied for and been granted a bank/informal loan. Bank/informal loan amounts are proxied by the logarithm of the household's granted amounts of bank/informal loans. The exclusive restriction used is Risk for return in model (5). The p-values refer to the test of equality among different levels of political connection quality*sociability. Robust standard errors are in parentheses. Significance levels 0.1, 0.05, and 0.01 are noted by ∗, ∗∗, and ∗∗∗ respectively.

Table 2.8 Robustness: Alternative measure of political connection quality

Variables	Bank loan		Informal loan	
	Loan dummy	Loan amount	Loan dummy	Loan amount
	(1)	(2)	(3)	(4)
Panel A: The impact of political connection quality on households' access to credit				
Household party members percentage	0.412***	0.146***	-0.304***	2.381***
	(0.109)	(0.039)	(0.046)	(0.9498)
Controls	Yes	Yes	Yes	Yes
Province FE	Yes	Yes	Yes	Yes
Observations	26408	26408	23720	23720
Panel B: Exploring the role of community political connection on households' access to credit				
Household party members percentage	0.190***	0.111***	-0.242***	1.917***
	(0.063)	(0.039)	(0.064)	(0.498)
Community political connection	0.213***	0.268***	-0.518***	3.874***
	(0.065)	(0.040)	(0.065)	(0.492)
Controls	Yes	Yes	Yes	Yes
Province FE	Yes	Yes	Yes	Yes
Observations	26408	26408	23720	23720
Panel C: Exploring the mediating effect of sociability on political connection quality and households' access to credit				
Household party members percentage *Sociability	0.168	1.117**	-0.360	1.900
	(0.347)	(0.576)	(0.219)	(0.457)
Province FE	Yes	Yes	Yes	Yes
Observations	26408	26408	23720	23720

Notes: The table reports the results from Heckman two-stage approach with province fixed effect regarding the three hypotheses by an alternative measure of political connection quality. The dependent variables in Columns (1), (2), (3), and (4) are bank loan dummy, bank loan amount, informal loan dummy, and informal loan amount, respectively. The bank/informal loan dummy is proxied by whether the household has applied for and been granted a bank/informal loan. Bank/informal loan amounts are proxied by the logarithm of the household's granted amounts of bank/informal loans. The variable party member percentage takes value 0-1 and the average is 8% in the full sample. The exclusive restriction used are Risk for return in all panels. The p-values refer to the test of equality among different levels of households' party member percentage, community political connection, and party member percentage *sociability in Panel A, Panel B, and Panel C, respectively. Robust standard errors are in parentheses. Significance levels 0.1, 0.05, and 0.01 are noted by *, **, and *** respectively. In column (2) and column (4) of Panel A and B, Average Marginal Effects are calculated at means.

Table 2.9 First-stage estimation of instrumental variable regressions

Dependent variables	Bank loan amount	Informal loan amount
	(1)	(2)
Panel A: *The impact of political connection quality on households' access to credit*		
Parental party membership	0.072***	0.175***
	(0.021)	(0.038)
Observations	3591	5060
Province FE	Yes	Yes
F-statistic for weak identification	12.14	21.61
Panel B: *Exploring the role of community political connection on households' access to credit*		
City political connection	0.678***	0.557***
	(0.028)	(0.021)
Observations	4094	5903
F-statistic for weak identification	572.02	703.36
Province FE	Yes	Yes

Notes: The table reports the results from the first stage of IV estimation with province fixed effect regarding the first two hypotheses. The dependent variables in Columns (1) and (2) are bank loan amount and informal loan amount, respectively. Bank/informal loan amounts are proxied by the logarithm of the household's granted amounts of bank/informal loans. The variable parental party membership takes value 1 if either the household head's father and/or mother is a party member. The variable City political connection is proxied by the leave-out means of party members within the same city. The p-values refer to the test of equality among different levels of households' parental party membership and city political connection in Panel A and Panel B, respectively. F statistics are tests for weak identification. Robust standard errors are in parentheses. Significance levels 0.1, 0.05, and 0.01 are noted by ∗, ∗∗, and ∗∗∗, respectively.

Table 2.10 Robustness: 2SLS regressions

Dependent variables	Bank loan amount	Informal loan amount
	(1)	**(2)**

Panel A: *The impact of political connection quality on households' access to credit*

Political connection quality	0.661**	0.725*
	(0.314)	(0.477)
Observations	3591	5060
Province FE	Yes	Yes
p value of LM statistics	0.000	0.000
F-statistic for weak identification	12.140	21.61
Anderson-Rubin F statistic	0.079	0.584
p-value of Hansen J statistic	0.000	0.000

Panel B: *Exploring the role of community political connection on households' access to credit*

Political connection quality	0.020	0.436***
	(0.028)	(0.146)
Community political connection	1.709***	2.781**
	(0.269)	(1.309)
Observations	4094	5094
Province FE	Yes	Yes
p value of LM statistics	0.0000	0.0000
F-statistic for weak identification	572.017	703.355
Anderson-Rubin F statistic	41.28	4.50
p value of Hansen J statistic	0.000	0.000

Notes: The table reports the two-staged least squares estimations with province fixed effects regarding the first two hypotheses. The dependent variables in Columns (1) and (2) are bank loan amount and informal loan amount, respectively. Bank/informal loan amounts are proxied by the logarithm of the household's granted amounts of bank/informal loans. The variable parental party membership takes value 1 if either the household head's father or mother is a party member. The variable City political connection is proxied by the leave-out means of party members within the same city. The p-values refer to the test of equality among different levels of households' parental party membership and city political connection in Panel A and Panel B, respectively. Robust standard errors are in

parentheses. Significance levels 0.1, 0.05, and 0.01 are noted by ∗, ∗∗, and ∗∗∗ respectively. The Anderson–Rubin and LM statistic is weak-instrument-robust inference tests, distributed as F-test and chi-square respectively, under the null that coefficients of the endogenous regressors in the structural equation are jointly equal to zero, and the overidentifying restrictions are valid. Hansen J statistic is a test of the overidentifying restrictions, distributed as chi-square under the null of instrument validity.

Table 2.11 Balancing properties of the household-level characteristics

Dependent variables		Mean			Reduct bias (%)	t-test	
	Sample	Treated	Control	Bias (%)		t-statistic	$p > \lvert t \rvert$
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Age	Unmatched	3.78	3.78	-1.0		-0.28	0.78
	Matched	3.78	3.77	2.2	-120.8	0.52	0.60
Female	Unmatched	0.25	0.21	8.4		2.41	0.01
	Matched	0.25	0.24	1.4	83.7	0.31	0.75
High school	Unmatched	0.22	0.20	6.4		1.83	0.07
	Matched	0.22	0.24	-5.5	13.7	-1.24	0.22
Work	Unmatched	0.82	0.83	-2.7		-0.76	0.45
	Matched	0.82	0.81	1.1	57.3	0.256	0.79
Household scale	Unmatched	3.65	3.83	-12.0		-3.32	0.00
	Matched	3.65	3.67	-1.3	89.3	-0.31	0.76
Child ratio	Unmatched	0.59	0.67	-10.7		--2.93	0.00
	Matched	0.59	0.60	-0.5	95.4	-0.12	0.90
Elder ratio	Unmatched	0.24	0.22	3.3		0.92	0.36
	Matched	0.24	0.24	0.9	72.0	0.20	0.84
Rural	Unmatched	0.21	0.37	-34.7		-9.43	0.00
	Matched	0.21	0.21	-0.6	98.4	-0.14	0.89
Land	Unmatched	0.31	0.55	-49.0		-13.62	0.000
	Matched	0.31	0.32	-0.8	98.4	-0.19	0.85
Household asset	Unmatched	13.71	13.02	50.2		13.68	0.00
	Matched	13.71	13.69	1.8	96.4	0.45	0.65
Household income	Unmatched	11.23	13.03	46.8		12.74	0.00
	Matched	11.23	13.69	2.7	94.3	0.67	0.504

Notes: The matching method `t-test' is the t-test to the equality of given the household-level characteristics between politically connected and non-politically connected households.

Table 2.12 Robustness: Propensity score matching estimation

	Bank loan amount	Informal loan amount
	(1)	(2)
Panel A: *The impact of political connection quality on households' access to credit*		
ATET	0.096***	0.432***
	(0.032)	(0.153)
Observations	4094	5903
Panel B: *Exploring the role of community political connection on households' access to credit*		
ATET	0.063**	0.480***
	(0.032)	(0.156)
Observations	4094	5903
Panel C: *Exploring the mediating effect of sociability on political connection quality and households' access to credit*		
ATET	0.847***	-1.422
	(0.228)	(0.877)
Observations	4094	5903

Notes: The table reports results from the Propensity score matching approach with province fixed effects. The dependent variables in Columns (1) and (2) are bank loan amount and informal loan amount, respectively. Bank/informal loan amounts are proxied by the logarithm of the household's granted amounts of bank/informal loans. Matching samples are chosen on a one-to-one basis, where each politically connected household is matched with a non-politically connected household of comparable household-level characteristics reported in Table 11. The ATET is the computation of the average treatment effect of the treated. That is, for a household, on average, the effect of being politically connected on the likelihood of obtaining larger loan amounts. The number of observations refers to observations on common support that is used to make the comparison between treatment and control group. Standard errors are bootstrapped in Panel A-C. Significance levels 0.1, 0.05, and 0.01 are noted by $*$, $**$, and $***$ respectively.

Chapter 3 CEO's Party school education and corporate investment efficiency: Evidence from Chinese listed firms

3.1 Introduction

The extant literature provides ample evidence that an individual's early experiences can significantly shape their risk preferences and decision-making behaviors (Holman and Silver, 1998; Hertwig and Erev, 2009; Cameron and Shah, 2015). Such factors can have lasting effects and play an important role in shaping firms' investment decisions in the future (Roll, 1986; Malmendier, Tate, and Yan, 2011; Benmelech and Frydman, 2015; Giannetti et al., 2015; Bernile et al., 2017; Mun et al., 2020). For instance, Malmendier et al. (2011) found that executives who lived through the Great Depression were more risk-averse and made more cautious decisions regarding external financing. Similarly, Benmelech and Frydman (2015) showed that executives who had experienced wars were more likely to engage in high-risk investments. These findings underscore the notion that an individual's early experiences can shape their future risk-taking tendencies and decision-making patterns. Consequently, they have significant implications for firms and investors seeking to understand and manage risk in their decision-making processes. By recognizing the impact of early experiences on risk preferences and decision-making behaviors, firms and investors can take steps to address potential biases and ensure that they are making well-informed decisions.

In addition to the impact of executives' early life experiences, numerous studies have also highlighted the importance of their educational background in shaping corporate governance practices. For example, Mun et al. (2020) found that CEOs with postgraduate degrees or business-related backgrounds tend to hold more cash reserves

than those without such qualifications. Similarly, Giannetti et al. (2015) used a unique dataset from China to demonstrate that directors with international education experience possess better management skills and are more effective at implementing corporate governance practices in emerging markets. However, the paper goes beyond this existing literature by examining the impact of executives' early education, specifically their degrees from party schools, on firms' capital allocation efficiency and performance once they assume leadership positions. By exploring this novel area of research, the study hopes to shed new light on the importance of Party school education and its potential implications for corporate decision-making.

Unlike previous studies on the early experiences and educational backgrounds of CEOs, the paper focuses on the Party School[18], a unique educational institution established by the Communist Party of China (CPC hereafter) to provide training for Party members and government officials. The Party School is designed to promote the CPC's ideology, ensure the faith and loyalty of Party members, and provide them with the skills necessary for effective governance in the future (Uhalley, 1988). As such, it represents an important channel for the CPC to maintain its political power and promote its values (Beladi et al., 2022). The Party School offers traditional higher education courses, including both undergraduate and postgraduate programs, as well as Party education that emphasizes political loyalty training and the promotion of Party values (Shambaugh, 2008; Beladi et al., 2022). This dual focus on education and Party loyalty makes the Party School a unique institution that is unlike any other educational

---

[18] As per the *Regulations on the Work of the Party Schools (Dang xiao/Xing zheng xue yuan) of the Communist Party of China*, Party schools (administrative colleges) are institutions under the leadership of the Party, designed to train and cultivate leading Party cadres. They serve as crucial departments within the Party Committee, offering the primary channel for developing high-level Party cadres at all levels. In addition, they hold significant roles in advancing the Party's ideology and theory, as well as serving as research institutions in philosophy and social sciences. https://www.12371.cn/2019/11/03/ARTI1572779103839582.shtml

institution in the world[19].Based on the institutional fact that there is only one ruling Party, that is the CPC in China (Liu, 2003; Appleton et al., 2009), the CPC exercises considerable control over key economic resources through state-owned enterprises and involvement in financial markets (i.e., state-owned banks) (McMillan, 1997; Chen et al., 2017; Pan and Tian, 2017). The Party School's focus on political loyalty and ideological conformity has important implications for how Party members and government officials approach their roles in the economy. First, students awarded Party school degrees have a greater opportunity to exclusively interact with government officials during the duration of their undergraduate and/or postgraduate studies (Beladi et al., 2022), suggesting they have greater advantages in joining political cliques (Liu, 2009, Tokarev et al., 2021); accumulating their political capital and cultivating invisible alumni relation with future government officials in their early life (Callick, 2013). Second, since the Party School instills a deep commitment to the Party's values and goals, those who have completed its degrees are likely to view economic decision-making through a political lens rather than a business lens (Beladi et al., 2022). The Party School's focus on loyalty training may lead to a culture of deference to Party monitoring, which could impede the possibility of dealing with self-interests (Qian, 1996; Li et al., 2020).

The evidence presented above implies two theoretical expectations. First, based on resource theory, connections with politicians can help firms access resources controlled by the government, such as the credit market, and obtain preferential treatment for more subsidies from the government (Shleifer and Vishny, 1993; Agrawal

---

[19] Party schools aim to instill communist ideology, loyalty, and discipline among prospective political leaders, and the Party school academic training is relatively weaker than traditional schools (Beladi et al., 2022). This specialized education fosters political connections in a state-influenced economy like China. Hence, this thesis treat the Party school education as a novel kind of political connection rather than traditional/academic education. This also leads me not to consider other traditional/academic education in the theoretical foundation.

and Knoeber, 2001; Adhikari et al., 2006). CEOs with Party school degrees have exclusive interaction and alumni relations with local government officials during their early life, which can help companies improve investment efficiency by obtaining more access to government resources. Second, based on agency theory, companies with access to political networks can reduce agency costs associated with investments. Agency costs arise from the conflict of interest between owners and managers of a company, who can make decisions that do not align with the interests of shareholders. Party School graduates are more likely to approach their roles as government officials and business leaders in a way that reflects the Party's values and goals, seeking no or only a small private benefit (Qian, 1996; Li et al., 2020). CEOs with Party school degrees can help companies reduce agency costs by providing greater oversight and accountability for investment decisions, as well as enabling companies to monitor and influence the actions of government agencies more effectively.

The study aims to fill the gap by investigating whether and how CEOs with Party School education affect firms' investment efficiency. By examining this relationship, the study hopes to shed light on the potential benefits and drawbacks of Party School education for firms operating in China. In particular, considering firms' ownership in the Chinese market, the study examines the research question by dividing the firms into SOEs and private firms. The chapter contributes to the literature mainly by extending the related literature on corporate capital allocation efficiency. Given that past evidence discusses the traditional education background of CEOs, to the best of my knowledge, the study is the first to investigate the causal relationship between the CEO Party education with a political focus and corporate capital allocation efficiency in the institutional background of only one ruling party[20], which deepens the understanding

---

[20] In western political systems, different political parties compete for ruling power and are open to recruiting new

of how firms' investment behaviors relate to its firm leader characteristics in general. These results also improve the understanding of how firms' investment behaviors relate to CEOs' political connections to the ruling party in particular.

The remainder of this paper's structure is as follows. Section 3.2 presents the related theory and hypotheses development, Section 3.3 describes the data and sample selection, and Section 3.4 introduces the empirical strategies for each hypothesis. Section 3.5 presents empirical results. Section 3.6 provides the robustness checks, and Section 3.7 addresses endogeneity concerns. Section 3.8 concludes the chapter by discussing the implications of the findings and directions of future research.

3.2 Related literature and hypotheses development

3.2.1 Determinants of corporate investments efficiency

"What determines firms' capital allocation" is a fundamental question in the finance literature (Chen et al., 2017). In a frictionless setting, a firm's investment should be driven solely by its investment opportunities, as measured by Tobin's Q (Tobin, 1969; Stein, 2003). However, in the real world, capital market frictions exist that can distort a firm's investment decisions and cause it to become unresponsive to growth opportunities, resulting in suboptimal investments. For example, Richardson (2006) finds that overinvestment is concentrated in firms with higher levels of free cash flow. Lara et al. (2016) argue that firms with more robust operations are less likely to overinvest or underinvest. Moreover, the degree of transparency of firms' financial information has an impact on both over- and under-investment (Biddle and Hilary, 2006;

---

members to chase funding (Appleton et al., 2008). However, the Communist Party is the only ruling party in China, so it is in power without any political competition.

Hope and Thomas, 2008; McNichols and Stubben, 2008; Biddle et al., 2009; Chen et al., 2011a).

Previous literature documented that information asymmetry can cause both moral hazard and adverse selection problems, affecting the efficiency of firms' investment (Myers and Majluf, 1984; Jensen, 1986; Stulz, 1990; Zwiebel, 1996). Mitigating the information asymmetry between corporate managers and investors that creates market friction improves investment efficiency (Bushman and Smith 2001; Healy and Palepu 2001; Lambert et al. 2007). For example, Benlemlih and Bitar (2018) find that high Corporate Social Responsibility (CSR) involvement can reduce investment inefficiency as those high CSR firms enjoy low information asymmetry.

Apart from the above literature, several empirical studies have identified that management team characteristics have a crucial impact on corporate investment decisions. Li et al. (2011) show that the age, tenure, and work experience of firms' managers have a significant impact on the investment efficiency of enterprises, and this impact differs among enterprises of different ownerships. Chen et al. (2011b) find that CEO political connection distorts the investment behavior of SOEs, thereby undermining investment efficiency. Zhu et al. (2022) use Chinese firm-level data and find that the investment efficiency of non-state-owned enterprises has no association with the CEO's existing tenure and expected tenure. In the case of SOEs, the more severe the overinvestment problem, the shorter the expected tenure, and the lesser the degree of overinvestment.

3.2.2 Related literature on party school education

The extant literature has documented that the individual's early experience can affect individual decision-making behaviors regarding firms' investment decisions in the

future (Roll,1986; Malmendier, Tate, and Yan,2011; Benmelech and Fryman,2015; Giannetti et al.,2015; Bernile et al.,2017; Mun et al.,2020). On the one hand, numerous studies evidence that an individual's early experience shapes their risk preferences toward investment opportunities (Holman and Silver, 1998; Hertwig and Erev, 2009; Cameron and Shah, 2015). Bernile et al. (2017) record that chef executives who were involved in fatal disasters and experienced extreme traumas in their early lives tend to be more risk-averse and so are more sensitive to the potential consequence of risk-taking. On the other hand, an individual's early experience can also affect their information asymmetry once they have joined the management team (Malmendier and Tate, 2008; Pham, 2020). For example, Pham (2020) finds that firms led by CEOs with legal expertise are associated with less stock price delay, weaker market reactions to corporate earnings announcements, and lower insider trading profits.

In addition to the effects of executives' early life experience, recent studies also sufficiently verify the importance of executives' educational background in corporate governance. For example, Mun et al. (2020) find that chief executives with postgraduate degrees or business disciplines are more likely to hold more cash than those without; Giannetti et al. (2015) use a unique dataset from China and show that directors with international education experience demonstrate better abilities of management practice and corporate governance in emerging markets. Distinct from the above literature, the paper provides a novel insight into how individuals' early party school education affects corporate investment efficiency once they have become executives in the future.

Past literature distinguishes future political promotion incentives for corporate executives from salary incentives (Liang et al., 2015; Cao et al., 2019). On the one hand, corporate executives may be granted preferential policies from government officials (Bai and Xu, 2005). On the other hand, corporate executives with future political

promotion incentives are constrained and influenced by local government officials. Providing the one-ruling-party institutional background and intensive political competition in China, SOE executives' positions can be adjusted among the original SOE, another SOE, and departments of the government, and they may also compete with each other to achieve a higher position in either SOEs or governments (Chen et al., 2018). Students who completed the Party school degrees may primarily engage in their future careers as potential politicians and value their roles mostly as government agents rather than entrepreneurs (Beladi et al., 2022), thereby focusing on future political promotion and ultimately siding with the interests of the government and the ruling party (Briscoe et al., 2014).

3.2.3 Hypotheses development

In this section, I present three hypotheses regarding the effect of CEO Party school education on corporate investment efficiency. Prior seminal studies (e.g., Tobin, 1969; Hayashi, 1982; Rauh, 2006; Baker et al., 2007) establish a fundamental theoretical framework explaining the relationship between corporate investment and investment opportunity. Recent empirical evidence (e.g., Chen et al., 2011b; McLean et al., 2012; Jiang et al., 2018) further suggests firms' ownership characteristics affect investment efficiency by applying the investment sensitivity to the investment opportunity. Following the spirit of fundamental theory and recent evidence, I propose that CEOs' Party school education in the form of firms' leadership characteristics can improve investment efficiency.

3.2.3.1 The effect of Party school education on firms' investment efficiency

Recent studies provide evidence that firms' investment decisions are associated with variations in CEO characteristics (Rajkovic, 2020; Lai et al., 2021; Kim et al., 2021).

Party school education naturally comes from only one ruling political party and is designed to cultivate potential politicians, suggesting that education shapes obedience, consciousness, and value orientation with party spirit and loyalty (Ladany, 1992; Brown, 2017). Previous empirical evidence also suggests that Party members[21] have a positive attitude towards communist ideology and society (Appleton et al., 2008; Li et al., 2008; Walder and Nguyen, 2008). Enterprisers with Communist party backgrounds are also less likely to be engaged in consumer fraud or predatory pricing (Brouthers et al., 2008; Neimanis, 1997; Ivlevs et al., 2021). SOE managers who are Party members and those who are directly under the Party control follow communist party ideology and seek no or only a small private benefit regarding firm decisions (Qian, 1996; Li et al., 2020). Those Party-affiliated managers stick to the political values, and so increase firms' accountability, thereby mitigating agency costs among SOEs (Qian, 1996). CEOs with Party school education are not only directly connected with the Party but enjoy direct communism ideology training from the Party, so they are more likely to improve investment efficiency by making proper decisions toward investment opportunities rather than seeking private benefits, thereby improving their alignment of interests with the shareholders.

Based on the natural connection between the Party and the government, CEOs with Party school education in SOEs also have exclusive interaction and alumni relations with local government officials (Beladi et al., 2022), which can help companies strengthen ties with the government and so gain more access to valuable information and resources[22] that are not available to the general public.

---

[21] As per the *Regulations on the Work of the Party Schools of the CPC*, Party schools are designed to train and cultivate leading Party cadres with significant roles in advancing the Party's ideology and theory. Also, being selected as a Party member is one essential entry requirement for the school

[22] Multiple studies have shown evidence of preferential access to credit (Cull and Xu, 2005; Johnson and Mitton, 2003; Khwaja and Mian, 2005), preferential treatment by government-owned banks (Backman, 1999; Dinc, 2005), preferential treatment in the award of government contracts (Agrawal and Knoeber, 2001), and bailouts (Faccio et al., 2006).

The above discussions suggest that CEOs with Party school degrees are not only more likely to be less self-interested but also have more access to government resources and market information, thereby making better investment decisions, especially for SOEs. Hence, I argue that Party school education improves SOEs' investment efficiency. Based on the arguments, I state the first hypothesis as follows.

H1a. CEO's Party school education has a positive impact on investment efficiency of SOE.

I next examine how CEOs with Party school education influence investment efficiency for private firms (non-SOEs). Unlike SOEs are naturally owned and controlled by the government (Brandt and Li, 2003) and are more likely to enjoy access to government financing and inside information (Brandt and Li, 2003; Faccio, 2006), private firms in China have a straightforward goal structure to maximize corporate values and they do not have those preferential treatments from the government in SOEs. Given the weak legal and economic infrastructure in China, political connections may enhance investment efficiency in private firms because of better investment opportunities offered by the government (Chen et al., 2011b), so private firms have to look for political connections as these ties can bring real economic benefits.

CEO Party school education exclusively provides firms with opportunities to contact local officials and establish political connections with the political party, suggesting it may also increase firms' investment opportunities provided by the government. Hence, I expect that Party school education is positively associated with investment efficiency for private firms.

H1b. CEO's Party school education has a positive impact on investment efficiency for private firms.

3.2.3.2 Party school education, investment sensitivity, and compensation incentives

Possible mechanisms behind the divergence between CEOs and shareholders may include a managerial incentive system (Jensen and Meckling, 1976; Li et al., 2014; Bhandari and Javahadze, 2017; Derchi et al., 2021). In the Chinese market, a salary-based CEO compensation package reflects Chinese listed firms' performance (Firth et al., 2007; Mengistae and Xu, 2004), suggesting that the potential benefit of a pay-for-performance incentive is to improve firm performance in principle. However, past literature (Baker et al., 1998; Xin et al., 2019) finds that, in practice, monetary incentives trigger significant adverse side effects that lower employee motivation and increase the probability of dealing with self-interests, and thus, are counter-productive. Moreover, the CEO's monetary compensation package is also an indicator of their self-interests (Bhandari and Javakhadze, 2017).

I argued above that CEOs with Party school education are directly connected with the Party and enjoy direct communism ideology training from the Party. Hence, they are more likely to have aligned interests with shareholders by being less self-interested. The assumed level of agency conflict between CEOs and shareholders could have an implication on the effect of Party school education on investment sensitivity to investment opportunities. Hence, regardless of the level of monetary compensation incentive, CEOs with Party school education prefer to follow the communist ideology to be less self-interested and be not interested in monetary incentives, thereby being the possible channel of the effect of Party school education on investment efficiency. Based on the above argument, I propose the second hypothesis regarding SOEs:

H2. CEO's Party school education has a positive impact on investment efficiency of both SOEs and private firms, while this impact is not associated with CEO compensations.

3.2.3.3 Party school education, investment sensitivity, and government resources

Prior studies have consistently indicated that political connections can help firms access resources controlled by the government, such as the credit market, and obtain preferential treatment concerning receiving more subsidies from the government (Agrawal and Knoeber, 2001; Adhikari et al., 2006; Shleifer and Vishny, 1993). This consistent evidence is particularly pronounced in China, which is characterized by a highly interventionist government and weak property rights protection (Li and Zhou, 2005; Wang et al., 2015). More specifically, due to the government's dual role as the owner of both SOEs and state-owned banks, credit allocation is usually not efficient (Wang et al., 2015). For SOEs, Cull and Xu (2005) and Cull et al. (2009) note that SOEs continue to receive a disproportionately large fraction of the credit extended by domestic (state-owned) banks. For private firms, Cull and Xu (2005), Bai et al. (2005), and Li et al. (2008), among others, demonstrate that privately controlled firms cultivating close relationships with the state indeed face better chances of receiving loans from state-owned banks. Thus, the Party school education may become a convenient and effective channel for Chinese firms to forge links with the government.

CEOs with Party school degrees have exclusive interaction and alumni relations with local government officials during their early life, which can help companies build a close relationship with politicians (Beladi et al., 2022), thereby providing access to government resources and enabling them to more effectively monitor the political and economic environment in which they are investing. Because the Chinese government still controls the allocation of resources, I argue that both SOEs and private firms may have the incentive to foster connections with the government via CEO's Party school education to receive more benefits (e.g., subsidies, etc.) from the government. Hence, I postulate the third hypothesis as follows:

H3. The impact of CEO's Party school education on investment efficiency is

stronger for both SOEs and private firms with larger amounts of government subsidies.

3.2.3.4 Accounting for controller heterogeneity: Central SOEs vs. Local SOEs

Regarding the effect of Party school education on investment efficiency for SOEs, a further distinction can be made between central and local SOEs depending on the type of effective controller. Consistent with previous studies (Chen et al., 2011b; Wang et al., 2024), a firm is classified as a central SOE if the central government ultimately controls it; A local SOE is identified if the firm is ultimately controlled by local governments at the provincial, municipal, and county level, and other governmental institutions. On the one hand, while central and local governments as the ultimate controlling owners have strong incentives to help listed firms maintain their listing status (Bai et al. 2005), both Jian and Wong (2010) and Cheung et al. (2010) find that central SOEs have more direct ties with the government and so gain more resources than their counterparts, to some extent enhancing the effect of the Party school. On the other hand, it has been documented that central SOEs' behavior is more likely to be monitored by the media and the public, and thus, those CEOs are less likely to deal with self-interest when they make investment decisions (Qian, 1996; Chen et al., 2011b). Thus, I propose the following hypothesis:

H4. The impact of CEO's Party school education on investment efficiency is stronger for central SOEs than local SOEs.

3.3 Data and descriptive statistics

3.3.1 Data and sample selection

To empirically understand whether and how CEOs with Party school education affect corporate investment efficiency, I construct a firm- CEO matched panel dataset with an

unbalanced structure based on the CSMAR database. I start by screening all A-share[23] firms listed on the Shanghai Stock Exchange (SHSE) from 2003 to 2020, and the year 2003 is selected as the start of the sampling period since the detailed profiles of CEOs in Chinese listed firms have only been available from 2003. Then I exclude financial listed firms. The rationale for excluding financial firms from the analysis is primarily rooted in their distinct regulatory environment and financial characteristics. First, financial firms are subject to stringent regulatory oversight aimed at ensuring the stability of the financial system. These regulations impact their capital structures, liquidity requirements, and risk-taking behaviors, making their financial decisions and performance metrics not directly comparable to those of non-financial firms (see e.g., Allen and Santomero, 2001). Second, the business models of financial firms are inherently different, with significant portions of their balance sheets comprising financial instruments and obligations (see e.g., Demirgüç-Kunt, and Huizinga, 2010). Their primary activities revolve around financial intermediation, asset management, and insurance underwriting, which entail different risk profiles and performance metrics compared to other firms. Third, including financial firms in a study focused on investment efficiency and corporate behavior can introduce noise due to the heterogeneity in financial reporting standards and business operations (see e.g., Bushman and Williams, 2012). This heterogeneity complicates the analysis and may lead to misleading conclusions if the unique aspects of financial firms are not adequately accounted for. This chapter also excludes cross-listed companies[24]. ST, *ST,

---

[23] Most Chinese companies listed and traded on the Shanghai Stock Exchange (SHSE) or Shenzhen Stock Exchange (SZSE) issue two classes of shares: A- and B-shares. A-shares are domestic shares quoted in Chinese yuan that are restricted to domestic investors and Qualified Foreign Institutional Investors (QFII). B-shares are foreign shares quoted in foreign currencies (U.S. dollars for Shanghai B-shares and Hong Kong dollars for Shenzhen B-shares); until February 2001, B-shares were available only to foreign investors.

[24] Cross-listing refers to the simultaneous issuance of shares or bonds by a company on the securities markets of multiple countries, both domestically and abroad. We exclude those firms as they are less regulated by the institutional setting in China (Beladi et al., 2022)

and PT companies are also excluded[25]. After excluding the above firms, I obtain the sample with 18,195 observations of 1412 firms over the sampling period, and all firm variables are winsorized at the 1% level to eliminate the influence of extreme values.

The ownership information of firms is collected from the annual report. To be consistent with previous studies involving Chinese listed firms' ownership (Chen et al., 2011b; Chen et al., 2017; Beladi et al., 2022), I classify a firm as an SOE if it is ultimately controlled by the government and governmental institutions and classify a firm as a private firm if it is ultimately controlled by individuals or a non-state entity. I further dually classify a firm as a central SOE if the ultimate controller is central government and central government institutions and classify a firm as a local SOE if the ultimate controller is local government and local government institutions at the provincial, municipal, and county levels.

I manually collect the data regarding the party school education background of CEOs. The CSMAR provides the names of the CEOs of all listed Chinese firms on the SHSE. Most CEOs' biographical information is also reported in the listed company's annual report, which is on the SHSE website (www. sse.com.cn). I first search "Party school (*Dang Xiao/Xingzheng xueyuan* in Chinese)" among CEOs' resumes to identify if the CEO graduated from Party school. Regarding the missing values of CEO personal characteristics and the educational background in annual reports of listed firms, I manually collect the information on each CEO from the Baidu search engine, Baidu Wikipedia, and LinkedIn website. During the data collection process, the information on the CEO's educational background was meticulously gathered from annual reports,

---

[25] Regarding Chinese listed firms, the stock code prefix ST means special treatment, which indicates additional controls on the stock trading of listed companies with unusual financial or other conditions. Although it is labeled ST, it does not represent a punishment for listed companies, it is just a risk warning tool to guide investors' rational investment. While the label PT means special transfer. A "special transfer service" designed to provide liquidity for suspended stocks.

the Baidu search engine, Baidu Wikipedia, and LinkedIn. However, despite these comprehensive efforts, a portion of the firms had to be excluded from the sample due to missing data on the CEOs' party school education. Specifically, after the manual collection process, the total number of firms dropped from the sample due to missing party school education data amounted to 487[26].

3.3.2 Descriptive statistics

Table 3.1 provides the variable definitions, and Table 3.2 provides the summary statistics for all variables used in the paper. In Panel A of Table 3.2, I report observations (Column 1), the mean (Column 2), the standard deviation (Column 3), the minimum value (Column 4), the median (Column 5), and the maximum value (Column 6) for the whole sample.

As shown in Panel A of Table 3.2, in terms of variables with the primary interest, the sample firms' mean (median) values of Party school (PS) is 0.013 (0.000), which confirms the scarcity of CEOs with Party school degree (Beladi et al., 2022). Also, the sample firms' mean (median) value of Inv is 0.031 (0.014). Values of $Invstment$ and other financial variables are very similar to prior studies on investment efficiency (Chen et al., 2011b; Wang et al., 2014; Jiang et al., 2018).

In Panel B of Table 3.2, I report the univariate test results between SOEs and private firms, including observations (Columns 1 and 3) and means (Columns 2 and 4). In column (5), I report the t-value of the test of equalities of means between SOEs and private firms. Overall, I can find a significant difference with positive signs between these two firm groups regarding *Partyschool*, *Leverage*, *Lnsize*, and *Lnage*,

---

[26] This exclusion was necessary to maintain the integrity and consistency of the dataset, ensuring that the analysis is based on complete and reliable information. The missing data likely reflect gaps in publicly available information rather than systematic biases, thereby minimizing concerns regarding the representativeness of the sample used for analysis.

suggesting that SOEs appointment more CEOs with Party school education have higher leverage, larger size, and longer existing age. I can also observe a significant difference with negative signs between these two firm groups regarding $Investment$, TQ, $Cashflow$, and SEO, implying that the SOEs have less investment, less investment opportunities, less cash flow, and smaller equity capital from the secondary market.

[INSERT TABLE 3.1 AND TABLE 3.2 HERE]

3.4 Empirical strategy

3.4.1 The effect of Party school education on firms' investment efficiency

To examine the first hypothesis, I follow the mainstream investment literature and measure firms' investment efficiency by applying the investment sensitivity to investment opportunity (TQ) (e.g., Bushman et al., 2007; Chen et al., 2011b; McLean et al., 2012 and Jiang et al., 2018), and test for the effect of Party school (PS):

$$Inv_{i,t} = \alpha + \beta_1 PS_{i,t-1} + \beta_2 PS_{i,t-1} TQ_{i,t-1} + \beta_3 TQ_{i,t-1} + \beta_n X_{i,t-1} + Firm + Year \varepsilon_{i,t} \quad (3.1)$$

Where $Inv_{i,t}$ is the investment of firm i in year t, which is measured by cash payments for fixed assets, intangible assets, and other long-term assets from the cash flow statement minus cash receipts from selling these assets, scaled by beginning total assets (Chen et al., 2011b). PS is a dummy variable; if a firm's CEO has a Party school degree, its value is 1; otherwise, its value is 0. TQ denotes investment opportunities, which is measured by the sum of the market value of tradable shares, the book value of non-tradable shares and liabilities, divided by book value of total assets (Chen et al., 2011b, Wu et al., 2022).

X represents a set of control variables[27], that is, CFO, Lev, SEO, $Lnsize$, $Lnage$.

---

[27] The reason why excluding macro-level variables is they may lead to some potential concerns, such as

The controls are consistent with the existing literature (Chen et al., 2011b; Richardson, 2006; Wu et al., 2022). CFO is a firm's net cash flow from operating activities divided by total assets. Larger operating cash flows indicate a firm has more financial resources for investment, so I expect a positive coefficient regarding CFO. Higher leverage (Lev) limits a company's ability to invest since it increases interest costs and decreases the likelihood that it will secure additional debt funding, preventing overinvestment (Jensen, 1986). I expect a negative coefficient for Lev. I also control SEO as an indicator of external financing, which is cash proceeds from seasoned stock issues scaled by beginning total assets (Chen et al., 2011b). $Lnsize$ may have a positive correlation if larger firms have more resources for investment, while a negative correlation may exist if smaller firms frequently go through an expansion phase. I also add a firm's listing age ($Lnage$) into the control, as the longer the firm has been listed, the more likely it is to be in the mature or declining stage of the business life cycle (Wang et al., 2017), suggesting reduced investment activity and thus a negative coefficient for the variable. TQ and all of the control variables are lagged by one year. As unobservable characteristics may affect investment expenditures across firms and years, the model also controls the firm and year fixed effects. The standard errors are clustered at the industry level.

3.4.2 Party school education, investment sensitivity, and managerial incentives.

To understand whether and how managerial incentives affect the relationship between Party school education and investment efficiency, I partition the sample into low and

---

multicollinearity concerns and data aggregation issues. On the one hand, including macro-level variables alongside firm-specific ones can introduce multicollinearity issues, where independent variables are highly correlated with each other. This can inflate the standard errors of the coefficient estimates, making it difficult to determine the precise effect of each variable. On the other hand, macro-level variables represent aggregate economic conditions that affect all firms in an economy to some extent. However, the extent and manner in which these conditions influence individual firms can vary widely depending on industry, size, geographic location, and other firm-specific factors. Aggregated macroeconomic data may not capture these nuances, leading to less precise or potentially misleading interpretations when applied to firm-level analyses.

high subsamples based on respective median values of CEO compensation. Consistent with prior studies (Firth et al., 2007; Conyon and He, 2016; Zhou et al., 2018), CEO compensation is the logarithm of the CEO's monetary income, which includes base salary, stipends, bonuses, and value of shareholdings in the company. The value of shareholdings is calculated as the product of the number of shares held by the CEO as disclosed in annual reports and the average month-end share price during the year.

The main variable of interest is the coefficient of interaction term $PS * TQ$ of high and low incentive alignment subsamples using respective median values of CEO compensation for partitioning, which captures whether CEOs with Party school degrees and lower compensation packages can benefit corporate investment efficiency. Because I hypothesized that CEOs with Party school education may prefer to follow the communist ideology to be less self-interested and be not interested in monetary incentives, I expect a larger coefficient of $PS * TQ$ to be found in the subsample of relatively low compensation.

3.4.3 Party school education, investment sensitivity, and government resources.

To understand whether and how government resources affect the relationship between Party school education and investment efficiency, I partition the sample into low and high subsamples based on respective median values of the ratio of government subsidies to sales. The definition of government resources is consistent with prior studies (Li and Guo, 2022; Pan and Tian, 2020).

The main variable of interest is the coefficient of interaction term $PS * TQ$ of high and low incentive alignment subsamples using respective median values of the ratio of government subsidies to sales for partitioning, that captures whether the effect of CEOs with Party school education on corporate investment efficiency is moderated by the

government resources. Because both SOEs and private firms may have the incentive to foster connections with the government via CEOs with Party school education to receive more benefits (e.g., subsidies, etc.) from the government, I expect a larger coefficient of $PS * TQ$ to be found in the subsample of the relatively high ratio of government subsidies to sales.

3.4.4 Accounting for controller heterogeneity: Central SOEs vs. Local SOEs

To understand whether and how controller heterogeneity affects the relationship between Party school education and investment efficiency among SOEs, I further introduce a distinction between central and local SOEs depending on the type of their ultimate controllers.

I expect a larger coefficient of $PS * TQ$ to be found in the subsample of central SOEs for several reasons. First, CEOs in central SOEs are more likely to be monitored by the media, the public, the Party, and the government than CEOs in local SOEs. They are more likely to have high moral standards and also follow the Party's ideology and spirit. Hence, CEOs in central SOEs are less likely to transfer wealth than CEOs in local SOEs, thereby reducing the probability of their self-interested investment. Second, CEOs in central SOEs have more access to government resources and market information.

3.5 Empirical results

3.5.1 The effect of the Party school education on investment efficiency

I first estimate the baseline model testing the impact of the Party school education on corporate investment efficiency, as shown in Eq. (3.1), by controlling the firm and year

fixed effects and clustering standard errors at the industry level. The estimated results are provided in Table 3.3. In Columns (1) and (2) of Table 3.3, I report the regression results when the sample is SOEs and private firms, respectively. Due to the different ownership nature[28], I have chosen to analyze the two subsamples separately (see example, Chen et al., 2011b). By estimating two separate regressions, I can avoid the need for three-way interaction variables and achieve greater clarity in interpreting the findings[29], thereby enabling us to gain a more nuanced understanding of the factors driving the outcomes of interest in each subsample, which could be masked by aggregating the data.

Consistent with the expectation regarding the SOEs sample, in Column (1), the main variable of interest, namely the interaction term between Party school education and investment opportunity ($PS * TQ$), is found to have a statistically significant coefficient (0.036) with a positive sign at 5% level, suggesting that the Party school education has a positive impact on investment sensitivity to the investment opportunity for SOEs. In other words, firms have more investment efficiency if their CEOs have a Party school degree than their counterparts. This result is economically significant as well[30]: The coefficient on TQ is 0.008, the coefficient on $PS * TQ$ is 0.036, and the mean value of PS is 0.012, which altogether imply that investment sensitivity to investment opportunity (TQ) evaluated at the mean level of PS is $0.008 + 0.036 *$

---

[28] While we hypothesize that CEOs with Party school education can have a positive impact on investment efficiency for private firms, it's worth noting that these firms share many similarities with their counterparts in free-market economies (Chen et al., 2011b). Specifically, they do not enjoy natural affiliation with the Party and their primary objective is value maximization, and we anticipate that they will only pursue and maintain political connections if those connections offer clear economic benefits.

[29] Also, this approach is less restrictive than the pooled regression method. This is because we do not need to assume the same coefficient for each of the non-comparison variables nor the same error distribution for the two sub-samples.

[30] The adopted approach examining economic magnitudes of the interaction term is consistent with previous studies on investment efficiency (Chen et al., 2017). The detailed formula is $\left[(\beta_{TQ} + \beta_{interaction} * (Mean_{PS} + Sd_{PS})) \right] - (\beta_{TQ} + \beta_{interaction} * Mean_{PS}) / (\beta_{TQ} + \beta_{interaction} * Mean_{PS})$. For example, holding all other variables constant, increasing Party school education by one standard deviation (0.115 in Table 2) increases investment sensitivity to investment opportunities by 49% from 0.0084 (0.008+0.036*0.012=0.0084) to 0.0125 (0.0125=0.008+0.036*(0.012+0.115)).

$0.012 = 0.0084$. Holding all other variables constant, increasing Party school education by one standard deviation (0.115 in Table 3.2) increases investment sensitivity to investment opportunities by 49% from 0.0084 to 0.0125. The results shown in Column (1) support the first hypothesis (H1a) that CEOs with Party school education have a positive impact on investment efficiency for SOEs.

Moving to other control variables, investment opportunities (TQ) are significantly positively associated with investment, which is in line with the rational firm decision-making paradigm (Modigliani and Miller, 1958). Some of the results for other control variables are also interesting, while I find no significant influence of firm cash flow from operation activities (CF) and firm size ($lnsize$). The significantly positive coefficients on SEO imply that larger financing activities lead to larger investments. Investment expenditure is negatively related to debt level (Lev), suggesting that debt financing constrains firms' investments. Firms with longer listing years spend less on investments, as indicated by the significantly negative coefficient on $Lnage$. These coefficients on control variables are generally consistent with the expectations and previous studies (Wang et al., 2014; Jiang et al., 2018).

Consistent with the expectations regarding the sample of private firms, in Column (2) of Table 3.3, the main variable of interest, namely the interaction term between Party school education and investment opportunity ($PS * TQ$), is found to have a statistically significant coefficient (0.011) with a positive sign at 10% level, suggesting that the Party school education has a positive impact on investment sensitivity to the investment opportunity for private firms as well. This result is economically significant as well – The coefficient on TQ is 0.006, the coefficient on $PS * TQ$ is 0.011, and the mean value of PS is 0.012, which altogether imply that investment sensitivity to investment opportunity (TQ) evaluated at the mean level of PS is $0.006 + 0.011 * 0.012 =$

0.0061. Holding all other variables constant, increasing Party school education by one standard deviation (0.115 in Table 3.2) increases investment sensitivity to investment opportunities by 21% from 0.0061 to 0.0074. The results shown in Column (2) support the first hypothesis (H1b) that CEOs with Party school education have a positive impact on investment efficiency for private firms.

The results of other control variables are also with the expectations: investment opportunities (TQ) are significantly positively associated with the investment. Further, significantly positive coefficients on SEO imply that larger financing activities lead to larger investments, while significantly negative coefficients on Lev and $Lnage$ indicate that firms with higher debt financing and longer listing years are less likely to engage in firms' investments. These coefficients on control variables are generally consistent with previous studies as well (Li et al., 2008; Chen et al.,2017).

[INSERT TABLE 3.3 HERE]

3.5.2 Party school education, investment sensitivity, and compensation incentives

In the next research question, I investigate whether the effect of Party school education on investment efficiency is affected by CEO monetary compensation so that we are able to assess whether the monetary compensation incentive can be identified as a possible mechanism behind the baseline relationship. I estimate Eq. (3.1) for high and low incentive alignment subsamples using respective median values of CEO compensation, by controlling the firm and year fixed effects and clustering standard errors at the industry level. The estimated results are provided in Table 3.4. Columns (1) and (2) report the regression results from SOEs when the compensation incentive is relatively low and high, respectively. Columns (3) and (4) report the regression results from private firms when the compensation incentive is relatively low, and high, respectively.

Consistent with the baseline relationship regarding SOEs, in Column (1) of Table 3.4, when the compensation incentive is relatively low, I find that the coefficient (0.058) on the interaction term $PS * TQ$ is significantly significant at 1% level. The economic magnitude of the interaction term suggests that increasing Party school education by one standard deviation (0.115 in Table 3.2) increases investment sensitivity to investment opportunities by 69.8% from 0.0096 to 0.0163. In Column (2), when the compensation incentive is relatively high, the coefficient (0.038) on the interaction term $PS * TQ$ is significantly significant at 1% level, suggesting that the Party school education has a positive impact on corporate investment. The economic magnitude of the interaction term suggests that increasing Party school education by one standard deviation (0.115 in Table 3.2) increases investment sensitivity to investment opportunities by 78.2% from 0.0055 to 0.0098. Although the coefficients of interactions term for both two subsamples are statistically and economically significant with positive signs, the test of equality shows an insignificant difference between the coefficient values of low and high compensation subsamples at the 5% level, suggesting that CEO compensation incentive does not moderate the baseline relationship for SOEs. These results shown in Columns (1) and (2) support the second hypothesis (H2) regarding SOEs: CEO's Party school education has a positive impact on investment efficiency of SOEs, while this impact is not associated with CEO compensations. The coefficients on control variables are generally consistent with the expectations and previous studies (Wang et al., 2014; Jiang et al., 2018).

In line with the baseline relationship regarding private firms, in Column (3) of Table 3.5, when the compensation incentive is relatively low, I find that the coefficient (0.015) on the interaction term $PS * TQ$ is significantly significant at 1% level. The economic magnitude of the interaction term suggests that increasing Party school

education by one standard deviation (0.115 in Table 3.2) increases investment sensitivity to investment opportunities by 23.7% from 0.0072 to 0.0089. In Column (4), when the compensation incentive is relatively high, the coefficient (0.010) on the interaction term $PS * TQ$ is significantly significant at 1% level, suggesting that the Party school education has a positive impact on corporate investment. The economic magnitude of the interaction term suggests that increasing Party school education by one standard deviation (0.115 in Table 3.2) increases investment sensitivity to investment opportunities by 29.3% from 0.0041 to 0.0053. Although the coefficients of interactions term for both two subsamples are statistically and economically significant with positive signs, the test of equality shows an insignificant difference between the coefficient values of low and high compensation subsamples at the 5% level, suggesting that CEO compensation incentive does not moderate the baseline relationship for private firms. These results shown in Columns (1) and (2) support the second hypothesis (H2) regarding private firms: CEO's Party school education has a positive impact on investment efficiency of private firms, while this impact is not associated with CEO compensations. The coefficients on control variables are generally consistent with the expectations and previous studies (Wang et al., 2014; Jiang et al., 2018).

In sum, these findings provide evidence that the Party school education still improves investment efficiency when I considered CEO compensations. Regardless of the level of compensation incentive, I evidenced that the positive effect of CEOs with Party school education on investment efficiency is not affected by their monetary incentives, thereby being the channel of the effect of Party school education on investment efficiency.

[INSERT TABLE 4 HERE]

3.5.3 Party school education, investment sensitivity, and government resources

In this section, I further examine whether the effect of Party school education on investment efficiency is moderated by government resources, thereby identifying whether the government resources can be identified as another possible mechanism behind the baseline relationship. In particular, I estimate Eq. (3.1) for high and low incentive alignment subsamples using respective median values of the ratio of government subsidies to sales, by controlling the firm and year fixed effects and clustering standard errors at the industry level. The estimated results are provided in Table 3.5. Columns (1) and (2) report the regression results for SOEs when the ratio of government subsidies to sales is relatively low and high, respectively. Columns (3) and (4) report the regression results for private firms when the ratio of government subsidies to sales is relatively low and high, respectively.

For SOEs, in Column (1) of Table 3.5, when the ratio of government subsidies to sales is relatively low, I find an insignificant coefficient on the interaction term $PS * TQ$. In Column (2), when the ratio of government subsidies to sales is relatively high, the coefficient (0.056) on the interaction term $PS * TQ$ is significantly significant at 10% level, suggesting that the Party school education has a positive impact on corporate investment. The economic magnitude of the interaction term suggests that increasing Party school education by one standard deviation (0.115 in Table 3.2) increases investment sensitivity to investment opportunities by 83.1% from 0.0077 to 0.0141. The test of equality shows a significant difference (p-value=0.000) between the coefficient values of low and high compensation subsamples at the 5% level, suggesting that government resources mediate the baseline relationship for SOEs. These results shown in Columns (1) and (2) support the second hypothesis (H3): The impact of CEO's Party school education on investment efficiency is stronger for SOEs with larger

amounts of government subsidies. The coefficients on control variables are generally consistent with the expectations and previous studies (Li and Guo, 2022; Pan and Tian, 2020).

Consistent with the baseline relationship regarding private firms, in Column (3) of Table 3.5, when the ratio of government subsidies is relatively low, I find that the coefficient (0.011) on the interaction term $PS * TQ$ is significantly significant at 1% level. The economic magnitude of the interaction term suggests that increasing Party school education by one standard deviation (0.115 in Table 3.2) increases investment sensitivity to investment opportunities by 38.7% from 0.0031 to 0.0043. In Column (4), when the ratio of government subsidies is relatively high, the coefficient (0.028) on the interaction term $PS * TQ$ is significantly significant at 1% level, suggesting that the Party school education has a positive impact on corporate investment. The economic magnitude of the interaction term suggests that increasing Party school education by one standard deviation (0.115 in Table 3.2) increases investment sensitivity to investment opportunities by 43.8% from 0.0073 to 0.0105. The test of equality shows a significant difference (p-value=0.001) between the coefficient values of low and high compensation subsamples at the 5% level, suggesting that government resources moderate the baseline relationship for private firms. These results shown in Columns (3) and (4) support the second hypothesis (H3): The impact of CEO's Party school education on investment efficiency is stronger for private firms with larger amounts of government subsidies. The coefficients on control variables are generally consistent with our expectations and previous studies (Li and Guo, 2022; Pan and Tian, 2020).

In sum, these findings provide evidence that the Party school education improves investment efficiency as those CEOs with such degrees can help firms access more political resources.

[INSERT TABLE 3.5 HERE]

3.5.4 Accounting for controller heterogeneity: Central SOEs vs. Local SOEs

I continue to estimate the impact of the Party school education on corporate investment efficiency between central and local SOEs, as shown in Eq. (3.1) for the central and local SOE subsamples, by controlling for the firm and year fixed effects and clustering standard errors at the industry level. The estimated results are provided in Table 6. In Columns (1) and (2) in Table 3.6, I report the regression results of central SOEs from the full sample. In Columns (4) and (5) in Table 3.6, I report the regression results of local SOEs from the full sample.

In Column (1), regarding the sample of central SOEs, I find that the coefficient (0.032) on the interaction term $PS * TQ$ is significantly significant at 1% level, suggesting that the Party school education has a positive impact on corporate investment sensitivity for central SOEs. The economic magnitude of the interaction term suggests that increasing Party school education by one standard deviation (0.115 in Table 3.2) increases investment sensitivity to investment opportunities by 31.6% from 0.0114 to 0.0150. The results shown in Column (1) suggest that the positive effect still exists in Central SOEs when I consider the controller heterogeneity. In Column (2), regarding the sample of local SOEs, I find that the coefficient (0.027) on the interaction term $PS * TQ$ is significantly insignificant, suggesting that the Party school education has no significant impact on corporate investment sensitivity for local SOEs. The results shown in Column (2) suggest that the positive effect does not exist in local SOEs when I consider the controller heterogeneity.

These results shown in Columns (1) and (2) support the second hypothesis (H4): The impact of CEO's Party school education on investment efficiency is stronger with

larger amounts of government subsidies. The coefficients on control variables are generally consistent with the expectations and previous studies (Chen et al., 2011b).

[INSERT TABLE 6 HERE]

3.6 Robustness checks

3.6.1 Alternative measures of investment expenditure

In Model (3.1), The investment expenditure is defined as cash payments for fixed assets, intangible assets, and other long-term assets from the cash flow statement minus cash receipts from selling these assets, scaled by beginning total assets. Following the current studies (Chen et al., 2011b), I use ΔPPE as an alternative measure of investment expenditure. ΔPPE represents the change in gross value of fixed assets and construction in process. It is measured as the difference between the ending and beginning value of these assets, scaled by the beginning value.

Table 3.8 reports the results by using ΔPPE. The baseline conclusions are consistent with the results of this measure of investment expenditure.

[INSERT TABLE 7 HERE]

3.6.2 Alternative measures of investment opportunity

The investment opportunity is defined as Tobin's Q in the baseline models. Following previous studies (Biddle et al.,2009; Cheng et al.,2011b), I use sales growth ($\Delta Sales$) as an alternative measure of investment opportunity. $Sales$ is defined as the annual change in sales revenue scaled by lagged sales.

Table 3.9 reports the results by using $\Delta Sales$. The baseline conclusions are

consistent with the results of this measure of investment expenditure. CEO demographics are also further considered in Table 9.

[INSERT TABLE 8 AND 9 HERE]

3.7 Endogeneity concerns

The main empirical results could be affected by comparable characteristics between the treated (with CEOs with Party school education) and control (without CEOs with Party school education) groups. To address this potential endogeneity concern, I apply the Propensity Score Matching (PSM) method (Rosenbaum and Rubin, 1983; Bose et al., 2021) and use kernel matching with a bandwidth of 0.04 as the matching approach. I estimate the propensity score defined as $P(X) = \Pr(D = 1|X)$, where $D = \{0, 1\}$ denotes whether the firm is treated, and X is the set of comparable characteristics, including TQ, CF, Lev, SEO, $Lnsize$, $Lnage$. To ensure the accuracy of matching results, the matched sample passes the balancing test, and the results are reported in Table A2.2.

Table 3.10 reports the propensity score matching estimation results with the year and firm fixed effects. The matched samples are chosen where each of the firms with CEOs with Party school education is matched with a firm without that of comparable firm-level factors reported in Table A3.2. The results further confirm the baseline results that CEO's Party school education has a positive impact on investment efficiency for SOE and private firms.

[INSERT TABLE 3.10 HERE]

3.8 Conclusion

In this study, I present evidence on the impact of CEO Party school education on firm investment behavior in a sample of Shanghai-listed non-financial A-share firms in China from 2003 to 2020. I first find that the Party school education has a positive impact on the sensitivity of investment expenditure to growth opportunities for both SOEs and private firms, suggesting more efficient investment in SOEs and private firms with CEOs with Party school education. Second, I further explore the role of monetary compensation incentives in the relationship between Party school and investment efficiency. I find that the impact of CEO's Party school education on investment efficiency is significantly positive but insignificant between low and high compensation subsamples, which affirms CEOs with Party school education are committed to being less self-interested (Qian, 1996). Finally, the positive impact of Party school education is primarily observed in SOEs that are controlled by central governments, suggesting stronger incentives to intervene among central governments. Central SOEs with CEOs with Party school education are also more communist and more tightly connected to the government. I conclude that Party school education in China improves firms' investment behavior and benefits investment efficiency.

The findings offer novel evidence to the extensive body of investment literature that studies the improved investment behaviors by political resources that exist between Party-school-connected firms and their counterparts in emerging markets. I show that Party school education in a one-ruling party regime is another type of friction that drives firms into more optimal investment decisions. The findings also have implications for a growing literature on firms' leadership characteristics. Not only do I provide new evidence about CEO characteristics in decision-making, but I also contribute to the extant literature by understanding how a firm's investment behaviors relate to its internal governance in the context of political connections. These results improve the

understanding of how a firm's investment behaviors relate to its CEO characteristics generally and to CEOs' loyalty to the ruling party in particular.

Specifically, for firms, CEOs with Party school education can be beneficial in not only navigating the political landscape and securing favorable government support, but also improving accountability, transparency, and overall management practices of the firms.

Policymakers can also rely on CEOs with Party school education to be effective intermediaries in implementing government policies within firms. On the one hand, their alignment with party ideology and familiarity with government priorities can ensure smoother policy rollouts and adherence to regulatory requirements. On the other hand, by fostering leadership with strong ties to the party, policymakers can appoint CEOs with Party school education to support and propagate government economic policies, contributing to a stable economic environment conducive to growth.

Last, Firms led by such CEOs might present attractive investment opportunities due to their potential for stable growth and access to government resources. Investors might consider these firms as lower-risk investments with the potential for steady returns.

Table 3.1 Definitions of variables

Variables	Definition
Investment (Inv)	Cash payments for fixed assets, intangible assets, and other long-term assets from the cash flow statement minus cash receipts from selling these assets, scaled by beginning total assets.
Party school (PS)	Dummy variable =1 if the firm's CEO has party school degrees
Tobin's Q (TQ)	The sum of market value of tradable shares, book value of non-tradable shares and liabilities, divided by book value of total assets
Operational cash flow (CFO)	Net cash flow from operating activities divided by total assets
Leverage (Lev)	The ratio of total liabilities to total assets
Equity capital (SEO)	Cash proceeds from seasoned equity offerings scaled by beginning total assets
Firm size ($Lnsize$)	Natural logarithm of total assets
Firm age ($Lnage$)	Natural logarithm of the number of listing years
CEO compensation	The logarithm of the CEO's base salary, stipends and bonus, and the value of shareholdings in the company.
Government subsidies ratio (SR)	The amount of government subsidies to sales
SOE	Dummy variable=1 if the firm is state-own-enterprise
Central SOE	Dummy variable=1 if the SOE is directly controlled by the central government
Industry dummy	The industry dummy variable was created to control industrial effects. According to the industry classification standard set by the China Securities Regulatory Commission in 2013, the manufacturing industry is a Class II industry, while other industries are classified as Class I industries. If a company falls into the specific industry, the variable value is 1; otherwise, its value is 0.

Table 3.2 Descriptive statistics of the variables

Panel A: Descriptive statistics

Variables	(1)	(2)	(3)	(4)	(5)	(6)
	Obs	Mean	SD	Min	Median	Max
Inv	18195	0.031	0.075	-0.232	0.014	0.332
PS	18195	0.013	0.115	0.000	0.000	1.000
TQ	18195	1.456	1.400	0.161	1.025	8.574
CF	18195	0.060	0.069	-0.100	0.056	1.069
Lev	18195	0.473	0.204	0.051	0.473	1.008
SEO	18195	0.016	0.021	0.000	0.009	0.113
Lnsize	18195	22.289	1.399	19.223	22.094	25.971
Lnage	18195	1.959	0.915	0.000	2.197	3.258

Panel B: Test of equalities of means between SOEs and private firms

Vairables	SOEs		Private firms		
	(1)	(2)	(3)	(4)	(5)
	Obs	Mean	Obs	Mean	T
Inv	9693	0.028	8502	0.034	-5.079***
PS	9696	0.023	8502	0.002	12.194***
TQ	9693	1.217	8502	1.728	-25.017***
CF	9693	0.057	8502	0.065	-7.429***
Lev	9693	0.515	8502	0.425	30.662***
SEO	9693	0.013	8502	0.020	-24.665***
Lnsize	9693	22.574	8502	21.963	30.122***
Lnage	9693	2.248	8502	1.630	48.241***

Notes: In this table, Panel A provides the descriptive statistics of the variables, including observations, the mean, standard deviation (SD), the minimum value, the median, and the maximum value. Panel B reports the results the test of equalities of means between SOEs and private firms. In column (5) I report the t-value of the test of equalities of means between SOEs and private firms. Inv which is cash payments for fixed assets, intangible assets, and other long-term assets from the cash flow statement minus cash receipts from selling these assets, scaled by beginning total assets. PS is a dummy variable; if a firm's CEO has Party school education experience, its value is 1; otherwise, its value is 0. TQ is estimated as the sum of the market value of tradable shares, and the book value of non-tradable shares and liabilities, divided by book value of total assets. CFO is net cash flow from operating activities divided by total assets. Lev is measured by the ratio of total liabilities to total assets. SEO is measured by cash proceeds from seasoned equity offerings scaled by beginning total assets. $Lnsize$ is the natural logarithm of total assets, and $Lnage$ is the natural logarithm of the number of listing years. Significance levels 0.1, 0.05, and 0.01 are noted by ∗, ∗∗, and ∗∗∗ respectively.

Table 3.3 The effect of Party school education on firms' investment efficiency

Variable	Dependent variable = *Inv*	
	(1)	(2)
	SOEs	Private firms
$PS_{t-1} * TQ_{t-1}$	0.036**	0.011*
	(2.22)	(1.98)
PS_{t-1}	-0.024	-0.012
	(-1.70)	(-0.77)
TQ_{t-1}	0.008***	0.006***
	(3.31)	(5.66)
CF_{t-1}	-0.013	0.006
	(-1.00)	(0.54)
Lev_{t-1}	-0.074***	-0.061***
	(-3.84)	(-7.33)
SEO_{t-1}	0.428***	0.182***
	(5.85)	(5.23)
$Lnsize_{t-1}$	-0.006	-0.001
	(-0.67)	(-0.28)
$Lnage_{t-1}$	-0.012**	-0.010*
	(2.55)	(-2.06)
Constant	0.157*	0.039
	(1.80)	(0.69)
Firm FE	Yes	Yes
Year FE	Yes	Yes
N	7656	7027
R-sq	0.07	0.06

Notes: This table shows the effect of the Party school education on investment efficiency. The dependent variable is *Inv* which is cash payments for fixed assets, intangible assets, and other long-term assets from the cash flow statement minus cash receipts from selling these assets, scaled by beginning total assets. *PS* is a dummy variable; if a firm's CEO has Party school education experience, its value is 1; otherwise, its value is 0. *TQ* is estimated as the sum of the market value of tradable shares, and the book value of non-tradable shares and liabilities, divided by book value of total assets. *CF* is net cash flow from operating activities divided by total assets. *Lev* is measured by the ratio of total liabilities to total assets. *SEO* is measured by cash proceeds from seasoned equity offerings scaled by beginning total assets. *Lnsize* is the natural logarithm of total assets, and *Lnage* is the natural logarithm of the number of listing years. Robust standard errors are clustered at the industry level. All variables are lagged by one year except the dependent variable *Inv*. *t*-statistics are reported in parentheses. Significance levels 0.1, 0.05, and 0.01 are noted by $*$, $**$, and $***$, respectively.

Table 3.4 Party school education, investment sensitivity, and compensation incentives

Variable	Dependent variable = Inv			
	(1)	(2)	(3)	(4)
	Compensation incentive			
	SOE		Private firms	
	Low	High	Low	High
$PS_{t-1} * TQ_{t-1}$	0.058**	0.038**	0.015***	0.010***
	(2.22)	(2.52)	(4.93)	(5.46)
PS_{t-1}	-0.073***	-0.013	-0.017	-0.027***
	(-4.24)	(-0.76)	(-1.26)	(-12.70)
TQ_{t-1}	0.009**	0.005***	0.007***	0.004***
	(2.20)	(4.25)	(5.17)	(6.11)
CF_{t-1}	0.003	-0.033	-0.003	-0.015*
	(0.016)	(-1.73)	(-0.19)	(-1.76)
Lev_{t-1}	-0.104***	-0.063**	-0.059***	-0.025**
	(0.20)	(-2.38)	(-5.28)	(-2.49)
SEO_{t-1}	0.617***	0.154*	0.154***	0.108**
	(-4.14)	(2.07)	(3.00)	(2.82)
$Lnsize_{t-1}$	-0.011***	-0.005	0.001	-0.016***
	(-3.14)	(-0.69)	(0.31)	(-3.03)
$Lnage_{t-1}$	-0.014	-0.009*	-0.008	-0.009***
	(-1.56)	(-2.06)	(-0.94)	(-3.27)
Constant	0.257***	0.189	-0.001	0.353***
	(3.86)	(1.29)	(-0.02)	(3.38)
Test of equality: p-value	0.173		0.265	
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
N	3671	3983	3495	3532
R-sq	0.09	0.06	0.06	0.08

Notes: This table shows the effect of the Party school education investment expenditure, and compensation incentives. In Columns (1)-(4), the sample is partitioned into low and high subsamples based on respective median values of CEO compensation, that is, the logarithm of the CEO's base salary, stipends, and bonus, and the value of shareholdings in the company. The dependent variable is Inv which is cash payments for fixed assets, intangible assets, and other long-term assets from the cash flow statement minus cash receipts from selling these assets, scaled by beginning total assets. PS is a dummy variable; if a firm's CEO has Party school education experience, its value is 1; otherwise, its value is 0. TQ is estimated as the sum of the market value of tradable shares, and the book value of non-tradable shares and liabilities, divided by book value of total assets. CF is net cash flow from operating activities divided by total assets. Lev is measured by the ratio of total liabilities to total assets. SEO is measured by cash proceeds from seasoned equity offerings scaled by beginning total assets. $Lnsize$ is the natural logarithm of total assets, and $Lnage$ is the natural logarithm of the number of listing years. Robust standard errors are clustered at the industry level. All variables are lagged by one year except the dependent variable Inv. t-statistics are reported in parentheses. Significance levels 0.1, 0.05, and 0.01 are noted by ∗, ∗∗, and ∗∗∗, respectively.

Table 3.5 Party school education, investment sensitivity, and government resources

Variable	Dependent variable = Inv			
	(1)	(2)	(3)	(4)
	Government Subsidies			
	SOE		Private firms	
	Low	High	Low	High
$PS_{t-1} * TQ_{t-1}$	-0.001	0.056*	0.011***	0.028***
	(-0.08)	(2.03)	(8.70)	(6.73)
PS_{t-1}	0.009	-0.047	-0.012***	-0.011
	(0.68)	(-1.80)	(-9.27)	(-0.55)
TQ_{t-1}	0.009**	0.007***	0.003***	0.007***
	(2.46)	(5.41)	(6.65)	(3.87)
CF_{t-1}	0.020	-0.067*	-0.054***	0.028
	(0.75)	(-1.79)	(-3.93)	(1.43)
Lev_{t-1}	-0.094***	-0.079***	-0.063***	-0.065***
	(-3.93)	(-3.38)	(-7.64)	(-4.79)
SEO_{t-1}	0.317***	0.375***	0.200***	0.099
	(2.97)	(4.40)	(5.79)	(1.64)
$Lnsize_{t-1}$	-0.004	-0.010**	-0.008**	0.003
	(-0.63)	(-2.50)	(-2.60)	(1.10)
$Lnage_{t-1}$	-0.016**	0.004	-0.012***	-0.007
	(-2.45)	(0.89)	(-3.57)	(-0.94)
Constant	0.144	0.366***	0.239***	-0.069
	(1.04)	(4.71)	(3.75)	(-1.21)
Test of equality: p-value	0.000		0.001	
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
N	3563	4093	3453	3496
R-sq	0.08	0.05	0.02	0.01

Notes: This table shows the effect of the Party school education investment expenditure, and government resources. In Columns (1)-(4), the sample is partitioned into low and high subsamples based on respective median values of the ratio of government subsidies to sales. The dependent variable is Inv which is cash payments for fixed assets, intangible assets, and other long-term assets from the cash flow statement minus cash receipts from selling these assets, scaled by beginning total assets. PS is a dummy variable; if a firm's CEO has Party school education experience, its value is 1; otherwise, its value is 0. TQ is estimated as the sum of the market value of tradable shares, and the book value of non-tradable shares and liabilities, divided by book value of total assets. CF is net cash flow from operating activities divided by total assets. Lev is measured by the ratio of total liabilities to total assets. SEO is measured by cash proceeds from seasoned equity offerings scaled by beginning total assets. $Lnsize$ is the natural logarithm of total assets, and $Lnage$ is the natural logarithm of the number of listing years. Robust standard errors are clustered at the industry level. All variables are lagged by one year except the dependent variable Inv. t-statistics are reported in parentheses. Significance levels 0.1, 0.05, and 0.01 are noted by *, **, and ***, respectively.

Table 3.6 Accounting for controller heterogeneity: Central SOEs vs. Local SOEs

Variables	Dependent variable = *Inv*	
	(1)	(2)
	Central SOEs	Local SOE
$PS_{t-1} * TQ_{t-1}$	0.032***	0.027
	(10.78)	(1.01)
PS_{t-1}	-0.046***	-0.002
	(-5.49)	(-0.10)
TQ_{t-1}	0.011***	0.007*
	(4.29)	(1.99)
CF_{t-1}	-0.050**	0.007
	(-2.46)	(0.38)
Lev_{t-1}	-0.038	-0.094***
	(-1.61)	(-4.70)
SEO_{t-1}	0.440***	0.421***
	(7.99)	(3.95)
$Lnsize_{t-1}$	-0.007*	-0.007
	(-1.85)	(-1.69)
$Lnage_{t-1}$	-0.017**	-0.006
	(-2.28)	(-0.84)
Constant	0.274**	0.119
	(2.79)	(1.23)
Test of equality: p-value	0.642	
Firm FE	Yes	Yes
Year FE	Yes	Yes
N	2662	4994
R-sq	0.11	0.07

Notes: This table shows the results of accounting for controller heterogeneity. In Columns (1)-(2), the sample is divided into two subsamples of central and local SOEs. Central SOEs denote the firm as a state-own-enterprise directly controlled by the central government. Local SOEs denote the local government directly controlling the firm. The dependent variable is *Inv* which is cash payments for fixed assets, intangible assets, and other long-term assets from the cash flow statement minus cash receipts from selling these assets, scaled by beginning total assets. *PS* is a dummy variable; if a firm's CEO has Party school education experience, its value is 1; otherwise, its value is 0. *TQ* is estimated as the sum of the market value of tradable shares, and the book value of non-tradable shares and liabilities, divided by book value of total assets. *CF* is net cash flow from operating activities divided by total assets. *Lev* is measured by the ratio of total liabilities to total assets. *SEO* is measured by cash proceeds from seasoned equity offerings scaled by beginning total assets. *Lnsize* is the natural logarithm of total assets, and *Lnage* is the natural logarithm of the number of listing years. Robust standard errors are clustered at the industry level. All variables are lagged by one year except the dependent variable *Inv*. *t*-statistics are reported in parentheses. Significance levels 0.1, 0.05, and 0.01 are noted by *, **, and ***, respectively.

Table 3.7 Robustness: Alternative measure of investment expenditure

	Dependent variable = ΔPPE	

Panel A: The effect of the Party school education on investment efficiency

Variables	(1)	(2)
	SOEs	Private firms
$PS_{t-1} * TQ_{t-1}$	0.673*	0.600***
	(2.08)	(13.41)
PS_{t-1}	-0.500	-1.139***
	(-1.30)	(-26.55)
TQ_{t-1}	0.103***	0.083***
	(3.04)	(5.12)
Controls	Yes	Yes
Firm FE	Yes	Yes
Year FE	Yes	Yes
Observations	3816	4234
R-squared	0.08	0.11

Panel B: Possible mechanism behind the baseline relationship: monetary compensation incentives

Variables	(1)	(2)	(3)	(4)
	SOEs		Private firms	
	Low	High	low	High
$PS_{t-1} * TQ_{t-1}$	1.460**	0.589**	0.108	0.941***
	(2.66)	(2.44)	(1.41)	(8.67)
PS_{t-1}	-1.287***	-0.127	-0.012***	-2.606***
	(-4.38)	(-0.32)	(-9.27)	(-22.13)
TQ_{t-1}	0.083	0.097***	0.067*	0.044**
	(0.91)	(4.20)	(2.14)	(2.86)
Test of equality: p-value	0.000		0.000	
Controls	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Observations	1572	2244	1637	2597
R-squared	0.06	0.07	0.10	0.13

Panel C: Possible mechanism behind the baseline relationship: access to government resources

Variables	(1)	(2)	(3)	(4)
	SOEs		Private firms	
	Low	High	low	High
$PS_{t-1} * TQ_{t-1}$	0.488	0.649	0.090	1.356***
	(1.36)	(1.35)	(0.70)	(8.26)
PS_{t-1}	0.137	-1.523***	-0.659	0.147
	(0.36)	(-4.60)	(-1.46)	(0.86)
TQ_{t-1}	0.159**	0.062	0.120	0.161***
	(2.37)	(1.69)	(1.71)	(4.89)
Test of equality: p-value	0.000		0.000	
Controls	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Observations	1781	2035	1883	2350
R-squared	0.44	0.51	0.24	0.04

Panel D: Accounting for controller heterogeneity: Central SOEs vs. Local SOEs

Variables	(1)	(2)
	Central SOEs	Local SOEs
$PS_{t-1} * TQ_{t-1}$	0.695**	0.577
	(2.71)	(1.28)
PS_{t-1}	-0.513	-0.453*
	(-0.82)	(-1.91)
TQ_{t-1}	0.121**	0.089*
	(2.60)	(1.81)
Test of equality: p-value		0.001
Controls	Yes	Yes
Firm FE	Yes	Yes
Year FE	Yes	Yes
Observations	1363	2453
R-squared	0.08	0.09

Notes: This table shows the robustness checks by the alternative measure of investment efficiency. Panel A, B, C, and D report the results regarding the H1, H2, H3, and H4 respectively. The dependent variable is ΔPPE, which

is the difference between the ending and beginning values of these assets, scaled by the beginning value. PS is a dummy variable; if a firm's CEO has Party school education experience, its value is 1; otherwise, its value is 0. TQ is estimated as the sum of the market value of tradable shares, and the book value of non-tradable shares and liabilities, divided by book value of total assets. Robust standard errors are clustered at the industry level. All variables are lagged by one year. t-statistics are reported in parentheses. Significance levels 0.1, 0.05, and 0.01 are noted by ∗, ∗∗, and ∗∗∗, respectively.

Table 3.8 Robustness: Alternative measure of investment opportunity

Dependent variable = *Inv*

Panel A: The effect of the Party school education on investment efficiency		
Variables	(1)	(2)
	SOEs	Private firms
$PS_{t-1} * Lnsale_{t-1}$	0.016***	0.014***
	(3.44)	(4.20)
PS_{t-1}	-0.018*	-0.027**
	(-1.82)	(-2.21)
TQ_{t-1}	0.007***	0.005***
	(3.00)	(4.91)
Controls	Yes	Yes
Firm FE	Yes	Yes
Year FE	Yes	Yes
Observations	7656	6949
R-squared	0.07	0.06

Panel B: Possible mechanism behind the baseline relationship: monetary compensation incentives				
Variables	(1)	(2)	(3)	(4)
	SOEs		Private firms	
	Low	High	low	High
$PS_{t-1} * Lnsale_{t-1}$	0.017	0.016***	0.018**	0.014***
	(0.51)	(3.21)	(2.52)	(7.42)
PS_{t-1}	-0.045	-0.008	-0.032	-0.041***
	(-1.25)	(-0.39)	(-1.31)	(-14.69)
TQ_{t-1}	0.008**	0.004**	0.004**	0.004***
	(2.20)	(2.71)	(2.18)	(3.36)
Test of equality: *p*-value	1.000		0.315	
Controls	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Observations	3671	3985	3421	3528
R-squared	0.09	0.06	0.06	0.09

Panel C: Possible mechanism behind the baseline relationship: access to government resources				
Variables	(1)	(2)	(3)	(4)
	SOEs		Private firm	
	Low	High	low	High
$PS_{t-1} * Lnsale_{t-1}$	-0.015*	0.058**	0.010***	0.029***
	(-1.94)	(2.60)	(7.70)	(3.92)
PS_{t-1}	0.030*	-0.079**	-0.017***	-0.042*
	(2.13)	(-2.78)	(-8.75)	(-1.97)
TQ_{t-1}	0.007**	0.005***	0.002***	0.006***
	(2.63)	(4.26)	(3.19)	(4.11)
Test of equality: *p*-value	0.000		0.000	
Controls	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Observations	3563	4093	3453	3496
R-squared	0.09	0.07	0.10	0.05

Panel D: Accounting for controller heterogeneity: Central SOEs vs. Local SOEs		
Variables	(1)	(2)
	Central SOEs	Local SOEs
$PS_{t-1} * Lnsale_{t-1}$	0.015***	0.008
	(4.60)	(0.64)
PS_{t-1}	-0.044***	0.009
	(-4.44)	(0.56)
TQ_{t-1}	0.008***	0.006**
	(3.70)	(2.19)
Test of equality: *p*-value	0.035	
Controls	Yes	Yes
Firm FE	Yes	Yes
Year FE	Yes	Yes
Observations	2662	4994
R-squared	0.10	0.07

Notes: This table shows the robustness checks by the alternative measure of investment opportunity. Panel A, B, C, and D report the results regarding the H1, H2, H3, and H4, respectively. The dependent variable is Inv, which is cash payments for fixed assets, intangible assets, and other long-term assets from the cash flow statement minus cash receipts from selling these assets, scaled by beginning total assets. PS is a dummy variable; if a firm's CEO has Party school education experience, its value is 1; otherwise, its value is 0. ΔSales is defined as the annual change in sales revenue scaled by lagged sales. Robust standard errors are clustered at the industry level. All variables are lagged by one year. t-statistics are reported in parentheses. Significance levels 0.1, 0.05, and 0.01 are noted by ∗, ∗∗, and ∗∗∗, respectively.

Table 3.9 Robustness: CEO demographic characteristics

	Dependent variable =Inv	

Panel A: The effect of the Party school education on investment efficiency

Variables	(1)	(2)
	SOEs	Private firms
$PS_{t-1} * TQ_{t-1}$	0.034**	0.010*
	(2.15)	(1.77)
Male CEO	0.016	-0.004
	(0.84)	(-0.26)
Ln(CEOage)	0.003	0.002
	(0.86)	(0.93)
Ln(CEOedu)	-0.127	-0.001
	-1.63	(-0.09)
Controls	Yes	Yes
Firm FE	Yes	Yes
Year FE	Yes	Yes
Observations	7656	7027
R-squared	0.07	0.06

Panel B: Possible mechanism behind the baseline relationship: monetary compensation incentives

Variables	(1)	(2)	(3)	(4)
	SOEs		Private firms	
	Low	High	low	High
$PS_{t-1} * TQ_{t-1}$	0.048	0.038**	0.015***	-0.001
	(0.028)	(2.58)	(4.81)	(-0.48)
Male CEO	0.043	-0.020*	-0.013	0.012***
	(1.42)	(-1.78)	(-0.66)	(3.90)
Ln(CEOage)	0.004	-0.002	0.006	0.004**
	(0.93)	(-0.71)	(1.62)	(2.18)
Ln(CEOedu)	-0.012	-0.006	-0.005	0.007
	(-0.77)	(-0.52)	(-0.35)	(0.53)
Test of equality: p-value	1.000		0.000	
Controls	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Observations	3671	3983	3495	3532
R-squared	0.08	0.06	0.10	0.13

Panel C: Possible mechanism behind the baseline relationship: access to government resources

Variables	(1)	(2)	(3)	(4)
	SOEs		Private firm	
	Low	High	low	High
$PS_{t-1} * TQ_{t-1}$	0.055	0.026**	-0.013	0.016***
	(1.65)	(2.16)	(-1.01)	(3.04)
Male CEO	0.011	0.036*	0.019*	-0.025
	(0.83)	(2.03)	(1.82)	(-1.15)
Ln(CEOage)	-0.004	0.004	-0.000	0.001
	(-1.29)	(0.71)	(-0.07)	(0.60)
Ln(CEOedu)	-0.017*	-0.013	0.005	0.001
	(-2.10)	(-0.82)	(0.33)	(0.12)
Test of equality: p-value	0.414		0.000	
Controls	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Observations	1781	2035	1883	2350
R-squared	0.44	0.51	0.24	0.04

Panel D: Accounting for controller heterogeneity: Central SOEs vs. Local SOEs

Variables	(1)	(2)
	Central SOEs	Local SOEs
$PS_{t-1} * TQ_{t-1}$	0.033***	0.026
	(10.08)	(0.99)
Male CEO	-0.004	0.029
	(-0.32)	(0.96)
Ln(CEOage)	-0.001	0.005
	(-0.59)	(1.29)
Ln(CEOedu)	-0.001	-0.022***
	(-0.04)	(-3.16)

Test of equality: p-value	0.840	
Controls	Yes	Yes
Firm FE	Yes	Yes
Year FE	Yes	Yes
Observations	2662	4994
R-squared	0.08	0.09

Notes: This table shows the robustness checks by CEO demographic characteristics. Panel A, B, C, and D report the results regarding the H1, H2, H3, and H4 respectively. The dependent variable is Inv which is cash payments for fixed assets, intangible assets, and other long-term assets from the cash flow statement minus cash receipts from selling these assets, scaled by beginning total assets. PS is a dummy variable; if a firm's CEO has Party school education experience, its value is 1; otherwise, its value is 0. TQ is estimated as the sum of the market value of tradable shares, and the book value of non-tradable shares and liabilities, divided by book value of total assets. $Male\ CEO$ is a dummy variable if the CEO if male, $Ln(CEOage)$ is measured as the logarithm of CEO age in given year; $Ln(CEOedu)$ is measured as the logarithm of the education years of the CEO. Robust standard errors are clustered at the industry level. All variables are lagged by one year. t-statistics are reported in parentheses. Significance levels 0.1, 0.05, and 0.01 are noted by $*$, $**$, and $***$, respectively.

Table 3.10 Addressing endogeneity concerns: Propensity Score Matching (PSM) method

	Dependent variable = Inv			
Panel A: The effect of the Party school education on investment efficiency				
Variables	(1)		(2)	
	SOEs		Private firms	
$PS_{t-1} * TQ_{t-1}$	0.037**		0.016***	
	(2.42)		(4.25)	
PS_{t-1}	-0.022		-0.031**	
	(-1.58)		(-2.86)	
TQ_{t-1}	0.008***		0.006***	
	(3.42)		(9.82)	
Controls	Yes		Yes	
Firm FE	Yes		Yes	
Year FE	Yes		Yes	
Observations	5593		5531	
R-squared	0.09		0.07	
Panel B: Possible mechanism behind the baseline relationship: monetary compensation incentives				
Variables	(1)	(2)	(3)	(4)
	SOEs		Private firms	
	Low	High	low	High
$PS_{t-1} * TQ_{t-1}$	0.073**	0.037**	0.025***	0.009***
	(2.64)	(2.45)	(5.59)	(5.76)
PS_{t-1}	-0.084***	-0.010	-0.063	-0.026***
	(-3.77)	(-0.56)	(-1.55)	(-19.82)
TQ_{t-1}	0.007	0.007***	0.006***	0.004***
	(1.48)	(5.22)	(4.59)	(4.80)
Test of equality: p-value	0.787		0.332	
Controls	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Observations	2333	3258	2316	3215
R-squared	0.11	0.08	0.06	0.10
Panel C: Possible mechanism behind the baseline relationship: access to government resources				
Variables	(1)	(2)	(3)	(4)
	SOEs		Private firm	
	Low	High	low	High
$PS_{t-1} * TQ_{t-1}$	0.017	0.046**	-0.002	0.030***
	(0.98)	(2.54)	(-0.40)	(4.49)
PS_{t-1}	0.010	-0.073**	-0.004	-0.080***
	(0.71)	(-2.28)	(-1.43)	(-3.13)
TQ_{t-1}	0.009**	0.007***	0.003***	0.009***
	(2.89)	(5.96)	(6.28)	(7.29)
Test of equality: p-value	0.415		0.000	
Controls	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Observations	3367	2226	2933	2598
R-squared	0.08	0.10	0.13	0.05
Panel D: Accounting for controller heterogeneity: Central SOEs vs. Local SOEs				
Variables	(1)		(2)	
	Central SOEs		Local SOEs	
$PS_{t-1} * TQ_{t-1}$	0.034***		0.027	
	(7.64)		(1.04)	
PS_{t-1}	-0.042***		-0.002	
	(-4.46)		(-0.10)	
TQ_{t-1}	0.011***		0.006**	
	(3.33)		(2.30)	
Test of equality: p-value		0.841		
Controls	Yes		Yes	
Firm FE	Yes		Yes	
Year FE	Yes		Yes	
Observations	1855		3738	
R-squared	0.12		0.08	

Notes: This table shows the results of PSM matched sample. Panel A, B, C, and D report the results regarding the

H1, H2, H3, and H4, respectively. The dependent variable is Inv, which is cash payments for fixed assets, intangible assets, and other long-term assets from the cash flow statement minus cash receipts from selling these assets, scaled by beginning total assets. PS is a dummy variable; if a firm's CEO has Party school education experience, its value is 1; otherwise, its value is 0. TQ is estimated as the sum of the market value of tradable shares, and the book value of non-tradable shares and liabilities, divided by book value of total assets. Robust standard errors are clustered at the industry level. All variables are lagged by one year. t-statistics are reported in parentheses. Significance levels 0.1, 0.05, and 0.01 are noted by $*$, $**$, and $***$, respectively.

Appendix A3

Table A3.1 Correlation of main variables

	Inv	PS_{t-1}	TQ_{t-1}	CFO_{t-1}	Lev_{t-1}	SEO_{t-1}	$Lnsize_{t-1}$	$Lnage_{t-1}$
Inv	1							
PS_{t-1}	-0.006	1						
TQ_{t-1}	0.016	-0.005	1					
CF_{t-1}	0.117	-0.005	0.015	1				
Lev_{t-1}	-0.101	0.029	-0.355	-0.177	1			
SEO_{t-1}	0.145	0.011	0.138	0.325	-0.363	1		
$Lnsize_{t-1}$	0.015	0.032	-0.408	0.079	0.296	0.075	1	
$Lnage_{t-1}$	-0.161	0.010	0.038	0.045	0.184	-0.187	0.212	1

Notes: This table provides correlations between the main variables. Inv which is cash payments for fixed assets, intangible assets, and other long-term assets from the cash flow statement minus cash receipts from selling these assets, scaled by beginning total assets. PS is a dummy variable; if a firm's CEO has Party school education experience, its value is 1; otherwise, its value is 0. TQ is estimated as the sum of the market value of tradable shares, and the book value of non-tradable shares and liabilities, divided by book value of total assets. CF is net cash flow from operating activities divided by total assets. Lev is measured by the ratio of total liabilities to total assets. SEO is measured by cash proceeds from seasoned equity offerings scaled by beginning total assets. Lnsize is the natural logarithm of total assets, and Lnage is the natural logarithm of the number of listing years.

Table A3.2 Balancing properties of matched firms

	Mean		t-test	
	$PS = 1$	$PS = 0$	t-statisic	p-value
CF_{t-1}	0.066	0.064	0.29	0.771
Lev_{t-1}	0.521	0.517	0.18	0.857
SEO_{t-1}	0.017	0.019	-1.38	0.167
$Lnsize_{t-1}$	24.287	24.131	-1.04	0.300
$Lnage_{t-1}$	2.292	2.166	1.419	0.157

Notes: Matching method `t-test' is the t-test to the equality of given firm characteristics between firms with CEOs with Party school education and firms without CEOs with Party school education.

Chapter 4 CEO Party school education and corporate ESG performance: Evidence from Chinese listed firms

4.1 Introduction

The role of politically connected leadership in determining organizational performance is a well-documented phenomenon in the existing literature (Jones and Olken, 2005). Accordingly, a large body of research has focused on the influence of CEOs' personal characteristics on corporate environmental, social, and governance (ESG) engagement, owing to their central role in steering corporate strategies. A plethora of studies has delved into the relationship between various CEO-specific factors such as age (Garcia-Blandon et al., 2019), education[31] (Gottesman and Morey, 2010; Kutzschbach et al., 2020), compensation (Gillan et al., 2021), and gender (Aabo and Giorici, 2022).

Diverging from the customary examinations of CEOs' early experiences and conventional educational backgrounds, this study concentrates on the Party school education of CEOs. Party schools, founded by the Communist Party of China (CPC), serve as an educational platform for Party members and government officials, promoting the CPC's ideology and fortifying the loyalty of its members. The Party School provides a dual focus on higher education and political fidelity, creating a distinct learning environment that sets it apart from typical educational establishments (Beladi et al., 2022; Shambaugh, 2008).

Given the hegemonic political structure in China, where the CPC holds unilateral

---

[31] Gottesman and Morey (2010) and Kutzschbach et al. (2020) have established the relevance of educational background on corporate financial performance. However, their study predominantly examines traditional educational backgrounds, such as attending business schools and/or law schools, without addressing the specific investigation of political education, such as that obtained from party schools.

power (Liu, 2003; Appleton et al., 2009; Hill,2016), it exerts considerable influence over key economic assets through state-owned enterprises and financial markets (Chen et al., 2017; McMillan, 1997; Pan and Tian, 2017). This extensive control underscores the unique position of the Party School in shaping economic and political mindsets. Graduates from the Party School gain exceptional access to government officials and potential political connections (Beladi et al., 2022; Liu, 2009; Tokarev et al., 2021) and foster a deep commitment to the party's goals. These connections and values can potentially affect their economic decision-making processes (Beladi et al., 2022).

This chapter aims to examine how CEOs' Party School education influences the ESG performance of firms. The goal of delving into this relationship is to empirically investigate potential advantages and challenges that may arise from CEOs with Party School education in firms. This chapter contributes significantly to the existing literature by being the first to investigate the causal relationship between CEOs' Party School education and corporate ESG performance within the unique institutional context of a single ruling party, specifically in China. By exploring this uncharted territory, the study adds depth to our understanding of the factors influencing firms' ESG practices. The emphasis on CEOs' Party School education provides novel insights into the role of political connections in corporate-government interplays in the context of an underdeveloped but strong political intervention market. Moreover, the chapter extends the scope of corporate ESG research by incorporating the influence of politically focused CEO education, shedding light on a dimension that has not been thoroughly explored. This expansion broadens the knowledge base and facilitates a more comprehensive analysis of the political factors impacting ESG performance in corporate settings.

By emphasizing the CEO's political connections to the ruling party and their

implementation of policies advocated by the ruling party, this chapter delves into the practical implications of CEOs with Party School education on corporate ESG practices. As the Chinese government endorses ESG practices as a strategic enterprise development approach, understanding the relationship between CEOs with Party School education and ESG performance becomes particularly relevant for policymakers, corporate leaders, and scholars interested in the intersection of politics and corporate governance. The chapter's unique focus and insights contribute substantially to the scholarly discourse on corporate sustainable governance.

Chapter 4 is related to two strands of literature. First, it enriches the literature on CEO characteristics and ESG performance in line with Upper Echelons Theory (see e.g., Kutzschbach et al., 2020; Wang et al., 2020; Beladi et al., 2022). Upper Echelons Theory posits that CEO characteristics and experiences influence their cognitive base and values, which in turn affect their strategic choices and organizational outcomes (Hambrick, and Mason, 1984). CEOs who have undergone Party school education bring a specific set of cognitive frameworks and values shaped by their political training and connections. These experiences influence their strategic decision-making processes, particularly in how they approach governance and compliance with ESG standards. The political acumen gained through Party school education can enable these CEOs to implement strategies that improve investment efficiency by aligning with government priorities and securing necessary resources. This strategic alignment can also lead to more proactive and effective ESG practices, as these CEOs are likely to prioritize compliance with state-supported sustainability initiatives.

Second, it extends the literature on CEO characteristics and ESG performance in line with institutional theory (see e.g., Galbreath, 2013; Liu et al., 2024). Institutional Theory suggests that organizations conform to the norms, values, and expectations of

their institutional environment to gain legitimacy, stability, and acceptance (DiMaggio and Powell, 1983). Party school education instills in CEOs a thorough understanding of the political and institutional landscape. These CEOs are likely to be more attuned to the institutional pressures and norms promoted by the government, especially those related to ESG criteria. By conforming to these expectations, firms can enhance their legitimacy and social license to operate. This alignment not only helps in meeting regulatory requirements but also builds trust and reputation among stakeholders, which can be crucial for long-term success and investment efficiency.

Chapter 4 contributes to the literature by providing empirical evidence on the distinct impact of political education on ESG performance, which has been relatively unexplored. By focusing on party school education, the study fills a gap in the existing research and offers new insights into how CEOs with Party school education can influence corporate behavior and ESG performance. This differentiation is crucial in the context of China's unique political and economic landscape, where political connections and state influence play a significant role in corporate governance.

The subsequent structure of this chapter is as follows: Section 4.2 delineates the theoretical foundations and context informing the hypotheses. Section 4.3 outlines the data collection process and the construction of variables. Section 4.4 discusses the research methodology. I present the empirical findings in Section 4.5. Section 4.6 validates the results through robustness checks, and Section 4.7 addresses endogeneity concerns. Section 4.8 concludes the chapter by discussing the theoretical and practical implications of the findings.

4.2 Related literature and hypotheses development

4.2.1 Related literature on ESG performance

In recent years, numerous studies on ESG (Environmental, Social, and Governance) have been conducted from various perspectives. Baron (2008) suggests that ESG activities can generate wealth for shareholders because meeting stakeholders' needs is often the most effective way to create shareholder value. For example, companies can attract and retain high-quality employees by offering generous benefits. Additionally, engaging in ESG activities is likely to enhance a firm's reputation, attract customers, and reduce political and financial risk. Consistently with the stakeholder value creation perspective, several previous studies indicate positive effects of ESG activities on firm performance (Deng et al., 2013; Flammer, 2021). Dimson et al. (2015) contend that organizations with high ESG performance tend to generate more long-term value compared to those with lower ESG performance.

Moreover, there is a broad consensus in the literature that firms can improve their self-image and reputation through ESG activities, conveying positive information to stakeholders, such as favorable evaluations from investors, attractiveness to potential employees, and appeal to clients (Porter and Kramer, 2002; Wang and Qian, 2011). This helps increase market value and ultimately enhance corporate value for sustainable development (Albuquerque et al., 2019), suggesting ESG activities also offer considerable benefits to shareholders.

From a traditional perspective, maximizing shareholder wealth is the primary goal of corporations, as shareholders are the ultimate owners of a firm's assets. However, from a stakeholder perspective, the firm should create value for all stakeholders, including employees, suppliers, social communities, and regulatory agents, not just shareholders.

It is essential to recognize that public concern for a firm's reputation encompasses economic conditions and the social consequences of corporate behavior. This is because firms are integrated with the social environment, which may foster positive relationships with various stakeholders (Rosen and Madlener, 2016). Jagannathan et al. (2018) argue that investors are increasingly paying attention to companies' ESG commitments due to the growing concern for the global environment. Furthermore, institutional investors are more inclined to consider firms with high ESG scores in their portfolios, as this provides information about risk (Amel-Zadeh and Serafeim, 2017; Eccles et al., 2017). A survey conducted by the Asset Management Association of China (AMAC) revealed that 87% of institutional investors are more aware of ESG engagement. Consequently, ESG performance has become a crucial dimension for evaluating investments in listed firms in the market.

Firms with better ESG performance tend to adopt a long-term orientation. Dimson et al. (2015) argue that organizations with high ESG performance are more likely to generate value in the long term compared to those with lower ESG performance. Moreover, a broad consensus in the literature suggests that firms can enhance their self-image and reputation by engaging in ESG activities, subsequently conveying positive information to stakeholders. This can result in favorable evaluations from investors and social media, increased attractiveness to potential employees and clients (Lev, Petrovits, and Radhakrishnan, 2010; Wang and Qian, 2011), and ultimately lead to increased market value and enhanced corporate value, promoting sustainable development (Albuquerque et al., 2019).

In contrast, Barnea and Rubin (2010) contend that the benefits of ESG activities are enjoyed primarily by executives, while shareholders bear the costs and risks. Intriguingly, some researchers propose that firm managers can improve their social

status and personal reputation for their future careers by investing in ESG activities (Chintrakarn et al., 2020). Additionally, ESG activities can serve as a useful tactic to alleviate pressure from stakeholders (Koehn and Ueng, 2010). Furthermore, firms with financial fraud and managerial misconduct may use ESG engagement as a tool to mitigate the negative public impact of their illegitimate behavior (Koehn and Ueng, 2010).

As discussed above, ESG investment has garnered significant attention not only from firm managers but also from academic researchers. Researchers have also been drawn to the motivations behind ESG engagement. On the one hand, Gautier and Pache (2015) posit that the political environment may drive ESG activities. This is because governments can use favorable or unfavorable regulatory policies to influence enterprises based on their monopolistic control in both regulations and policies, creating significant uncertainty for companies' operations. As a result, firms may employ strategies such as ESG engagement to cater to the government and build good relationships. This notion is supported by Li et al. (2015) further argue that this phenomenon occurs more frequently in less developed economies, where governments, as regulatory agencies, depend on controlling key resources and consistently involve themselves in corporate operations.

On the other hand, an agency perspective suggests that managers may pursue their private interests by over-investing in ESG engagement (Bénabou and Tirole, 2010; Tirole, 2001). Managers may have incentives to over-invest in ESG activities to enhance their reputation and create a favorable self-image at the expense of shareholders (Krüger, 2015). Barnea and Rubin (2010) contend that the negative impact of ESG arises from executives enjoying the benefits of ESG activities while shareholders bear the costs and risks. Additionally, Chintrakarn et al. (2020) propose

that firm managers can improve their social status and personal reputation for their future careers by investing in ESG. As another example of agency costs, top managers may use ESG as a risk management strategy to mitigate the negative effects of their decision-making (Koehn and Ueng, 2010). Managers engaged in misconduct may also use ESG engagement as a tool to alleviate the public's negative perception of their illegitimate behavior (Koehn and Ueng, 2010). Consequently, agency theories may view ESG as a managerial agency problem and a waste of corporate resources. Considering the extensive debate on the impact of ESG activities and the lack of consensus regarding ESG incentives, it is important to explore the substantial heterogeneity in firms' ESG performance by taking into account CEOs' characteristics.

4.2.2 Related literature on CEO background

Numerous scholars argue that individual leaders play a crucial role in the performance of organizations (Jones and Olken, 2005). In line with this perspective, some researchers have focused on the influence of personal characteristics on corporate ESG engagement, given the CEO's significant role in firms' decision-making processes. Extensive research has been conducted to examine the impact of various factors such as CEOs' age (Garcia-Blandon et al., 2019), educational background (Gottesman and Morey, 2010), compensation (Gillan et al., 2021), and gender (Aabo and Giorici, 2022) on ESG performance. However, it is worth exploring how CEOs with Party school education influence firms' ESG performance.

ESG investment is widely perceived as a means to achieve various objectives within companies. While some scholars argue that there is an inherent desire among companies to engage in positive actions (Gautier and Pache, 2015), others, such as Wulfson (2001), maintain that the presence of a utilitarian cost-benefit analysis in ESG

decision-making does not preclude the existence of ethical drivers for firms to pursue actions they deem "morally right." In the literature discussed earlier, Fanke (2001) discovered that cadets at the United States Military Academy (USMA) exhibit conservatism and patriotism when compared to their non-military counterparts, based on an analysis of value orientation and attitudes. Fanke (2001) also found that 81% of cadets agreed with the statement "Honesty is the best policy in all situations," compared to only 68% of civilian students. Furthermore, more than half of the cadets concurred that they should take action when they believe it is morally right.

Researchers have largely discussed whether leadership characteristics make a big difference in the outcomes of organizations. Past studies have extensively investigated that CEO background may affect firms' performance, investment, and strategy decision-making, and financial policies (Ahlstrom and Wang, 2009; Benmelech and Frydman, 2014; Malmendier, Tate, and Yan, 2011). For instance, Military top executives may imply moral values so that they are inclined to make ethical decisions and be loyal to their firms rather than chasing personal profits (Benmelech and Frydman, 2014; Collins, 2001). Moreover, Guo et al. (2020) examine that top managers with a military background are likely to pour less money into firms' innovation investment than those with non-military experience because of their risk-averse orientation. In addition, Luo et al. (2017) find that there is a negative relationship between CEOs' military experience and firm philanthropy in China.

4.2.3 Hypothesis development

4.2.3.1 Baseline: the impact of CEO's Party school education on corporate ESG performance

Firms led by CEOs with Party school education often prioritize non-profitable

investments that align with government objectives rather than focusing on profitable investments that satisfy shareholder needs. While this approach may enhance ESG performance, it may also give rise to agency problems. Empirical studies (Boubakri et al., 2008; Chen et al., 2011b; Chen et al., 2017; Beladi et al., 2022) demonstrate that political interventions—such as politically connected firm leadership—can result in management teams being less concerned with a company's performance and shareholder interests. Consequently, these teams allocate limited corporate resources toward government-aligned activities.

Given the institutional context in which SOEs operate as extensions of the government, they are tasked with fulfilling multiple objectives beyond profitability (Gillan et al., 2019; Pan and Tian, 2020). Government officials face intense political promotion competition based on the stable performance of local economic development, which is critically influenced by local firms' operational performance (Li and Zhou, 2005). This can motivate CEO with Party school education to improve their governance skills, thereby presenting better governance performance. Within the Chinese SOE system, executives have the opportunity to be politically promoted to government positions (Beladi et al., 2022). Thus, CEOs with Party school education may not aim to maximize corporate value but instead prioritize objectives such as engaging in environmental investment or promoting government-favored regional development (Boubakri et al., 2008), thereby presenting better environmental performance. Consequently, I argue that CEOs with Party school education might make investment decisions concerning environmental and governance issues to meet government assessments, thereby increasing their chances of obtaining political promotions. Based on the arguments, I propose the following hypothesis.

H1: CEO's Party school education has a positive impact on corporate ESG

performance.

4.2.3.2 Possible mechanism: Local economic development incentive

Local official promotion tournaments offer significant incentives for officials to intervene in the business activities of SOEs within their jurisdictions (Chen et al., 2011b; Beladi et al., 2022). This study investigates the impact of Party school degrees on firms' ESG performance in the context of local government GDP growth target settings in China. Annually, Chinese local governments issue government work reports outlining the previous year's GDP growth accomplishments and the GDP growth targets for the upcoming year. Local officials are accountable for fulfilling their economic growth commitments and endeavor to marshal extensive resources to achieve these objectives (Li et al., 2019). A signaling effect is associated with officials' capabilities, which is demonstrated by the extent to which they achieve their economic growth targets. As a result, once a target is established, it possesses strong credibility and becomes linked to the officials' performance evaluations, which may subsequently influence their prospects for promotion (Chen et al., 2021). Consequently, local governments experience a top-down amplification effect when setting economic growth targets. Hence, we propose the second hypothesis as follows.

H2: The impact of CEOs who attended Party schools on the ESG performance of SOEs is more pronounced in regions facing greater local economic development pressure.

4.2.3.3 Possible mechanism: Political promotion incentives

Numerous studies in the Chinese SOE context (Cao et al., 2019; Beladi et al., 2022; Wang et al., 2023) have examined the relationship between political promotion incentives and firm performance. For instance, Cao et al. (2019) discovered that CEOs

with a higher likelihood of political promotion exhibit lower pay-for-performance sensitivity. Following the findings of the above literature, CEOs with a Party school education in SOEs may prefer their political promotion to corporate value maximization. Lee (2013) explored the role of Party school education in officials' promotions using a cadre transfer scenario within the government system. Lee found that officials who attended Party school training experienced a 15% increase in promotion probability compared to their counterparts who did not attend the training. To further investigate the advantages gained by CEOs with Party school degrees in SOEs who collaborate with local officials to enhance ESG performance, I delve deeper into the impact of Party school education on CEO political promotions in SOEs. Hence, we propose the third hypothesis as follows.

H3: The impact of CEO's Party school education on corporate ESG performance is stronger for SOEs whose CEOs have successfully politically promoted.

4.2.2.4 Accounting for controller heterogeneity: Central government versus local government controlled SOEs

Throughout the years of economic reforms in China, there has been a gradual shift in decision-making power from the central government to local governments. This decentralization has incentivized local governments to focus on regional economic development, but it has also led to competition for resources (Cao et al., 1999; Poncet, 2005). Unlike the central government, local governments have more limited resources at their disposal, and they are consequently more inclined to seek assistance from SOEs under their jurisdiction (Chen et al., 2011b; Wang et al., 2020). Furthermore, the central government's actions are more likely to be under public scrutiny due to media coverage and the watchful eyes of the general public (Li et al., 2008; He et al., 2022). As a result, the local government tends to be more interventionist in its management of SOEs. This

is crucial in the context of ESG practices because the firm may make excess decisions on its environmental and social investment if local governments look for the firm's funding help on environmental and social activities. I, therefore, hypothesize that the positive impact of Party school education on ESG performance will be more pronounced for SOEs governed by local authorities compared to those managed by the central government. To test this hypothesis, I categorize the sample SOEs based on the identities of their controlling shareholders, distinguishing between central and local government-controlled enterprises. Hence, the fourth hypothesis is as follows:

H4: The impact of CEO's Party school education on corporate ESG performance is stronger for local SOEs as compared to central SOEs.

4.3 Data and sample selection

4.3.1 Data and sample selection

To empirically understand whether and how CEOs with Party school education affect corporate ESG performance, I construct a firm-CEO matched panel dataset with an unbalanced structure based on the CSMAR database and Hexun[32] database. I start by screening all A-share firms listed on the Shanghai Stock Exchange (SHSE) from 2010 to 2020, and the year 2010 is selected as the start of the sampling period since the ESG rating in Chinese listed firms has only been available from 2010. The data on the ESG

---

[32] Hexun initiated the evaluation of social responsibility performance among listed firms and began publicly releasing ratings in 2010. These ratings form the foundation for our measurement of ESG performance. Hexun's professional evaluation system analyzes the social responsibility reports and annual reports released by companies listed on the Shanghai Stock Exchange (SSE) and Shenzhen Stock Exchange (SZSE) through their official websites. The system comprises 13 secondary indicators and 37 tertiary indicators across five categories: shareholder responsibility, employee responsibility, supplier responsibility, customer and consumer responsibility, environmental responsibility, and social responsibility. This comprehensive framework objectively reflects the ESG performance of firms. Widely adopted in recent years for ESG-related research in China, this evaluation system serves as the basis for our assessment (Yi, Zhang, & Yan, 2021).

rating for A-share firms comes from the Hexun database. Then, I exclude financial listed and cross-listed companies as the latter are less regulated by the institutional setting in China (Beladi et al., 2022). ST, *ST, and PT companies are also excluded.

The rationale for excluding private firms from the sample is grounded in the distinct pathways available to CEOs in SOEs for career promotion into government positions. This distinction aligns more closely with the theoretical bases of Institutional Theory. In China, CEOs of SOEs have a unique career trajectory that includes the potential for promotion to government positions through formal, state-controlled channels. These channels are part of the state's effort to ensure that key positions within SOEs are occupied by individuals well-aligned with the government's policies and objectives (Chen et al., 2011b). The possibility of promotion creates a strong incentive for CEOs within SOEs to align their corporate strategies with government priorities, including those related to ESG standards. CEOs of private firms do not have the same formal pathways for career advancement into government roles. While private firm CEOs may develop political connections, the lack of a structured promotion channel reduces the direct influence of political considerations on their corporate decision-making. Therefore, including private firms could introduce variability that does not align with the study's focus on the specific political dynamics affecting CEOs within SOEs.

The nature of firm ownership is collected from the annual reports. To be consistent with previous studies involving Chinese listing firms' ownership (Chen et al., 2011b; Chen et al., 2017; Beladi et al., 2022), I classify a firm as an SOE if it is ultimately controlled by the government and governmental institutions and classify a firm as a private firm if it is ultimately controlled by individuals or a non-state entity. I further classify a firm as a central SOE if the ultimate controller is central government and central government institutions, and a firm as a local SOE if the ultimate controller is

local government and local government institutions at the provincial, municipal, and county levels.

4.3.2 Descriptive statistics

I provide the definitions for the main variables in Table 4.1. Table 4.2 provides the summary statistics for all variables used in the paper. To eliminate the influence of extreme values, all continuous variables are winsorized at the 1% and 99% quantiles. In Panel A of Table 4.2, I report the number of observations (Column 1), mean (Column 2), standard deviation (Column 3), minimum value (Column 4), median (Column 5), and maximum value (Column 6) of all variables.

As shown in Panel A of Table 4.2, in terms of variables with the primary interest, the sample firms' mean (median) values of Party school (PS) is 0.016 (0.000), which confirms the scarcity of CEOs with Party school degree (Beladi et al., 2022) and is consistent with chapter 3 of this thesis. Also, the sample firms' mean (median) value of $In(ESG)$, $Ln(E)$, $Ln(S)$ and $Ln(G)$ are 3.200 (3.169), 0.420 (0.000), 1.768 (1.792), 0.413 (0.000), respectively. Values of four dependent variables and other financial variables are very similar to prior studies on ESG performance in the context of Chinese markets (He et al., 2022; Liu et al., 2023).

In Panel B of Table 4.2, I report the results regarding tests of equalities of means between SOEs with and without CEOs with Party school education, including observations (Columns 1 and 3) and means (Columns 2 and 4). In column (5), I report the t-value of the tests of equalities of means. Overall, I can find a significant difference with positive signs between these two firm groups regarding $Ln(ESG)$, $Ln(E)$, $Ln(G)$, $Lnsize$, $Lnage$, $Lnboard$, $Top1$ and $Institutional$, suggesting that SOEs with CEOs with Party school education have higher ESG ratings, environmental ratings, and

governance ratings; larger size, longer existing age, more directors, and higher institutional investor percentage. I can also observe a significant difference in negative signs between these two SOE groups regarding ROA, $Lerverage$, and Q, implying that SOEs with CEOs with Party school education have less net profit, liabilities, and market values.

[INSERT TABLE 4.1 AND TABLE 4.2 HERE]

4.4 Empirical strategies

I estimate the baseline model testing the impact of the CEO's Party school education on corporate ESG performance, as shown in Eq. (4.1), by controlling the firm and year fixed effects and clustering standard errors at the industry level. The estimated results are provided in Table 3.

$$ESG\ performance_{i,t} = \alpha + \beta_1 PS_{i,t-1} + \beta_n X_{i,t-1} + Firm + Year +$$
$$Province + \varepsilon_{i,t} \ldots \tag{4.1}$$

Where $ESG_{i,t}$ is the logarithm of the firm's ESG rating of firm i in year t. PS is a dummy variable; if a firm's CEO has a Party school degree, its value is 1; otherwise, its value is 0.

X represents a set of control variables, that is, ROA, Lev, Q, $Lnsize$, $Lnage$, $Lnboard$, $Top1$, and $Insitutional$. ROA is measured by the ratio of net profits for a period to total assets at the end of this period. Lev is measured by the ratio of total liabilities to total assets. Q is the company's market value, which is measured by the ratio of the sum of market values of equity and net liabilities to total assets at the end of the period; the market value of unlisted shares is substituted for net assets. $Lnsize$ is

the natural logarithm of total assets. $Lnage$ is the natural logarithm of the number of listing years. $Lnboard$ is the natural logarithm of director number plus one. $Top1$ is measured by the largest shareholder's percentage ownership, indicating the degree of ownership concentration. *Institutional* denotes institutional investors' percentage ownership. The controls are consistent with the existing literature (Baranchuk et al., 2014; Yuan and Wen, 2018; Aabo and Giorici, 2022; Beladi et al., 2022).

I expect a positive sign on ROA to control for firm profitability, as the firm has less pressure in operations and the managers have more incentive to invest in ESG activities (Shi, Connelly, and Hoskisson, 2017). Higher leverage (Lev) limits a company's ability to invest since it increases interest costs and decreases the likelihood that it will secure additional debt funding preventing ESG investment (Jensen, 1986). I expect a negative coefficient for Lev. He et al. (2022) argue that rapid growth in firm value is positively associated with corporate ESG performance, so I expect a positive sign on investment opportunities (Q). Larger firms have more accessible funding to make ESG-related investments (Khanna et al., 2015). Therefore, I expect a positive sign on $Lnsize$; The longer the firm has been listed, the higher focus on social reputation (Wang et al., 2020), suggesting increased ESG activity and thus a positive coefficient for $Lnage$. The greater the number of executives on board in a firm, the stronger the monitoring effect on executives. This monitoring effect can benefit firms in alleviating agency problems and lowering the probability of violations, thereby maximizing firms' profit rather than investing in ESG activities (Chen et al., 2006). Hence, I expect a negative sign on $Lnboard$. Institutional investors are more inclined to consider firms with high ESG scores in their portfolios, as this provides information about risk (Amel-Zadeh and Serafeim, 2017; Eccles et al., 2017). Also, the Asset Management Association of China (AMAC) survey revealed that 87% of institutional investors are

more aware of ESG engagement (Wang et al., 2023). Consequently, I expect a positive sign on $Institutional$. I also use the shareholding of the first largest shareholder as a proxy for equity concentration, as shareholding concentration reflects the agency conflict between controlling and minority shareholders. The higher the equity concentration in the firm, the worse the level of corporate governance (Jiang, Lee, and Yue, 2010), so I expect a negative sign on $Top1$. To account for the influence of unobservable firm-specific and temporal factors on investment expenditures, the model incorporates both firm and year fixed effects and clusters the data at the industry level.

4.5 Results

4.5.1 Baseline regression: The effect of Party school education on firms' ESG performance

Table 4.3 presents the results of the baseline relationship (Eq. (4.1)). Consistent with the expectation, in Column (1), the main variable of interest, namely the Party school education (PS), is found to have a statistically significant coefficient (0.109) with a positive sign at 5% level, suggesting that firms having CEOs with Party school education increase their ESG performance. This result is economically significant as well: Holding all other variables constant, increasing Party school education by one standard deviation (0.126 in Table 4.3) increases firm ESG performance by 0.43%[33]. Regarding the corporate environmental performance, in column (2), the Party school education (PS) is found to have a statistically significant coefficient (0.205) with a positive sign at 1% level, suggesting that the Party school education has a positive

---

[33] Following the paper of Chen et al. (2017), the economic significance is calculated by $\beta_{dep.var} * Sd._{dep.\ var}/Mean_{indep.var}$. Hence, the economic significance in Column (1) is 0.109*0.126/3.200=0.00429 (0.43%).

impact on environmental performance. Holding all other variables constant, increasing Party school education by one standard deviation (0.126 in Table 4.3) increases firm environmental performance by 6.2%[34]. This statistical and economic significance indicates that CEOs with Party school education are associated with higher environmental performance. This could be due to these CEOs' better alignment with government policies that emphasize environmental protection and sustainable development. However, in column (3), the Party school education (PS) is found to have a statistically significant coefficient (-0.068), suggesting that the Party school education does not necessarily enhance social performance. Similarly, in column (4), the Party school education (PS) is found to have a statistically significant coefficient (0.239) with a positive sign at 1% level, suggesting that the Party school education has a positive impact on governance performance. Holding all other variables constant, increasing Party school education by one standard deviation (0.126 in Table 4.3) increases firm governance performance by 7.3%[35]. This indicates a strong positive relationship between Party school education and governance performance. CEOs with such education may be better at implementing strong governance practices, reducing corruption, and ensuring compliance with regulatory requirements.

Moving to other control variables, in Column (1), while I find no significant influence of firms' cash flow from investment opportunities (Q) and the shareholding of the first largest shareholder ($top1$) on ESG ratings, ROA is significant and positively associated with firms' ESG ratings, confirming that SOEs that face less pressure in operations have more incentive to invest in ESG activities (Shi, Connelly, and Hoskisson, 2017). The significant and positive coefficients on Lev imply that SOEs

---

[34] This figure is calculated as $\beta_{dep.var} * Sd._{dep.\ var}/Mean_{indep.var}$, that is 0.205*0.126/0.420=0.0615 (6.2%).

[35] This figure is calculated as $\beta_{dep.var} * Sd._{dep.\ var}/Mean_{indep.var}$, that is 0.239*0.126/0.413=0.0729 (7.3%)

have better ESG performance, although they have a higher level of liabilities. Firms with larger sizes and longer listing years have more pronounced ESG performance, as indicated by the significantly positive coefficients on *Lnsize* and *Lnage*, respectively. Also, the significant and negative coefficient on *Lnboard* confirms that a stronger monitoring effect decreases firms' ESG performance. Regarding environmental performance, In Column (2), The coefficients of Lnsize, Lnboard, and Institutional are positively significant, while the coefficients of ROA, Lev, Q, Lange, and Top1 are insignificant, suggesting SOEs with larger size, more board members and institution investors have better environmental performance. Regarding social performance, In Column (3), although the coefficient of PS is insignificant, the coefficients of ROA, Lev, Q, Lnsize, Lnage, and Lnboard are significant, implying financial factors within firms are the main factors when they make social investment. Regarding governance performance, In Column (4), in line with the environmental dimension, the coefficients of Lnsize, Lnboard, and Institutional are positively significant, while the coefficients of ROA, Lev, Q, Lange, and Top1 are insignificant, suggesting SOEs with larger size, more board members and institution investors have better governance performance. These coefficients of control variables in all columns are generally consistent with the expectations and previous studies (Beladi et al., 2022; He et al., 2022; Wang et al., 2023). These coefficients of control variables in all columns are generally consistent with the expectations and previous studies (Beladi et al., 2022; He et al., 2022; Wang et al., 2023).

In sum, the results shown in Table 4.3 support the first hypothesis (H1) that CEO's Party school education has a positive impact on ESG performance for SOEs.

[INSERT TABLE 4.3 HERE]

4.5.2 Possible mechanism: Local development incentives

The aforementioned results demonstrate that SOEs led by CEOs with Party School degrees exhibit improved ESG performance. This section aims to investigate the potential mechanisms underlying the relationship between CEOs with Party School education and firm ESG performance. In the prior theoretical analysis, I emphasized the significance of promotion incentives for local officials. In this section, I extend the examination to two interconnected factors: the establishment of economic growth targets, which intensify officials' demand for short-term economic performance, and the subsequent promotions of CEOs, which incentivize them to fulfill government expectations regarding ESG performance.

Table 4.4 explores the role of local development incentives in the baseline relationship. I examine the impact of CEOs with Party school education on firms' ESG performance within the framework of local government GDP growth target setting. In China, local governments issue annual reports of government missions detailing the previous year's GDP growth achievements and outlining the GDP growth targets for the upcoming year from the central level to the local level. Local officials bear the responsibility of fulfilling these economic growth commitments and strive to mobilize resources extensively to meet these targets (Li et al., 2019). The development level to which officials achieve their economic growth targets serves as a signal of their competence. Consequently, once the targets are established, they carry significant credibility and are integral to officials' performance evaluations, influencing their prospects for future promotion (Beladi et al., 2022). Hence, I construct *LowGDP_dummy* variable to reflect the level of economic development pressure of local governments: *LowGDP_dummy* is a dummy variable, if the local GDP of a given prefecture-level city is lower than the sample median in a given year, its value is 1;

otherwise, its value is 0. With the higher economic development to be faced in local jurisdiction, government intervention derived from co-alumni relationships between local officials and CEOs with Party school degrees will increase, leading to increased pressure on government-favored ESG activities in these SOEs.

As the results shown in column (1) of Table 4.4, the coefficient (0.190) to interaction term $PS * LowGDP\_dummy$ is found to be positively significant at 1 percent level, suggesting the higher the target set by local government, the better the ESG performance of SOEs with Party school CEOs, which confirms that CEOs with Party school education are more concerned about their alumni relationship with the local officials who pursue local economic growth targets with highlights on ESG activities. This result is economically significant as well: The coefficient on $LowGDP\_dummy$ is 0.075, the coefficient on $PS * LowGDP\_dummy$ is 0.190, and the mean value of PS is 0.016, which altogether imply that the level of economic development pressure of local governments ($LowGDP\_dummy$) evaluated at the mean level of PS is $0.075 + 0.190 * 0.016 = 0.0780$[36]. Holding all other variables constant, increasing Party school education by one standard deviation (0.126 in Table 4.2) increases ESG performance by 31% from 0.0780 to 0.1020.

Looking at each component individually, in column (2), $PS * LowGDP\_dummy$ have a significant positive coefficient on the environmental performance ($Ln(E)$, 0.448). Holding all other variables constant, increasing Party school education by one standard deviation (0.126 in Table 4.2) increases environmental performance by 47%

---

[36] The adopted approach examining economic magnitudes of the interaction term is consistent with previous studies (Chen et al., 2017). The detailed formula is $\left[(\beta_{LowGDP_{dummy}} + \beta_{interaction} * (Mean_{PS} + Sd_{PS}) \right] - (\beta_{LowGDP_{dummy}} + \beta_{interaction} * Mean_{PS}) / (\beta_{LowGDP_{dummy}} + \beta_{interaction} * Mean_{PS})$, that is $\left[0.075 + 0.190 * (0.016 + 0.126) \right] - (0.075 + 0.190 * 0.016) / (0.075 + 0.190 * 0.016) = (0.1020 - 0.0780)/0.0780 = 0.3076$（31%）.

from 0.1211 to 0.1776^{37}. In column (4), $PS * LowGDP\_dummy$ have a significant

positive coefficient on the governance performance ($Ln(G)$, 0.296). Holding all other

variables constant, increasing Party school education by one standard deviation (0.126

in Table 4.2) increases governance performance by 18% from 0.1739 to 0.2112^{38}.

The results are consistent with the theoretical prediction, that is, CEOs with Party

school education have the incentive to improve their governance skills, and they do not

aim to maximize corporate value but instead prioritize objectives such as engaging in

environmental investment or promoting government-favored regional development

(Boubakri et al., 2008). Moving to other control variables, these coefficients on control

variables in all columns are generally consistent with the expectations and previous

studies (Beladi et al., 2022).

In sum, the results shown in Table 4.4 support the first hypothesis (H2) that the

impact of CEOs with Party school education on corporate ESG performance is stronger

for SOEs that are located in areas with higher local economic development pressure.

[INSERT TABLE 4.4 HERE]

4.5.3 Possible mechanism: Political promotion incentives

Consistent with Beladi et al. (2022), I manually collected the political promotion data

for CEOs in SOEs. I first use Google News and Baidu News to search and match the

CEO changes in position, where they go, and whether they have been promoted to a

higher level in a given year. I have identified clear promotions for a total of 76 CEOs.

I then create a binary variable *Promotion*, that takes value 1 if an executive of a

---

[37] This figure is calculated as $[0.114 + 0.448 * (0.016 + 0.126)] - (0.114 + 0.448 * 0.016) / (0.114 + 0.448 * 0.016) = (0.1776 - 0.1211)/0.1211 = 0.4665$ (47%).

[38] This figure is calculated as $[-0.216 + 0.296 * (0.016 + 0.126)] - (-0.216 + 0.296 * 0.016) / (-0.216 + 0.296 * 0.016) = (-0.1739 + 0.2112)/0.2112 = 0.1766$ (18%).

company is promoted to a higher position in a given year and 0 otherwise.

The results are shown in Table 4.5. The key explanatory variable "$PS *$ $Promotion$" is an interaction term between a dummy variable indicating if a firm's CEO has Party school education experience (PS) and a dummy indicating if a CEO was successfully politically promoted to a higher position (Promotion). The estimated coefficient for $PS * Promotion$ is positive and highly significant (0.266) in predicting the $Ln(ESG)$, indicating a positive association between political promotion incentives and a firm's ESG performance. This result is economically significant as well: Holding all other variables constant, increasing Party school education by one standard deviation (0.126 in Table 4.2) increases ESG performance by 15% from 0.2212 to 0.2547.

Looking at each component individually, in column (2), $PS * Promotion$ have a significant positive coefficient on the environmental performance ($Ln(E)$, 0.661). Holding all other variables constant, increasing Party school education by one standard deviation (0.126 in Table 4.2) increases environmental performance by 19% from 0.4385 to 0.5218. In column (4), $PS * Promotion$ have a significant positive coefficient on the governance performance ($Ln(G)$, 0.775). Holding all other variables constant, increasing Party school education by one standard deviation (0.126 in Table 4.2) increases governance performance by 25% from 0.3964 to 0.4940. These coefficients on control variables in all columns are generally consistent with the expectations and previous studies (Beladi et al., 2022; He et al., 2022; Wang et al., 2023).

In conclusion, the findings in Table 4.5 provide evidence supporting the third hypothesis (H3) that the impact of CEO's Party school education on corporate ESG performance is stronger for SOEs whose CEOs have successfully politically promoted.

[INSERT TABLE 4.5 HERE]

4.5.4 Accounting for controller heterogeneity: Central and local SOEs

To test this hypothesis, I categorize the sample SOEs based on the identities of their controlling shareholders, distinguishing between central and local government-controlled enterprises.

I then analyze whether the effect of Party school education on ESG performance varies between these two subgroups. Table 4.6 presents results that are consistent with the expectations. The coefficients on the main effect of *PS* are insignificant for Central SOE in Column (1), while significantly positive (0.122) at 5% level for local SOEs in Column (5). This indicates that the better ESG performance of firms with Party school education is more pronounced among the local SOEs. Looking at each component individually, regarding environmental performance, *PS* has an insignificant coefficient in column (2) while having significant positive coefficients on the environmental performance ($Ln(E)$, 0.247) in column (6). The results differentiate the impact of Party school education on environmental performance between central and local SOEs. The stronger impact in local SOEs suggests that Party school education might be particularly beneficial in environments where local government policies and initiatives are more directly implemented and monitored. This could be due to closer relationships and more direct influence between local governments and local SOEs. The results imply that local SOEs with Party school-educated CEOs may be better positioned to leverage local government support and resources for enhancing their environmental performance. This can result in more effective implementation of sustainability initiatives and governance reforms at the local level. Regarding governance performance, *PS* has an insignificant coefficient in column (4) while having significant positive coefficients on

the environmental performance ($Ln(E)$, 0.259) in column (8). The results also differentiate the impact of Party school education on governance performance between central and local SOEs. The heightened influence observed within local SOEs underscores the significance of governance performance. Consistent with our institutional theory expectation, Party school education catalyzes institutional isomorphism by fostering a shared understanding of governance principles and sustainability goals among CEOs and other organizational members. This alignment facilitates smoother interactions between local governments, thereby enhancing their governance performance. Last, PS has a negligible effect on social performance ($Ln(S)$) for local SOEs. Local SOEs are typically tasked with fulfilling specific economic, political, and developmental objectives set by the government (Chen et al., 2011b). As such, firms' priorities may be more closely aligned with institutional imperatives rather than social considerations. The results are consistent with the theoretical prediction.

Moving to other control variables for local SOEs. In Column (5), the coefficients of ROA, Lev, $Lnsize$, and Institutional are positively significant, suggesting local SOEs with less operational pressure, larger size, and more institutional investors have better ESG performance. Regarding environmental performance, In Column (6), The coefficients of $Lnsize$, $Lnboard$, and $Institutional$ are positively significant, while the coefficients of ROA, Lev, Q, $Lange$, and $Top1$ are insignificant, suggesting local SOEs with larger size, more board members and institution investors have better environmental performance. Regarding social performance, In Column (7), although the coefficient of PS is insignificant, the coefficients of Lev, Q, $Lnsize$, $Lnage$, and $Lnboard$ are significant, implying financial factors within firms are the main factors when they make social investments. Regarding governance performance, In Column (8), in line with the environmental dimension, the coefficients of $Lnsize$, $Lnboard$,

and *Institutional* are positively significant, while the coefficients of ROA, Lev, Q, $Lnage$, and $Top1$ are insignificant, suggesting local SOEs with larger size, more board members and institution investors have better governance performance. These coefficients of control variables in all columns are generally consistent with the expectations and previous studies (Beladi et al., 2022; He et al., 2022; Wang et al., 2023) and also are consistent with our baseline results.

In conclusion, the findings in Table 4.6 support the fourth hypothesis (H4) that the impact of CEO's Party school education on corporate ESG performance is stronger in local SOEs.

[INSERT TABLE 4.6 HERE]

4.6 Robustness Checks

Thus far, I have focused on the relationship between CEO Party school education and ESG performance. I recognize that some other CEO variations may affect the baseline relationship (Lai et al., 2021; Kim et al., 2021; Rajkovic, 2020). I further control male CEO, CEO age, and CEO education years for several reasons.

First, studies show that gender diversity in leadership positions, particularly at the CEO level, has implications for firm performance and decision-making. For example, Post and Byron (2015) demonstrate that companies with female CEOs show superior ESG performance. This is hypothesized to be due to a higher level of social awareness and risk aversion compared to their male counterparts (Adams and Ferreira, 2009). Furthermore, Dezso and Ross (2012) find that having a female CEO leads to better financial performance, particularly in firms with a greater focus on innovation. Hence, not controlling for CEO gender could confound the findings.

Second, age can influence the risk-taking behavior and strategic decisions of CEOs. Older CEOs may be more conservative and risk-averse than younger ones (Yim, 2013). The results of Gottesman and Morey (2010) consistently show factors like CEO age were found to be significantly related to firm performance, but these were not directly tied to CEO education. Wang and Lim (2018) suggest that younger CEOs are more likely to engage in acquisitions and diversify their firms, potentially affecting firm performance. In the context of ESG, older CEOs may prefer traditional business methods over more sustainable practices, thus influencing a firm's ESG performance. Therefore, controlling for CEO age is critical to isolate its effect from other variables in the analysis.

Third, the education level of a CEO can impact their decision-making processes, influencing the firm's strategic direction and performance. Higher education levels can lead to more innovative strategies and better decision-making skills (Barker and Mueller, 2002). In terms of ESG, CEOs with higher education levels might be more aware of the benefits of sustainable practices, influencing the firm's ESG performance positively. Nguyen et al. (2015) also found a positive correlation between the CEO's education level and firm performance.

Given these factors, controlling for CEO characteristics like gender, age, and education level is crucial. It helps ensure the robustness of the research findings by isolating the effects of the variables of interest from the influence of these CEO characteristics. Additionally, these CEO characteristics can also serve as important factors of interest themselves, contributing to the understanding of their roles in influencing firm performance. The variable $MaleCEO$ is defined as a dummy variable that equals one if the CEO in the firm is male; Otherwise, it equals zero. The variables $Ln(CEOage)$ and $Ln(CEOedu)$ are the natural logarithm of the CEO's age and

educational years.

Table 4.7 presents the robustness results of additional CEO variables. Panel A, B, C, and D are for the H1, H2, H3, and H4, respectively. These results remain reliable and shed light on the roles that various CEO and firm characteristics play in influencing firms' ESG performance.

<div align="center">**[INSERT TABLE 4.7 HERE]**</div>

4.7 Endogeneity concerns

The main empirical results could be affected by comparable characteristics between the treated (with CEOs with Party school education) and control (without CEOs with Party school education) groups. To address this potential endogeneity concern, I apply the Propensity Score Matching (PSM) method (Rosenbaum and Rubin, 1983; Bose et al., 2021) and use kernel matching with a bandwidth of 0.04 as the matching approach. I estimate the propensity score defined as $P(X) = \Pr(D = 1|X)$, where $D = \{0, 1\}$ denotes whether the firm is treated, and X is the set of comparable characteristics, including ROA, Lev, Q, $Lnsize$, $Lnage$, $Lnboard$, $Top1$, and $Institutional$. To ensure the accuracy of matching results, the matched sample passes the balancing test, and the results are reported in Table A4.1.

Table 4.8 reports the propensity score matching estimation results with the year and firm fixed effects. The matched samples are chosen where each of the firms with CEOs with Party school education is matched with a firm without that of comparable firm-level factors reported in Table 4.8. The table is divided into four main panels. Panel A details the PSM results regarding the H1. In Column (1) of Panel A, the coefficient of PS (0.119) is significant at 5% level, indicating a positive impact of Party school education on ESG performance. In Columns (2) and (4), the coefficients (0.318 for

$Ln(E)$, 0.351 for $Ln(G)$) are also both positively significant and consistent with our main analyses, further confirming a positive impact of Party school education on corporate environmental and governance performance. The impact on social performance ($Ln(S)$) is still insignificant. Panel B provides the PSM results regarding the possible mechanism of economic development incentives. The interaction term $PS * LowGDP\_$dummy shows significant positive coefficients for $Ln(ESG)$, $Ln(E)$, and Ln(G) indicating that the economic development incentive mechanism is stronger in regions with lower GDP. Panel C presents the PSM results regarding the possible mechanism of political promotion incentives. The interaction term PS * Promotion shows significant positive coefficients for $Ln(ESG)$, $Ln(E)$, and $Ln(G)$, further confirming that political promotion incentives exist in the relationship between CEOs with Party school education and ESG performance, particularly in environmental and governance aspects. Panel D shows the PSM results between central SOEs and local SOEs. For local SOEs, the coefficients are positive and significant across ESG, E, and G dimensions, further confirming that Party school education has a more pronounced positive effect on local SOEs compared to central SOEs.

In summary, the PSM analysis in Table 4.8 robustly supports the main empirical findings. CEOs with Party school education positively influence ESG performance, with mechanisms tied to economic development and political promotion incentives, and varying impacts between central and local SOEs. **[INSERT TABLE 4.8 HERE]**

4.8 Conclusion

In this study, I explore the influence of a CEO's Party school education on a firm's ESG performance within the context of Shanghai-listed non-financial A-share firms in China

from 2010 to 2020. The findings reveal a beneficial impact of Party school education on ESG performance within state-owned enterprises (SOEs), thereby indicating that CEOs who attended Party schools can facilitate the advancement of ESG initiatives within their organizations.

Further, the study delves into the interplay between local economic development pressures and Party school education's impact on a firm's ESG performance. I discovered that this influence is intensified in firms situated in regions experiencing heightened economic development pressure. Moreover, I found a stronger impact when the CEO could attain a higher rank within the organization within three years.

Of particular interest is the observation that the advantageous effect of Party school education is mostly discernible in local government-controlled SOEs. I noted that these entities, under the stewardship of Party school-educated CEOs, enjoy enhanced benefit transfers with the local government. Therefore, I conclude that in China, Party school education plays a pivotal role in amplifying a firm's ESG performance.

The insights offer fresh perspectives to the expansive investment literature that explores the enhanced ESG performance resulting from the political resources shared among Party-school-affiliated firms and their counterparts in emerging markets. The results suggest that within a one-party rule, Party school education is a distinct driving force nudging firms towards increased ESG engagement.

These findings also carry implications for the burgeoning literature on leadership characteristics within firms. Besides offering new insights into the role CEO characteristics play in decision-making, I enrich existing literature by dissecting how a firm's ESG performance interacts with its internal governance amidst political connections.

In summary, the findings bolster the comprehension of how a firm's ESG performance corresponds to the leadership traits of the firm, particularly concerning CEOs' political connections to the ruling party. This contributes significantly to the broader understanding of how leadership can shape and drive ESG performance in an environment heavily influenced by political factors.

Table 4.1 Definitions of variables

Variables	Definition
$Ln(ESG)$	The logarithm of the firm's ESG rating
$Ln(E)$	The logarithm of the firm's environmental rating
$Ln(S)$	The logarithm of the firm's social rating
$Ln(G)$	The logarithm of the firm's governance rating
PS	Dummy variable =1 if the firm's CEO has party school degrees
ROA	The ratio of net profits for a period to total assets at the end of this period
Lev	The ratio of total liabilities to total assets
Q	Company's market value, measured by the ratio of the sum of market values of equity and net liabilities to total assets at the end of period; the market value of unlisted shares is substituted for net assets.
$Lnsize$	Natural logarithm of total assets
$Lnage$	Natural logarithm of the number of listing years
$Lnboard$	The natural logarithm of director number plus one.
$Top1$	The largest shareholder's percentage ownership, indicating the degree of ownership concentration
$Institutional$	institutional investors' percentage ownership
$Industry\ dummy$	The industry dummy variable was created to control industrial effects. According to the industry classification standard set by the China Securities Regulatory Commission in 2013, the manufacturing industry is a Class II industry, while other industries are classified as Class I industries. If a company falls into the specific industry, the variable value is 1; otherwise its value is 0.

Table 4.2 Summary statistics of the variables

Panel A: Descriptive statistics

Variables	(1)	(2)	(3)	(4)	(5)	(6)
	Obs	Mean	SD	Min	Median	Max
Ln (ESG)	8104	3.200	0.539	1.075	3.169	4.332
Ln (E)	8104	0.420	0.977	0.000	0.000	3.178
Ln (S)	8104	1.768	0.555	0.000	1.792	2.862
Ln (G)	8104	0.413	0.957	0.000	0.000	2.996
PS	8104	0.016	0.126	0.000	0.000	1.000
ROA	8104	5.437	4.984	-64.384	4.482	65.537
Lev	8104	3.070	2.726	1.022	2.227	50.431
Q	8104	2.155	1.596	0.837	1.632	7.066
Lnsize	8104	22.701	1.454	19.681	22.456	28.636
Lnage	8104	2.094	0.965	0.000	2.485	3.434
Lnboard	8104	2.181	0.204	1.609	2.197	2.708
Top1	8104	38.915	15.658	0.000	37.230	88.240
Institutional	8104	0.535	0.232	0.004	0.570	0.923

Panel B: Test of equalities of means between CEOs with and without CEOs with Party school education

Vairables	PS =1		PS=0		
	(1)	(2)	(3)	(4)	(5)
	Obs	Mean	Obs	Mean	T
Ln (ESG)	130	3.467	7974	3.196	5.698***
Ln (E)	130	1.014	7974	0.410	7.010***
Ln (S)	130	1.781	7974	1.768	0.274
Ln (G)	130	1.012	7974	0.404	7.210***
ROA	130	4.188	7974	5.458	-2.883**
Lev	130	2.289	7974	3.083	-3.295***
Q	130	1.575	7974	2.164	-4.177***
Lnsize	130	24.467	7974	22.672	14.149***
Lnage	130	2.439	7974	2.089	4.109***
Lnboard	130	2.357	7974	2.178	9.974***
Top1	130	43.325	7974	38.843	3.239***
Institutional	130	0.722	7974	0.532	9.315***

Notes: In this table, Panel A provides the descriptive statistics of the variables, including observations, the mean, standard deviation (SD), the minimum value, the median, and the maximum value. Panel B reports the results of test of equalities of means between CEOs with and without CEOs with Party school education. In column (5) we report the t-value of the test of equalities of means between SOEs and private firms. $Ln (ESG)$ is the logarithm of the firm's ESG rating. $Ln (E)$ is the logarithm of the firm's environmental rating. $Ln (S)$ is the logarithm of the firm's social rating. $Ln (G)$ is the logarithm of the firm's governance rating. PS is a dummy variable; if a firm's CEO has Party school education experience, its value is 1; otherwise, its value is 0. ROA is measured by the ratio of net profits for a period to total assets at the end of this period. Lev is measured by the ratio of total liabilities to total assets. Q is estimated as the company's market value, measured by the ratio of the sum of market values of equity and net liabilities to total assets at the end of the period; the market value of unlisted shares is substituted for net assets. $Lnsize$ is the natural logarithm of total assets. $Lnage$ is the natural logarithm of the number of listing years. $Lnboard$ is measured by the natural logarithm of director number plus one. $Top1$ is the largest shareholder's percentage ownership, indicating the degree of ownership concentration. $Institutional$ is institutional investors' percentage ownership. t-statistics are reported in parentheses. Significance levels 0.1, 0.05, and 0.01 are noted by *, **, and ***, respectively.

Table 4.3 Relationship between Party school education and ESG performance

Variables	Dependent variables are defined as			
	Ln (ESG)	Ln(E)	Ln(S)	Ln(G)
	(1)	(2)	(3)	(4)
PS	0.109**	0.205***	-0.068	0.239***
	(2.39)	(2.82)	(-1.41)	(3.33)
ROA	0.022***	0.001	0.004***	0.003
	(17.01)	(0.71)	(2.78)	(1.61)
Lev	0.007***	0.005	-0.012***	0.004
	(2.96)	(1.29)	(-4.67)	(1.07)
Q	0.005	0.010	0.021***	0.009
	(1.12)	(1.52)	(4.84)	(1.42)
Lnsize	0.081***	0.109***	0.040***	0.090***
	(15.85)	(13.33)	(7.43)	(11.18)
Lnage	0.051***	-0.015	0.076***	0.006
	(7.55)	(-1.35)	(10.64)	(0.55)
Lnboard	-0.054*	0.088*	-0.158***	0.099**
	(-1.82)	(1.86)	(-4.98)	(2.11)
Top1	0.000	-0.000	-0.000	-0.001
	(0.34)	(-0.53)	(-0.52)	(-1.09)
Institutional	0.117***	0.229***	-0.005	0.241***
	(3.63)	(4.43)	(-0.16)	(4.73)
Constant	1.256***	-1.604***	1.125***	-1.276***
	(10.59)	(-8.46)	(8.91)	(-6.83)
Year FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
N	8104	8104	8104	8104
R-sq	0.12	0.31	0.06	0.31

Notes: This table shows the effect of the Party school education on ESG performance. The dependent variable $Ln(ESG)$ is the logarithm of the firm's ESG rating. $Ln(E)$ is the logarithm of the firm's environmental rating. $Ln(S)$ is the logarithm of the firm's social rating. $Ln(G)$ is the logarithm of the firm's governance rating. PS is a dummy variable; if a firm's CEO has Party school education experience, its value is 1; Otherwise, its value is 0. ROA is measured by the ratio of net profits for a period to total assets at the end of this period. Lev is measured by the ratio of total liabilities to total assets. Q is estimated as the company's market value, measured by the ratio of the sum of market values of equity and net liabilities to total assets at the end of the period; the market value of unlisted shares is substituted for net assets. $Lnsize$ is the natural logarithm of total assets. $Lnage$ is the natural logarithm of the number of listing years. $Lnboard$ is measured by the natural logarithm of director number plus one. $Top1$ is the largest shareholder's percentage ownership, indicating the degree of ownership concentration. $Institutional$ is institutional investors' percentage ownership. t-statistics are reported in parentheses. Significance levels 0.1, 0.05, and 0.01 are noted by *, **, and ***, respectively.

Table 4.4 Possible mechanism: Local economic development incentive

Variable	Dependent variables are defined as			
	$Ln\,(ESG)$	Ln(E)	Ln(S)	Ln(G)
	(1)	(2)	(3)	(4)
$PS * LowGDP\_dummy$	0.190**	0.448***	-0.032	0.296*
	(2.11)	(4.71)	(-0.23)	(1.82)
PS	0.011	-0.294***	0.216**	0.210*
	(0.17)	(-4.43)	(2.15)	(1.85)
$LowGDP\_dummy$	0.075***	0.114***	0.052***	-0.216***
	(5.96)	(8.55)	(2.60)	(-10.07)
ROA	0.022***	0.004***	0.001	0.007***
	(17.02)	(2.74)	(0.71)	(3.02)
Lev	0.007***	-0.012***	0.005	-0.012***
	(2.83)	(-4.92)	(1.24)	(-2.73)
Q	0.003	0.019***	0.009	-0.018**
	(0.83)	(4.45)	(1.40)	(-2.52)
$Lnsize$	0.078***	0.036***	0.107***	0.025***
	(15.31)	(6.67)	(13.09)	(2.76)
$Lnage$	0.053***	0.079***	-0.013	0.047***
	(7.82)	(11.03)	(-1.21)	(3.85)
$Lnboard$	-0.032	-0.126***	0.105**	0.326***
	(-1.07)	(-3.96)	(2.19)	(6.05)
$Top1$	-0.000	-0.001	-0.001	-0.001
	(-0.26)	(-1.41)	(-0.77)	(-0.79)
$Institutional$	0.130***	0.015	0.237***	0.659***
	(4.03)	(0.44)	(4.58)	(11.46)
Constant	1.269***	1.156***	-1.605***	-1.158***
	(10.72)	(9.21)	(-8.46)	(-5.43)
Year FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
N	8104	8104	8104	8104
R-sq	0.12	0.31	0.07	0.31

Notes: This table shows the results of the possible mechanism: Local economic development incentive. The dependent variable $Ln\,(ESG)$ *is* the logarithm of the firm's ESG rating. $Ln\,(E)$ is the logarithm of the firm's environmental rating. $Ln\,(S)$ is the logarithm of the firm's social rating. $Ln\,(G)$ is the logarithm of the firm's governance rating. PS is a dummy variable; if a firm's CEO has Party school education experience, its value is 1; otherwise, its value is 0. $LowGDP\_dummy$ is a dummy variable if the local GDP of a given prefecture-level city is lower than the sample median in a given year, its value is 1; otherwise, its value is 0. ROA is measured by the ratio of net profits for a period to total assets at the end of this period. Lev is measured by the ratio of total liabilities to total assets. Q is estimated as the company's market value, measured by the ratio of the sum of market values of equity and net liabilities to total assets at the end of the period; the market value of unlisted shares is substituted for net assets.$Lnsize$ is the natural logarithm of total assets. $Lnage$ is the natural logarithm of the number of listing years. $Lnboard$ is measured by the natural logarithm of director number plus one. $Top1$ is the largest shareholder's percentage ownership, indicating the degree of ownership concentration. $Institutional$ is institutional investors' percentage ownership. t-statistics are reported in parentheses. Significance levels 0.1, 0.05, and 0.01 are noted by *, **, and ***, respectively.

Table 4.5 Possible mechanism: Political promotion incentive

Variable	Dependent variables are defined as			
	Ln (ESG)	Ln(E)	Ln(S)	Ln(G)
	(1)	(2)	(3)	(4)
*PS * Promotion*	0.266***	0.661***	-0.004	0.755***
	(3.00)	(4.65)	(-0.02)	(5.40)
PS	0.048	0.066	-0.065	0.090
	(1.02)	(0.87)	(-1.26)	(1.21)
Promotion	0.217***	0.428***	-0.020	0.384***
	(2.67)	(3.30)	(-0.19)	(3.01)
ROA	0.022***	0.001	0.004***	0.003
	(16.96)	(0.62)	(2.79)	(1.51)
Lev	0.007***	0.005	-0.012***	0.004
	(2.91)	(1.22)	(-4.67)	(1.00)
Q	0.005	0.010	0.021***	0.009
	(1.14)	(1.56)	(4.84)	(1.47)
Lnsize	0.081***	0.109***	0.040***	0.090***
	(15.82)	(13.32)	(7.43)	(11.17)
Lnage	0.050***	-0.016	0.076***	0.005
	(7.46)	(-1.48)	(10.64)	(0.43)
Lnboard	-0.061**	0.073	-0.158***	0.082*
	(-2.04)	(1.53)	(-4.98)	(1.75)
*Top*1	0.000	-0.000	-0.000	-0.001
	(0.28)	(-0.61)	(-0.52)	(-1.17)
Institutional	0.117***	0.227***	-0.005	0.239***
	(3.62)	(4.40)	(-0.16)	(4.71)
Constant	1.275***	-1.561***	1.125***	-1.231***
	(10.76)	(-8.25)	(8.91)	(-6.61)
Year FE	Yes	Yes	Yes	Yes
FIrm FE	Yes	Yes	Yes	Yes
N	8104	8104	8104	8104
R-sq	0.12	0.32	0.06	0.31

Notes: This table shows the results of possible mechanism: Political promotion incentives. The dependent variable *ESG* the logarithm of the firm's ESG rating. $Ln\ (E)$ is the logarithm of the firm's environmental rating. $Ln\ (S)$ is the logarithm of the firm's social rating. $Ln\ (G)$ is the logarithm of the firm's governance rating. *PS* is a dummy variable; if a firm's CEO has Party school education experience, its value is 1; otherwise, its value is 0. Promotion is a dummy variable; if a firm's CEO politically promotes to a higher position, its value is 1; otherwise, its value is 0. *ROA* is measured by the ratio of net profits for a period to total assets at the end of this period. *Lev* is measured by the ratio of total liabilities to total assets. *Q* is estimated as the company's market value, measured by the ratio of the sum of market values of equity and net liabilities to total assets at the end of the period; the market value of unlisted shares is substituted for net assets. *Lnsize* is the natural logarithm of total assets. *Lnage* is the natural logarithm of the number of listing years. *Lnboard* is measured by the natural logarithm of director number plus one. *Top*1 is the largest shareholder's percentage ownership, indicating the degree of ownership concentration. *Institutional* is institutional investors' percentage ownership. *t*-statistics are reported in parentheses. Significance levels 0.1, 0.05, and 0.01 are noted by *, **, and ***, respectively.

Table 4.6 Accounting for heterogeneity: Central SOEs vs. Local SOEs

Variable	Central SOEs				Local SOEs			
	Ln (ESG)	Ln(E)	Ln(S)	Ln(G)	Ln (ESG)	Ln(E)	Ln(S)	Ln(G)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
PS	0.107	0.160	-0.228***	0.206	0.122**	0.247***	0.015	0.259***
	(1.24)	(1.15)	(-3.03)	(1.54)	(2.18)	(2.80)	(0.23)	(2.94)
ROA	0.036***	0.009	0.012***	0.015**	0.019***	0.002	0.002	0.003
	(8.50)	(1.23)	(3.34)	(2.27)	(14.56)	(0.92)	(1.55)	(1.37)
Lev	0.009	-0.001	-0.007	0.003	0.007***	0.005	-0.012***	0.004
	(1.02)	(-0.04)	(-0.94)	(0.22)	(2.98)	(1.34)	(-4.67)	(1.11)
Q	0.004	0.054**	0.020	0.055**	0.006	0.000	0.022***	0.000
	(0.25)	(2.38)	(1.61)	(2.52)	(1.36)	(0.08)	(4.80)	(0.06)
Lnsize	0.092***	0.131***	0.089***	0.120***	0.087***	0.099***	0.034***	0.084***
	(7.42)	(6.61)	(8.30)	(6.27)	(14.02)	(10.00)	(4.88)	(8.54)
Lnage	0.103***	0.029	0.106***	0.044	0.043***	-0.007	0.078***	0.010
	(3.99)	(0.71)	(4.73)	(1.09)	(5.96)	(-0.60)	(9.67)	(0.86)
Lnboard	-0.119	-0.070	-0.025	0.048	-0.038	0.112**	-0.177***	0.091*
	(-1.60)	(-0.58)	(-0.38)	(0.42)	(-1.15)	(2.17)	(-4.85)	(1.78)
Top1	-0.001	-0.003	-0.002	-0.004**	0.000	-0.000	0.000	-0.000
	(-0.39)	(-1.31)	(-1.48)	(-1.99)	(0.75)	(-0.26)	(0.27)	(-0.52)
Institutional	0.039	0.358	-0.403***	0.266	0.130***	0.219***	0.042	0.237***
	(0.27)	(1.55)	(-3.23)	(1.20)	(4.00)	(4.25)	(1.16)	(4.63)
Constant	1.050***	-1.616***	-0.030	-1.659***	1.097***	-1.531***	1.264***	-1.207***
	(3.34)	(-3.20)	(-0.11)	(-3.42)	(7.99)	(-7.04)	(8.24)	(-5.58)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	1458	1458	1458	1458	6646	6646	6646	6646
R-sq	0.12	0.39	0.10	0.38	0.11	0.28	0.06	0.28

Notes: This table shows the results of accounting for heterogeneity. Columns (1) – (4) and (5) –(8) are for central SOEs and local SOEs subsamples, respectively. The dependent variable *ESG* the logarithm of the firm's ESG rating. *PS* is a dummy variable; if a firm's CEO has Party school education experience, its value is 1; otherwise, its value is 0. $Ln(E)$ is the logarithm of the firm's environmental rating. $Ln(S)$ is the logarithm of the firm's social rating. $Ln(G)$ is the logarithm of the firm's governance rating. ROA is measured by the ratio of net profits for a period to total assets at the end of this period. *Lev* is measured by the ratio of total liabilities to total assets. Q is estimated as the company's market value, measured by the ratio of the sum of market values of equity and net liabilities to total assets at the end of the period; the market value of unlisted shares is substituted for net assets. *Lnsize* is the natural logarithm of total assets. *Lnage* is the natural logarithm of the number of listing years. *Lnboard* is measured by the natural logarithm of director number plus one. $Top1$ is the largest shareholder's percentage ownership, indicating the degree of ownership concentration. *Institutional* is institutional investors' percentage ownership. *t*-statistics are reported in parentheses. Significance levels 0.1, 0.05, and 0.01 are noted by *, **, and ***, respectively.

Table 4.7 Robustness: Accounting for CEO demographic characteristics

Variable	Dependent variables are defined as			
	Ln (ESG)	Ln(E)	Ln (S)	Ln(G)
	(1)	(2)	(3)	(4)
Panel A: Relationship between Party school education and ESG performance.				
PS	0.094**	0.264***	-0.082	0.283***
	(2.03)	(3.10)	(-1.64)	(3.40)
Male CEO	0.111	0.214	-0.049	0.219
	(0.99)	(1.04)	(-0.58)	(1.08)
Ln(CEOage)	-0.017	-1.803***	0.778***	-1.685***
	(-0.18)	(-10.39)	(7.76)	(-9.91)
Ln(CEOedu)	0.029***	0.036***	0.048***	0.052***
	(-4.40)	(-2.94)	(-6.80)	(-4.37)
Controls	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
N	8104	8104	8104	8104
R-sq	0.11	0.09	0.05	0.09
Panel B: Possible mechanism: Local economic development incentive				
PS * LowGDP_dummy	0.098***	0.397***	-0.099	0.293**
	(3.00)	(4.12)	(-0.60)	(2.55)
Male CEO	0.111	-0.031	0.166	0.169
	(0.99)	(-0.26)	(0.81)	(0.84)
Ln(CEOage)	-0.028	0.749***	-1.666***	-1.559***
	(-0.30)	(7.47)	(-9.66)	(-9.22)
Ln(CEOedu)	-0.025***	-0.036***	-0.081***	-0.092***
	(-3.51)	(-4.85)	(-6.39)	(-7.40)
Controls	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
N	8104	8104	8104	8104
R-sq	0.11	0.10	0.06	0.10
Panel C: Possible mechanism: Political promotion incentive				
PS * Promotion	0.274***	0.700***	0.084	0.793***
	(3.07)	(4.28)	(1.07)	(4.95)
Male CEO	0.112	0.215	-0.028	0.222
	(1.00)	(1.05)	(-0.24)	(1.10)
Ln(CEOage)	-0.014	-1.794***	0.782***	-1.674***
	(-0.15)	(-10.37)	(7.80)	(-9.87)
Ln(CEOedu)	-0.029***	-0.034***	-0.048***	-0.051***
	(-4.33)	(-2.84)	(-6.75)	(-4.28)
Controls	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
N	8104	8104	8104	8104
R-sq	0.11	0.10	0.06	0.10

Panel D: Accounting for heterogeneity: Central SOEs vs. Local SOEs

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Central SOEs				Local SOEs			
PS	0.078	0.096	-0.273***	0.123	0.111*	0.444***	-0.006	0.440***
	(0.89)	(0.57)	(-3.55)	(0.76)	(1.94)	(4.34)	(-0.09)	(4.34)
Male CEO	0.251	0.522	-0.039	0.638	0.051	0.137	-0.071	0.102
	(0.95)	(1.02)	(-0.17)	(1.31)	(0.41)	(0.62)	(-0.51)	(0.46)
Ln(CEOage)	-0.577	-5.513***	0.503	-5.276***	0.026	-1.306***	0.816***	-1.223***
	(-1.59)	(-7.86)	(1.58)	(-7.90)	(0.27)	(-7.61)	(7.65)	(-7.18)
Ln(CEOedu)	-0.031**	-0.083***	-0.046***	-0.112***	-0.038***	0.035**	-0.066***	0.018
	(-2.42)	(-3.38)	(-4.10)	(-4.79)	(-4.30)	(2.23)	(-6.69)	(1.13)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	1458	1458	1458	1458	6646	6646	6646	6646
R-sq	0.11	0.11	0.07	0.11	0.11	0.08	0.06	0.08

Notes: This table shows the robustness results of additional CEO variables. Columns (1) – (4) are the firm's ESG, E, S, and G performances, respectively. The dependent variable *ESG* the logarithm of the firm's ESG rating. *Ln (E)* is the logarithm of the firm's environmental rating. *Ln (S)* is the logarithm of the firm's social rating. *Ln (G)* is the logarithm of the firm's governance rating. *PS* is a dummy variable; if a firm's CEO has Party school education experience, its value is 1; otherwise, its value is 0. Other variables are consistently defined as main regressions. *t*-statistics are reported in parentheses. Significance levels 0.1, 0.05, and 0.01 are noted by *, **, and ***, respectively.

Table 4.8 Robustness: Propensity score matching (PSM) approach

Variable	Dependent variables are defined as			
	Ln (ESG)	Ln(E)	Ln (S)	Ln(G)
	(1)	(2)	(3)	(4)
Panel A: Relationship between Party school education and ESG performance.				
PS	0.119**	0.318***	-0.071	0.351***
	(2.31)	(3.09)	(-1.38)	(3.53)
Controls	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
N	4225	4225	4225	4225
R-sq	0.07	0.03	0.05	0.03
Panel B: Possible mechanism: Economic development incentive				
$PS * LowGDP\_dummy$	0.210**	0.408***	0.193	0.440**
	(2.05)	(4.03)	(0.95)	(2.24)
Controls	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
N	4225	4225	4225	4225
R-sq	0.07	0.05	0.06	0.04
Panel C: Possible mechanism: Political promotion incentive				
$PS * Promotion$	0.281***	0.734***	0.275	0.832***
	(2.77)	(3.62)	(0.68)	(4.25)
Controls	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
N	4225	4225	4225	4225
R-sq	0.08	0.04	0.05	0.04

Panel D: Accounting for heterogeneity: Central SOEs vs. Local SOEs

	Central SOEs				Local SOEs			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
PS	0.116	0.194	-0.259***	0.233	0.142**	0.415***	0.044	0.427***
	(1.27)	(1.06)	(-3.46)	(1.34)	(2.25)	(3.31)	(0.66)	(3.48)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	1458	1458	1458	1458	6646	6646	6646	6646
R-sq	0.09	0.06	0.06	0.06	0.08	0.03	0.06	0.03

Notes: This table shows the robustness results of the PSM approach. Columns (1) – (4) are the firm's ESG, E, S, and G performances, respectively. The dependent variable $Ln (ESG)$ is the logarithm of the firm's ESG rating. $Ln (E)$ is the logarithm of the firm's environmental rating. $Ln (S)$ is the logarithm of the firm's social rating. $Ln (G)$ is the logarithm of the firm's governance rating. PS is a dummy variable; if a firm's CEO has Party school education experience, its value is 1; otherwise, its value is 0. ROA is measured by the ratio of net profits for a period to total assets at the end of this period. Lev is measured by the ratio of total liabilities to total assets. $Lnsize$ is the natural logarithm of total assets. $Lnboard$ is measured by the natural logarithm of director number plus one. $Lnage$ is the natural logarithm of the number of listing years. $Top1$ is the largest shareholder's percentage ownership, indicating the degree of ownership concentration. TQ is estimated as the sum of the market value of tradable shares, and the book value of non-tradable shares and liabilities, divided by the book value of total assets. PPE is Factory, equipment, and real estate, divided by the total assets at the beginning. $Institutional$ is institutional investors' percentage ownership. t-statistics are reported in parentheses. Significance levels $0.1, 0.05,$ and 0.01 are noted by $*, **,$ and $***$, respectively.

Appendix A4

Table A4.1 Correlation matrix

	Ln(ESG)	Ln(E)	Ln(S)	Ln(G)	PS	ROA	Lev	Q	Lnsize	Lnage	Lnboard	Top1	Institutiona
Ln(ESG)	1												
Ln(E)	0.279	1											
Ln(S)	0.279	0.146	1										
Ln(G)	0.288	0.980	0.188	1									
PS	0.063	0.078	0.003	0.080	1								
ROA	0.160	-0.023	-0.007	-0.017	-0.032	1							
Lev	-0.029	-0.108	-0.110	-0.104	-0.037	0.286	1						
Q	0.010	-0.072	-0.004	-0.068	-0.046	0.352	0.273	1					
Lnsize	0.233	0.183	0.134	0.167	0.155	-0.133	-0.366	-0.267	1				
Lnage	0.125	0.118	0.169	0.126	0.046	-0.260	-0.263	-0.161	0.352	1			
Lnboard	0.068	0.159	0.013	0.159	0.110	-0.091	-0.124	-0.107	0.269	0.217	1		
Top1	0.090	0.081	0.009	0.069	0.036	0.068	-0.031	-0.024	0.245	-0.112	0.007	1	
Institutiona	0.185	0.227	0.083	0.220	0.103	-0.008	-0.178	-0.033	0.469	0.191	0.229	0.487	1

Notes: This table provides correlations between the main variables. The dependent variable Ln (ESG) the logarithm of the firm's ESG rating. Ln (E) is the logarithm of the firm's environmental rating. Ln (S) is the logarithm of the firm's social rating. Ln (G) is the logarithm of the firm's governance rating. PS is a dummy variable; if a firm's CEO has Party school education experience, its value is 1; otherwise, its value is 0. Other variables are consistent with variable definitions.

Table A4.2 Balancing properties of matched firms

	Mean		t-test	
	$PS = 1$	$PS = 0$	t-statisic	p-value
ROA	4.210	4.610	-0.98	0.329
Lev	2.295	2.565	-1.22	0.221
Q	1.580	1.722	-1.36	0.174
Lnsize	24.331	23.886	1.106	0.275
Lnage	2.434	2.460	-0.41	0.679
Lnboard	2.432	2.321	0.82	0.423
*Top*1	43.411	41.844	1.12	0.265
Institutional	0.677	0.689	-0.27	0.792

Notes: Matching method `t-test' is the t-test to the equality of given firm characteristics between firms with CEOs with Party school education and firms without CEOs with Party school education.

Chapter 5 Conclusion

5.1 Outline

This thesis investigates the nexus between political affiliations and financial choices made by both households and corporates. It covers the fundamental organizational units, that are households and corporates, in the financial world. The primary objective of this thesis is to investigate relationships between political connections and three pivotal domains within the realm of financial decisions, namely, household borrowing (Chapter 2), corporate investment efficiency (Chapter 3), and ESG performance (Chapter 4), respectively. Chapter 2 looks at households and checks how being affiliated with CPC relates to how much loan households borrow. Then, we move on to corporates in Chapter 3, exploring how having CEOs with Party school education affects firms' investment decisions. In Chapter 4, we change our focus to look at how corporates implement ESG practices, a strategy encouraged by the government and introduced into government performance reviews (Wang et al., 2023).

5.2 Detailed summary and policy implication of empirical findings

The first empirical chapter of this thesis (Chapter 2) echoes the prevailing body of literature concerning the intersection of political connections and household finance. Within this discourse, this chapter introduces three novel contributions to the existing scholarship. First, in contrast to prior research employing a binary membership indicator, the study posits that the number of party members within specific

organizational units can serve as a robust proxy for the quality of political connections. Noteworthy precedents in this regard include Perdersen et al. (2004) and Cheng (2022). Secondly, this chapter differentiates itself from prior research that predominantly concentrates on the impact of party memberships on bank loans by extending its purview to encompass a comprehensive examination of the influence of party memberships on both bank and informal loans. Thus, the study bridges an important gap by providing a more comprehensive understanding of the role played by party memberships in shaping households' financial decisions, revealing that such a higher quality is associated with increased amounts of both bank loans and informal loans among Chinese households. Thirdly, this chapter constitutes the first empirical exploration of sociability as a mediating factor in the relationship between political affiliations and household access to finance. It not only substantiates the notion that sociability leads to greater financial holdings (both formal and informal) but also provides empirical evidence that politically connected households with robust social ties exhibit even larger bank loan holdings.

In summary, Chapter 2 of this thesis contributes to the existing literature by introducing novel perspectives on the relationship between political connections and household finance, emphasizing the significance of the quantity of CPC members within specific organizational units, expanding the scope to encompass both bank and informal loans, and examining sociability as a mediating factor. These contributions collectively enhance the comprehension of the intricate dynamics at play in shaping households' financial decisions within the context of Chinese politics.

The subsequent empirical chapter (Chapter 3) seeks to address a significant gap in the literature by investigating the influence of CEOs with Party School education on firms' capital allocation efficiency. The findings indicate that both SOEs and private firms led by CEOs with Party School degrees exhibit enhanced investment efficiency, as measured by their sensitivity to investment opportunities. However, this effect is more pronounced and statistically significant among SOEs. Furthermore, the research unveils that CEOs with Party School backgrounds exhibit reduced self-interest in their investment decision-making processes, aligning with the principles of communist ideology. Additionally, the analysis reveals that firms led by Party School-educated CEOs have improved access to government resources, as Party School education strengthens their connections to the government. Notably, this impact is particularly pronounced among central SOEs.

Chapter 3 aims to shed light on the potential advantages and disadvantages of Party School education for firms operating in China. Given the diversity of firm ownership structures in the Chinese market, this chapter stratifies analyses to differentiate between SOEs and private firms. This chapter contributes to the existing literature primarily by expanding the discourse on corporate capital allocation efficiency. Notably, while prior research has delved into the traditional educational backgrounds of CEOs, the study is the first, to the best of my knowledge, to empirically investigate the causal connection between CEO Party education, with a political emphasis, and corporate capital allocation efficiency within the institutional framework of a single ruling party. This inquiry deepens the understanding of how firms' investment behaviors relate to their

leadership attributes in general and, more specifically, how they intersect with CEOs' political connections to the ruling party.

The last empirical chapter (Chapter 4) undertakes an empirical examination of the influence exerted by CEOs with Party school education on the ESG performance of Chinese SOEs. The inquiry divulges compelling evidence indicating that SOEs helmed by CEOs who have undergone formal education within Party schools exhibit notably enhanced ESG performance. This chapter uncovers a noteworthy interaction effect wherein the positive impact of CEO's Party school education on ESG performance is further amplified in the presence of SOEs located within areas characterized by heightened economic pressure. After this finding, this chapter delves deeper into the realm of CEO motivation, observing that those CEOs who possess a discernible political promotion incentive emanating from their Party school education exhibit a strengthened propensity to bolster ESG performance within their respective firms. Remarkably, this investigation unravels that the discernible influence of CEOs with Party school education on ESG performance is most pronounced among locally operated SOEs.

As far as extant literature extends, this chapter marks a pioneering effort in examining the causal relationship between CEOs with Party School education and corporate ESG performance. This study is particularly notable given the unique institutional context of a dominant ruling party. It expands upon existing literature on leadership characteristics by investigating the influence of CEOs' educational backgrounds, especially those within politically oriented educational settings. The

findings of this investigation will not only enhance our understanding of the complex relationship between firms' ESG performance and CEOs' characteristics but will also shed light on the specific connections between ESG performance and CEOs' political connection to the ruling party.

5.3 Prospects of Future Research

This thesis represents a substantial contribution to the field of political affiliations, political education, and household and corporate financial decisions. Nonetheless, it is imperative to recognize the presence of unexplored avenues for research that have the potential to further enrich this domain.

One promising avenue for future research entails expanding the current investigation into previously unexamined aspects of corporate governance and performance within China. Specifically, in an underdeveloped and strong political intervention market, the exploration of domains such as corporate innovation, strategies for global expansion, and human resource management practices within Chinese corporations offers a valuable opportunity to unearth novel insights and augment the existing body of research on political connections.

Another compelling direction for exploration lies within the realm of comparative studies. By meticulously examining the impact of political affiliations and educational variables across diverse political and economic contexts, scholars can deepen their comprehension of the intricate dynamics inherent in political economies within varying

systems. Such cross-contextual inquiries have the potential to enhance both the depth and breadth of comprehension regarding the interplay between politics and economics. Consequently, future research can transcend the confines of the Chinese context and the unique characteristics of single-party regimes, offering insights that can be applied to a broader and comparative spectrum of political and economic systems.

Furthermore, future research can consider integrating these additional variables to validate and extend the findings. This could involve conducting robustness checks by including variables like CEO experience variations and the specified macro-level variables in robustness checks can help assess the stability of the main findings.

Aabo, T., & Giorici, I. C. (2023). Do female CEOs matter for ESG scores?. *Global Finance Journal*, *56*, 100722.

Acemoglu, D., Johnson, S., Kermani, A., Kwak, J., & Mitton, T. (2016). The value of connections in turbulent times: Evidence from the United States. *Journal of Financial Economics*, 121(2), 368-391.

Adams, R. B., Hermalin, B. E., & Weisbach, M. S. (2010). The role of boards of directors in corporate governance: A conceptual framework and survey. *Journal of Economic Literature*, 48(1), 58-107.

Adhikari, A., Derashid, C., & Zhang, H. (2006). Public policy, political connections, and effective tax rates: Longitudinal evidence from Malaysia. *Journal of Accounting and Public Policy*, 25(5), 574-595.

Aghion, P., and Bolton, P. (1997). A theory of trickle-down growth and development. *The Review of Economic Studies*, 64(2), 151–172.

Agrawal, A., & Knoeber, C. R. (2001). Do some outside directors play a political role?. *The Journal of Law and Economics*, *44*(1), 179-198.

Albuquerque, R., Brandão-Marques, L., Ferreira, M. A., & Matos, P. (2019). International corporate governance spillovers: Evidence from cross-border mergers and acquisitions. *The Review of Financial Studies*, *32*(2), 738-770.

Alesina, A., Baqir, R., & Easterly, W. (1999). Public goods and ethnic divisions. *The Quarterly journal of economics*, *114*(4), 1243-1284.

Allen, F., & Santomero, A. M. (2001). What do financial intermediaries do?. *Journal of Banking & Finance*, 25(2), 271-294.

Allen, F., Qian, J., & Qian, M. (2005). Law, finance, and economic growth in China. *Journal of financial economics*, 77(1), 57-116.

Amel-Zadeh, A., & Serafeim, G. (2018). Why and how investors use ESG information: Evidence from a global survey. *Financial analysts journal*, *74*(3), 87-103.

Anderson, S., Francois, P., & Kotwal, A. (2015). Clientelism in Indian villages. *American Economic Review*, *105*(6), 1780-1816.

Angrist, J. D. (2014). The perils of peer effects. *Labour Economics*, 30, 98-108.

Angrist, J., Lang, D., & Oreopoulos, P. (2009). Incentives and services for college achievement: Evidence from a randomized trial. *American Economic Journal: Applied Economics*, 1(1), 136-63.

Appleton, S., & Song, L. (2008). Life satisfaction in urban China: Components and determinants. *World development*, *36*(11), 2325-2340.

Appleton, S., Knight, J., Song, L., & Xia, Q. (2009). The economics of Communist Party membership: the curious case of rising numbers and wage premium during China's transition. *The Journal of Development Studies*, *45*(2), 256-275.

Asher, S., and Novosad, P. (2017). Politics and local economic growth: Evidence from India. *American Economic Journal: Applied Economics*, 9, 229–273.

Bai, C. E., & Xu, L. C. (2005). Incentives for CEOs with multitasks: Evidence from Chinese state-owned enterprises. *Journal of Comparative Economics*, 33(3), 517-539.

Bai, X., Tsang, E. W., & Xia, W. (2020). Domestic versus foreign listing: Does a CEO's educational experience matter?. *Journal of Business Venturing*, 35(1), 105906.

Baker, M., Coval, J., & Stein, J. C. (2007). Corporate financing decisions when investors take the path of least resistance. *Journal of Financial Economics*, *84*(2),

266-298.

Baland, J. M., & Robinson, J. A. (2008). Land and power: Theory and evidence from Chile. *American Economic Review*, *98*(5), 1737-1765.

Banerji, S., Duygun, M., & Shaban, M. (2018). Political connections, bailout in financial markets, and firm value. *Journal of Corporate Finance*, 50, 388–401.

Barnea, A., & Rubin, A. (2010). Corporate social responsibility as a conflict between shareholders. *Journal of business ethics*, *97*, 71-86.

Barro, R. J., & Lee, J. W. (1996). International measures of schooling years and schooling quality. *The American Economic Review*, *86*(2), 218-223.

Barseghyan, L., Molinari, F., O'Donoghue, T., & Teitelbaum, J. C. (2018). Estimating risk preferences in the field. *Journal of Economic Literature*, 56(2), 501-64.

Beck, T., Buyukkarabacak, B., Rioja, F. K., & Valev, N. T. (2012). Who gets the credit? And does it matter? Household vs. firm lending across countries. *The BE Journal of Macroeconomics*, 12, 1–46.

Beck, T., Büyükkarabacak, B., Rioja, F. K., & Valev, N. T. (2012). Who gets the credit? And does it matter? Household vs. firm lending across countries. *The BE Journal of Macroeconomics*, 12(1).

Beladi, H., Hou, Q., & Hu, M. (2022). The party school education and corporate innovation: Evidence from SOEs in China. *Journal of Corporate Finance*, 72, 102143.

Bénabou, R., & Tirole, J. (2010). Individual and corporate social responsibility. *Economica*, *77*(305), 1-19.

Benlemlih, M., & Bitar, M. (2018). Corporate social responsibility and investment efficiency. *Journal of Business Ethics*, 148, 647-671.

Benmelech, E., & Frydman, C. (2015). Military ceos. *Journal of financial Economics*, *117*(1), 43-59.

Bernile, G., Bhagwat, V., & Rau, P. R. (2017). What doesn't kill you will only make you more risk-loving: Early-life disasters and CEO behavior. *The Journal of Finance*, 72(1), 167-206.

Bester, H. (1985). Screening versus rationing in credit markets with imperfect information. *American Economic Review*, 75, 850–855.

Bhandari, A., & Golden, J. (2021). CEO political preference and credit ratings. *Journal of Corporate Finance*, *68*, 101909.

Bhandari, A., & Javakhadze, D. (2017). Corporate social responsibility and capital allocation efficiency. *Journal of Corporate Finance*, 43, 354-377.

Bian, Y., Shu, X., & Logan, J. R. (2001). Communist party membership and regime dynamics in China. *Social forces*, *79*(3), 805-841.

Biddle, G. C., & Hilary, G. (2006). Accounting quality and firm-level capital investment. *The accounting review*, *81*(5), 963-982.

Biddle, G. C., Hilary, G., & Verdi, R. S. (2009). How does financial reporting quality relate to investment efficiency?. *Journal of accounting and economics*, *48*(2-3), 112-131.

Bose, U., Filomeni, S., & Mallick, S. (2021). Does bankruptcy law improve the fate of distressed firms? The role of credit channels. *Journal of Corporate Finance*, *68*, 101836.

Boubakri, N., Cosset, J. C., & Saffar, W. (2008). Political connections of newly privatized firms. *Journal of corporate finance*, 14(5), 654-673.

Boucher, S. R., Guirkinger, C., & Trivelli, C. (2009). Direct elicitation of credit constraints: Conceptual and practical issues with an application to Peruvian agriculture. *Economic development and cultural change*, *57*(4), 609-640.

Braggion, F., & Moore, L. (2013). The economic benefits of political connections in late Victorian Britain. *The Journal of Economic History*, *73*(1), 142-176.

Brandt, L., & Li, H. (2003). Bank discrimination in transition economies: ideology, information, or incentives?. *Journal of comparative economics*, *31*(3), 387-413.

Brau, J. C., & Woller, G. M. (2004). Microfinance: A comprehensive review of the existing literature. *The Journal of Entrepreneurial Finance*, *9*(1), 1-28.

Briscoe, F., Chin, M. K., & Hambrick, D. C. (2014). CEO ideology as an element of the corporate opportunity structure for social activists. *Academy of Management Journal*, 57(6), 1786-1809.

Brouthers, L. E., Lascu, D. N., & Werner, S. (2008). Competitive irrationality in transitional economies: Are communist managers less irrational?. *Journal of business ethics*, *83*, 397-408.

Brown, J. K., & Hohman, Z. P. (2022). Extreme party animals: Effects of political identification and ideological extremity. *Journal of applied social psychology*, *52*(5), 351-362.

Brown, M., Jappelli, T., & Pagano, M. (2009). Information sharing and credit: Firm-level evidence from transition countries. *Journal of Financial Intermediation*, 18(2), 151–172.

Brown, S. C., & Lombard, J. (2014). Neighborhoods and social interaction. *Wellbeing and the environment*, *2*.

Bushman, R. M., & Williams, C. D. (2012). Accounting discretion, loan loss provisioning, and discipline of banks' risk-taking. *Journal of accounting and economics*, 54(1), 1-18.

Cai, H., Fang, H., & Xu, L. C. (2011). Eat, drink, firms, government: An investigation of corruption from the entertainment and travel costs of Chinese firms. *The Journal of Law and Economics*, *54*(1), 55-78.

Callick, R. (2013). *The party forever: inside China's modern communist elite*. St. Martin's Press.

Cameron, L., & Shah, M. (2015). Risk-taking behavior in the wake of natural disasters. Journal of Human Resources, 50(2), 484-515.

Campbell, J. Y., Lo, A. W., MacKinlay, A. C., & Whitelaw, R. F. (1998). The econometrics of financial markets. *Macroeconomic Dynamics*, 2(4), 559-562.

Cao, X., Lemmon, M., Pan, X., Qian, M., & Tian, G. (2019). Political promotion, CEO incentives, and the relationship between pay and performance. *Management Science*, 65(7), 2947-2965.

Casson, M. C., Della Giusta, M., & Kambhampati, U. S. (2010). Formal and informal institutions and development. *World Development*, 38(2), 137-141.

Castelló-Climent, A. (2019). The age structure of human capital and economic growth. *Oxford Bulletin of Economics and Statistics*, *81*(2), 394-411.

Cavalluzzo, K., Cavalluzzo, L., & Wolken, J. (2002). Competition, small business

financing, and discrimination: Evidence From a new survey. *The Journal of Business*, 75(4), 641–679.

Chakravarty, S., & Xiang, M. (2009). What discourages small businesses from asking for loans? The international evidence on borrower discouragement. *The International Evidence on Borrower Discouragement (February 15, 2009)*.

Chen, D., Guan, Y., Zhang, T., & Zhao, G. (2017). Political connection of financial intermediaries: Evidence from China's IPO market. *Journal of Banking and Finance*, 76, 15–31.

Chen, D., Kim, J. B., Li, O. Z., & Liang, S. (2018). China's closed pyramidal managerial labor market and the stock price crash risk. *The Accounting Review*, 93(3), 105-131.

Chen, F., Hope, O. K., Li, Q., & Wang, X. (2011a). Financial reporting quality and investment efficiency of private firms in emerging markets. *The Accounting Review*, 86(4), 1255-1288.

Chen, K., & Wen, Y. (2017). The great housing boom of China. *American Economic Journal: Macroeconomics*, 9, 73–114.

Chen, S., Sun, Z., Tang, S., & Wu, D. (2011b). Government intervention and investment efficiency: Evidence from China. *Journal of Corporate Finance*, 17(2), 259-271.

Chen, W. T., Zhou, G. S., & Zhu, X. K. (2019). CEO tenure and corporate social responsibility performance. *Journal of Business Research*, 95, 292-302.

Cheng, Z. (2022). Communist Party branch and labour rights: Evidence from Chinese entrepreneurs. *China Economic Review*, *71*, 101730.

Cheung, Y. L., Jiang, P., Limpaphayom, P., & Tong, L. U. (2008). Does corporate governance matter in China?. *China Economic Review*, 19(3), 460-479.

Chintrakarn, P., Jiraporn, P., Tong, S., Jiraporn, N., & Proctor, R. (2020). How do independent directors view corporate social responsibility (CSR)? Evidence from a quasi-natural experiment. *Financial Review*, *55*(4), 697-716.

Cingano, F., & Pinotti, P. (2009). Politicians at work. *The private returns and social costs of*.

Claessens, S., Feijen, E., & Laeven, L. (2008). Political connections and preferential access to finance: The role of campaign contributions. *Journal of financial economics*, 88(3), 554-580.

Coady, D. P., & Parker, S. W. (2009). Targeting performance under self-selection and administrative targeting method. *Economic Development and Cultural Change*, 57(3), 559–587.

Cole, R. A. (1998). The importance of relationships to the availability of credit. *Journal of Banking and Finance*, 22(6-8), 959–977.

Cole, R., & Sokolyk, T. (2016). Who needs credit and who gets credit? Evidence from the surveys of small business finances. *Journal of Financial Stability*, 24, 40–60.

Coleman, B. E. (1999). The impact of group lending in Northeast Thailand. *Journal of Development Economics*, 60(1), 105–141.

Conyon, M. J., & He, L. (2016). Executive compensation and corporate fraud in China. *Journal of Business Ethics*, 134(4), 669-691.

Crane, L., Davies, J., Fritz, A., O'brien, S., Worsley, A., Ashworth, M., & Remington, A. (2021). The transition to adulthood for autistic young people with additional

learning needs: The views and experiences of education professionals in special schools. *British Journal of Special Education*, *48*(3), 323-346.

Cruz, C., Labonne, J., & Querubin, P. (2017). Politician family networks and electoral outcomes: Evidence from the Philippines. *American Economic Review*, 107(10), 3006–3037.

Cull, R., & Xu, L. C. (2005). Institutions, ownership, and finance: the determinants of profit reinvestment among Chinese firms. *Journal of Financial Economics*, *77*(1), 117-146.

Cull, R., Gan, L., Gao, N., & Xu, L. C. (2019). Dual credit markets and household usage to finance: Evidence from a representative Chinese household survey. *Oxford Bulletin of Economics and Statistics*, 81(6), 1280-1317.

Dang, L., Yang, R. L., & Yang, J. D. (2015). Anti-corruption and firms' innovations: an explanation from political connections. *China Industrial Economics,* 7, 146-160.

Das, U. (2015). Does political activism and affiliation affect allocation of benefits in the rural employment guarantee program: Evidence from West Bengal, India. *World Development*, 67, 202–217.

DeMarzo, P. M., Kaniel, R., & Kremer, I. (2004). Diversification as a public good: Community effects in portfolio choice. *The Journal of Finance*, *59*(4), 1677-1716.

Demirgüç-Kunt, A., & Huizinga, H. (2010). Bank activity and funding strategies: The impact on risk and returns. *Journal of Financial economics*, 98(3), 626-650.

Deng, X., & Cheng, X. (2019). Can ESG indices improve the enterprises' stock market performance?—An empirical study from China. *Sustainability*, *11*(17), 4765.

Derchi, G. B., Zoni, L., & Dossi, A. (2021). Corporate social responsibility performance, incentives, and learning effects. *Journal of Business Ethics*, 173(3), 617-641.

Derchi, G. B., Zoni, L., & Dossi, A. (2021). Corporate social responsibility performance, incentives, and learning effects. *Journal of Business Ethics*, *173*(3), 617-641.

Dickson, B. J. (2003). Red capitalists in China. Cambridge: MA: Cambridge University Press.

DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American sociological review*, 48(2), 147-160.

Dimson, E., Karakaş, O., & Li, X. (2015). Active ownership. *The Review of Financial Studies*, *28*(12), 3225-3268.

Do, Q. A., Lee, Y. T., & Nguyen, B. D. (2017, February). Directors as connectors: The impact of the external networks of directors on firms. In *Asian Finance Association (AsianFA) 2017 Conference*.

Dong, Z., Wei, X., & Zhang, Y. (2016). The allocation of entrepreneurial efforts in a rent-seeking society: Evidence from China. *Journal of Comparative Economics*, 44(2), 353–371.

Dorfleitner, G., Just-Marx, S., & Priberny, C. (2017). What drives the repayment of agricultural micro loans? Evidence from Nicaragua. *The Quarterly Review of Economics and Finance*, *63*, 89-100.

Dufhues, T., Buchenrieder, G., & Munkung, N. (2013). Social capital and market imperfections: Accessing formal credit in Thailand. *Oxford Development Studies*, 41(1), 54–75.

Dunning, T., & Harrison, L. (2010). Cross-cutting cleavages and ethnic voting: An

experimental study of cousinage in Mali. *American Political Science Review*, *104*(1), 21-39.

Duong, H. N., Nguyen, H. T., & Pham, M. H. (2018). Military CEOs and bank loan contracts. Working paper, Monash University.

Eccles, R. G., & Serafeim, G. (2017). Corporate and integrated reporting: A functional perspective. In *Corporate stewardship* (pp. 156-171). Routledge.

Erev, I., Ert, E., Roth, A. E., Haruvy, E., Herzog, S. M., Hau, R., ... & Lebiere, C. (2010). A choice prediction competition: Choices from experience and from description. Journal of Behavioral Decision Making, 23(1), 15-47.

Erkens, D. H., Hung, M., & Matos, P. (2012). Corporate governance in the 2007–2008 financial crisis: Evidence from financial institutions worldwide. *Journal of Corporate Finance*, 18(2), 389-411.

Faccio, M. (2006). Politically connected firms. *American Economic Review*, 96(1), 369-386.

Faccio, M., & HSU, H. C. (2017). Politically connected private equity and employment. *The Journal of Finance*, *72*(2), 539-574.

Faccio, M., & Parsley, D. C. (2009). Sudden deaths: Taking stock of geographic ties. *Journal of Financial and Quantitative Analysis*, 44(3), 683-718.

Faccio, M., Masulis, R. W., & McConnell, J. J. (2006). Political connections and corporate bailouts. *The Journal of Finance*, 61(6), 2597-2635.

Fafchamps, M., & Labonne, J. (2017). Do politicians' relatives get better jobs? Evidence from Municipal Elections. *The Journal of Law, Economics, and Organization*, 33(2), 268–300.

Fan, G., Wang, X., & Zhu, H. (2011). NERI index of marketization of China's provinces 2011 report: Beijing: National Economic Research Institute. *China Reform Foundation.*

Fan, J. P., Rui, O. M., & Zhao, M. (2008). Public governance and corporate finance: Evidence from corruption cases. *Journal of Comparative Economics*, 36(3), 343-364.

Fan, J. P., Wong, T. J., & Zhang, T. (2007). Politically connected CEOs, corporate governance, and Post-IPO performance of China's newly partially privatized firms. *Journal of Financial Economics*, 84(2), 330-357.

Feld, J., & Zölitz, U. (2017). Understanding peer effects: On the nature, estimation, and channels of peer effects. *Journal of Labor Economics*, 35(2), 387-428.

Feng, X., Johansson, A. C., & Zhang, T. (2014). Political participation and entrepreneurial initial public offerings in China. *Journal of Comparative Economics*, 42(2), 269–285.

Feng, X., Johansson, A. C., and Zhang, T. (2015). Mixing business with politics: Political participation by entrepreneurs in China. *Journal of Banking and Finance*, 59, 220–235.

Ferguson, T., & Voth, H. J. (2008). Betting on Hitler—the value of political connections in Nazi Germany. *The Quarterly Journal of Economic*s, 123(1), 101-137.

Firth, M., Fung, P. M., & Rui, O. M. (2007). How ownership and corporate governance influence chief executive pay in China's listed firms. *Journal of Business Research*, *60*(7), 776-785.

Fisman, R. (2001). Estimating the value of political connections. *American Economic*

Review, 91(4), 1095-1102.

Fisman, R., & Wang, Y. (2015). The mortality cost of political connections. *The Review of Economic Studies*, 82(4), 1346–1382.

Flammer, C. (2021). Corporate green bonds. *Journal of financial economics*, *142*(2), 499-516.

Foltz, J. (2004). Credit market access and profitability in Tunisian agriculture. *Agricultural Economics*, 30(3), 229–240.

Francis, B. B., Hasan, I., & Sun, X. (2009). Political connections and the process of going public: Evidence from China. *Journal of International Money and Finance*, 28(4), 696–719.

Galbreath, J. (2013). ESG in focus: The Australian evidence. Journal of business ethics, 118, 529-541.

Gan, L., Yin, Z., Jia, N., Shu, X., Ma, S., and Zheng, L. (2014). Data you need to know about China: Research report of China Household Finance Survey 2012. *Berlin: Springer-Verlag.*

Garcia-Blandon, J., Argilés-Bosch, J. M., & Ravenda, D. (2019). Is there a gender effect on the quality of audit services?. *Journal of Business Research*, *96*, 238-249.

Gautier, A., & Pache, A. C. (2015). Research on corporate philanthropy: A review and assessment. *Journal of Business Ethics*, *126*, 343-369.

Ge, Y., Chen, H., Zou, L., & Zhou, Z. (2021). Political background and household financial asset allocation in China. *Emerging Markets Finance and Trade*, *57*(4), 1232-1246.

Ghosh, S., and Vinod, D. (2017). What constrains financial inclusion for women? Evidence from Indian micro data. *World Development*, 92, 60–81.

Giannetti, M., Liao, G., & Yu, X. (2015). The brain gain of corporate boards: Evidence from China. *the Journal of Finance*, *70*(4), 1629-1682.

Giannetti, M., Liao, G., You, J., & Yu, X. (2021). The externalities of corruption: Evidence from entrepreneurial firms in China. *Review of Finance*, 25(3), 629-667.

Gillan, S. L., Koch, A., & Starks, L. T. (2021). Firms and social responsibility: A review of ESG and CSR research in corporate finance. *Journal of Corporate Finance*, *66*, 101889.

Goldman, E., Rocholl, J., & So, J. (2009). Do politically connected boards affect firm value?. *The review of financial studies*, 22(6), 2331-2360

Gottesman, A., & Morey, M. R. (2010). CEO educational background and firm financial performance. *Journal of Applied Finance (Formerly Financial Practice and Education)*, *20*(2).

Guo, D., Kun, J., Kim, B. Y., & Xu, C. (2014). Political economy of private firms in China. *Journal of Comparative Economics*, 42(2), 286–303

Guo, G., Li, J., Wang, D., & Zhang, L. (2022). Political connection, contract intensity, and OFDI: Evidence from China. *Journal of Economic Surveys*, 36(3), 534-557.

Guo, R., Sun, M., Zhang, C., Fan, Z., Liu, Z., & Tao, H. (2021). The role of military training in improving psychological resilience and reducing depression among college freshmen. *Frontiers in Psychiatry*, *12*, 641396.

Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: The organization as a reflection of its top managers. *Academy of management review*, 9(2), 193-206.

Hameiri, S., & Jones, L. (2018). China challenges global governance? Chinese international development finance and the AIIB. *International Affairs*, *94*(3), 573-593.

Han, H., & Gao, Q. (2019). Community-based welfare targeting and political elite capture: Evidence from rural China. *World Development*, *115*, 145-159.

Han, L., Fraser, S., & Storey, D. J. (2009). Are good or bad borrowers discouraged from applying for loans? Evidence from US small business credit markets. *Journal of Banking and Finance*, 33(2), 415–424.

Hao, Z., Liu, Y., Zhang, J., & Zhao, X. (2020). Political connection, corporate philanthropy and efficiency: Evidence from China's anti-corruption campaign. *Journal of Comparative Economics*, 48(3), 688-708.

Hayashi, F. (1982). Tobin's marginal q and average q: A neoclassical interpretation. *Econometrica: Journal of the Econometric Society*, 213-224.

He, F., Du, H., & Yu, B. (2022). Corporate ESG performance and manager misconduct: Evidence from China. *International Review of Financial Analysis*, *82*, 102201.

He, X., Yan, J., Yang, L. E., Zhou, H., Wu, Y., & Wu, S. (2022). The role of government interventions in household climate adaptation on the Tibetan Plateau. *Journal of Rural Studies*, *95*, 544-559.

Heckman, J. J. (1979). Sample selection bias as a specification error. *Econometrica*, 47(1), 153–161.

Heckman, J. J., & Navarro-Lozano, S. (2004). Using matching, instrumental variables, and control functions to estimate economic choice models. *Review of Economics and Statistics*, 86(1), 30–57.

Heckman, J., & Navarro-Lozano, S. (2004). Using matching, instrumental variables, and control functions to estimate economic choice models. *Review of Economics and statistics*, *86*(1), 30-57.

Hertwig, R., & Erev, I. (2009). The description–experience gap in risky choice. *Trends in cognitive sciences*, *13*(12), 517-523.

Holman, E. A., & Silver, R. C. (1998). Getting" stuck" in the past: temporal orientation and coping with trauma. *Journal of personality and social psychology*, 74(5), 1146.

Hong, H., Kubik, J. D., & Stein, J. C. (2004). Social interaction and stock-market participation. *The journal of finance*, *59*(1), 137-163.

Hope, O. K., & Thomas, W. B. (2008). Managerial empire building and firm disclosure. *Journal of Accounting Research*, 46(3), 591-626.

Hope, O. K., & Thomas, W. B. (2008). Managerial empire building and firm disclosure. *Journal of Accounting Research*, *46*(3), 591-626.

Houston, J. F., Jiang, L., Lin, C., & Ma, Y. (2014). Political connections and the cost of bank loans. *Journal of Accounting Research*, 52(1), 193–243.

Infante, L., & Piazza, M. (2014). Political connections and preferential lending at local level: Some evidence from the Italian credit market. *Journal of Corporate Finance*, 29, 246–262.

Ivlevs, A., Nikolova, M., & Popova, O. (2021). Former Communist party membership and present-day entrepreneurship. *Small Business Economics*, 57, 1783-1800.

Jagannathan, R., Ravikumar, A., & Sammon, M. (2018). Environmental, social, and governance criteria: Why investors should care. *Journal of Investment*

Management, *16*(1), 18-31.

Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *The American Economic Review*, 76(2), 323-329.

Jensen, M. C., & Meckling, W. H. (2019). Theory of the firm: Managerial behavior, agency costs and ownership structure. In *Corporate governance* (pp. 77-132). Gower.

Jian, M., & Wong, T. J. (2010). Propping through related party transactions. *Review of Accounting Studies*, 15(1), 70-105.

Jiang, F., Cai, W., Wang, X., & Zhu, B. (2018). Multiple large shareholders and corporate investment: Evidence from China. *Journal of Corporate Finance*, *50*, 66-83.

Johnson, S., & Mitton, T. (2003). Cronyism and capital controls: evidence from Malaysia. *Journal of financial economics*, *67*(2), 351-382.

Jones, B. F., & Olken, B. A. (2005). Do leaders matter? National leadership and growth since World War II. *The Quarterly Journal of Economics*, *120*(3), 835-864.

Jorgensen, R. B. (2003). *Individually managed accounts: an investor's guide* (Vol. 207). John Wiley & Sons.

Karaivanov, A., & Kessler, A. (2018). (Dis) advantages of informal loans–Theory and evidence. *European Economic Review*, 102, 100-128.

Karlan, D., & Morduch, J. (2009). Access to finance. In D. Rodrik and M. Rosenzweig (Eds.), *Handbook of Development Economics (Vol. 5, pp. 4704–4784). Amsterdam: Elsevier*.

Keynes, J. M., & Waeger, F. (1936). Allgemeine Theorie der Beschäftigung, des Zinses und des Geldes (Vol. 6). Berlin: Duncker & Humblot.

Khwaja, A. I., & Mian, A. (2005). Do lenders favor politically connected firms? Rent provision in an emerging financial market. *The Quarterly Journal of Economics*, 120(4), 1371-1411.

Kim, J., Kim, Y., & Zhou, J. (2021). Time encoding in languages and investment efficiency. *Management Science*, *67*(4), 2609-2629.

Kim, T. (2018). Does a firm's political capital affect its investment and innovation?. Available at SSRN 2971752.

Koehn, D., & Ueng, J. (2010). Is philanthropy being used by corporate wrongdoers to buy good will?. *Journal of Management & Governance*, *14*, 1-16.

Kon, Y., & Storey, D. J. (2003). A theory of discouraged borrowers. *Small Business Economics*, 21(1), 37–49.

Kong, D., Tao, Y., & Wang, Y. (2020). China's anti-corruption campaign and firm productivity: Evidence from a quasi-natural experiment (p. 101535). *China Economic Review*.

Krammer, S. M& Jimenez, A. (2020). Do political connections matter for firm innovation? Evidence from emerging markets in Central Asia and Eastern Europe. *Technological Forecasting and Social Change*, *151*, 119669.

Krüger, P. (2015). Corporate goodness and shareholder wealth. *Journal of financial economics*, *115*(2), 304-329.

Kung, J. K. S., & Ma, C. (2018). Friends with benefits: How political connections help to sustain private enterprise growth in China. *Economica*, 85(337), 41–74.

Kutzschbach, J., Peetz, I., Tanikulova, P., & Willers, K. (2020). How CEO's education impacts CSR performance–An empirical analysis of publicly listed companies in Germany. *Management Studies*, 10(3), 50-63.

Ladany, L. (1992). *Law and legality in China: The testament of a China-watcher*. University of Hawaii Press.

Lai, S., Li, X., & Chan, K. C. (2021). CEO overconfidence and labor investment efficiency. *The North American Journal of Economics and Finance*, 55, 101319.

Lara, J. M. G., Osma, B. G., & Penalva, F. (2016). Accounting conservatism and firm investment efficiency. *Journal of accounting and economics*, *61*(1), 221-238.

Lei, J., Bai, Y., & Kong, D. (2024). Bank competition and household informal credit. *International Review of Financial Analysis*, 94, 103259.

Leuz, C., & Oberholzer-Gee, F. (2006). Political relationships, global financing, and corporate transparency: Evidence from Indonesia. *Journal of Financial Economics*, 81(2), 411–439.

Lev, B., Petrovits, C., & Radhakrishnan, S. (2010). Is doing good good for you? How corporate charitable contributions enhance revenue growth. *Strategic management journal*, *31*(2), 182-200.

Li, B., & Walder, A. G. (2001). Career advancement as party patronage: Sponsored mobility into the Chinese administrative elite, 1949–1996. *American Journal of Sociology*, *106*(5), 1371-1408.

Li, F., Minnis, M., Nagar, V., & Rajan, M. (2014). Knowledge, compensation, and firm value: An empirical analysis of firm communication. *Journal of Accounting and Economics*, 58(1), 96-116.

Li, G., & Zhou, H. (2015). Political connections and access to IPO markets in China. *China Economic Review*, 33, 76–93.

Li, H., & Zhou, L. A. (2005). Political turnover and economic performance: the incentive role of personnel control in China. *Journal of Public Economics*, 89(9-10), 1743-1762

Li, H., Liu, P., Zhang, J., & Ma, N. (2007). Economic returns to Communist Party membership: Evidence from urban Chinese twins. *The Economic Journal*, 117(523), 1504–1520.

Li, H., Meng, L., Wang, Q., & Zhou, L. (2008). Political connections, financing and firm performance: Evidence from Chinese private firms. *Journal of Development Economics*, 87(2), 283–299.

Li, J., Wu, Y., & Xiao, J. J. (2020). The impact of digital finance on household consumption: Evidence from China. *Economic Modelling*, 86, 317-326.

Li, L. (2018). Financial inclusion and poverty: The role of relative income. *China Economic Review*, 52, 165–191.

Li, L., Hermes, N., & Lensink, R. (2020). Political connections and household access to bank loans: evidence from China. *Economic research-Ekonomska istraživanja*, *33*(1), 288-309.

Li, R., & Qian, Y. (2021). How does entrepreneurship influence the efficiency of household portfolios?. *The European Journal of Finance*, *27*(13), 1282-1302.

Li, R., Li, Q., Huang, S., and Zhu, X. (2013). The credit rationing of Chinese rural households and its welfare loss: An investigation based on panel data. *China Economic Review*, 26,17–27.

Li, W., & Lie, E. (2006). Dividend changes and catering incentives. *Journal of financial economics*, 80(2), 293-308.

Li, W., & Zhang, R. (2010). Corporate social responsibility, ownership structure, and political interference: Evidence from China. *Journal of business ethics*, *96*, 631-645.

Liang, H., Renneboog, L., & Sun, S. L. (2016). A state-stewardship view on executive compensation. In *The Political Economy of Chinese Finance* (pp. 39-91). Emerald group publishing limited.

Liang, P., & Guo, S. (2015). Social interaction, Internet access and stock market participation—An empirical study in China. *Journal of Comparative Economic*s, 43(4), 883-901.

Liang, S., Li, Z., Chen, D., & Chen, S. (2015). Political ranks, incentives and firm performance. *China Journal of Accounting Studies*, 3(2), 87-108.

Liang, S., Niu, Y., Xin, F., & Jiang, L. (2024). CEO foreign experience and corporate financial investment. *International Review of Economics & Finance*, 93, 929-946.

Lin, N., & Bian, Y. (1991). Getting ahead in urban China. *American journal of sociology*, *97*(3), 657-688.

Liu, J., Xiong, X., Gao, Y., & Zhang, J. (2023). The impact of institutional investors on ESG: Evidence from China. *Accounting & Finance*, *63*, 2801-2826.

Liu, M., Lu, J., Liu, Q., Wang, H., Yang, Y., & Fang, S. (2024). The impact of executive cognitive characteristics on a firm's ESG performance: an institutional theory perspective. *Journal of Management and Governance*, 1-29.

Luo, J. H., Xiang, Y., & Zhu, R. (2017). Military top executives and corporate philanthropy: Evidence from China. *Asia Pacific Journal of Management*, *34*, 725-755.

Ma, G., & Yang, E. (2011). Social networks, informal finance and entrepreneurship. *Economic Research Journal*, 3, 83-94.

Malmendier, U., & Tate, G. (2008). Who makes acquisitions? CEO overconfidence and the market's reaction. *Journal of Financial Economics*, 89(1), 20-43.

Malmendier, U., Tate, G., & Yan, J. (2011). Overconfidence and early-life experiences: the effect of managerial traits on corporate financial policies. *The Journal of Finance*, 66(5), 1687-1733.

Manski, C. F. (1993). Identification of endogenous social effects: The reflection problem. *The review of economic studies*, *60*(3), 531-542.

Markussen, T., & Ngo, Q. T. (2019). Economic and non-economic returns to communist party membership in Vietnam. *World Development*, *122*, 370-384.

Markussen, T., & Tarp, F. (2014). Political connections and land-related investment in rural Vietnam. *Journal of Development Economics*, *110*, 291-302.

Marquis, C., Qian, C., 2014. Corporate social responsibility reporting in China: symbol or substance? *Organization Science*. 25 (1), 127–148.

McLaughlin, J. S. (2017). Does communist party membership pay? Estimating the economic returns to party membership in the labor market in China. *Journal of Comparative Economics*, *45*(4), 963-983.

McLean, R. D., Zhang, T., & Zhao, M. (2012). Why does the law matter? Investor protection and its effects on investment, finance, and growth. *The Journal of*

finance, *67*(1), 313-350.

McMillen, N. R. (Ed.). (1997). *Remaking Dixie: The Impact of World War II on the American South*. Univ. Press of Mississippi.

McNichols, M. F., & Stubben, S. R. (2008). Does earnings management affect firms' investment decisions?. *The accounting review*, *83*(6), 1571-1603.

Mengistae, T., & Colin Xu, L. (2004). Agency theory and executive compensation: The case of Chinese state-owned enterprises. *Journal of labor Economics*, *22*(3), 615-637.

Mun, S., Han, S. H., & Seo, D. (2020). The impact of CEO educational background on corporate cash holdings and value of excess cash. *Pacific-Basin Finance Journal*, *61*, 101339.

Munshi, K., & Rosenzweig, M. (2013). *Networks, commitment, and competence: caste in Indian local politics* (No. w19197). National Bureau of Economic Research.

Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of financial economics*, *13*(2), 187-221.

Neimanis, G. J. (1997). Business ethics in the former Soviet Union: A report. *Journal of Business Ethics*, *16*, 357-362.

Ngo, H. Y., Lau, C. M., & Foley, S. (2008). Strategic human resource management, firm performance, and employee relations climate in China. *Human Resource Management: Published in Cooperation with the School of Business Administration, The University of Michigan and in Alliance with the Society of Human Resources Management*, *47*(1), 73-90.

Nguyen, B. D., & Nielsen, K. M. (2010). The value of independent directors: Evidence from sudden deaths. *Journal of financial economics*, 98(3), 550-567.

Nguyen, B. D., Do, Q. A., Lee, Y. T., & Nguyen, K. T. (2012). Out of sight, out of mind: The value of political connections in social networks. Out of Mind: *The Value of Political Connections in Social Networks (June 22, 2012)*.

Pan, X., & Tian, G. G. (2020). Political connections and corporate investments: Evidence from the recent anti-corruption campaign in China. *Journal of Banking & Finance*, 119, 105108.

Pedersen, K., Bille, L., Buch, R., Elklit, J., Hansen, B., & Nielsen, H. J. (2004). Sleeping or active partners? Danish party members at the turn of the millennium. *Party Politics*, *10*(4), 367-383.

Peng, M. W., & Luo, Y. (2000). Managerial ties and firm performance in a transition economy: The nature of a micro-macro link. *Academy of management journal*, *43*(3), 486-501.

Pham, M. H. (2020). In law OUR trust: Lawyer CEOs and stock liquidity. *Journal of Financial Market*s, 50, 100548.

Piotroski, J. D., & Zhang, T. (2014). Politicians and the IPO decision: The impact of impending political promotions on IPO activity in China. *Journal of Financial Economics*, *111*(1), 111-136.

Porter, M. E., & Kramer, M. R. (2002). The competitive advantage of corporate philanthropy. *Harvard business review*, *80*(12), 56-68.

Qian, Y. (1996). Enterprise reform in China: Agency problems and political control. *Economics of Transition*, *4*(2), 427-447.

Rajkovic, T. (2020). Lead independent directors and investment efficiency. *Journal of Corporate Finance*, *64*, 101690.

Rauh, J. D. (2006). Investment and financing constraints: Evidence from the funding of corporate pension plans. *the Journal of Finance*, *61*(1), 33-71.

Richardson, S. (2006). Over-investment of free cash flow. *Review of Accounting Studies*, 11(2), 159-189.

Rithmire, M. E. (2014). China's "New Regionalism": Subnational analysis in Chinese political economy. *World Politics*, *66*(1), 165-194.

Roll, R. (1986). The hubris hypothesis of corporate takeovers. *Journal of business*, 197-216.

Rosen, C., & Madlener, R. (2016). Regulatory options for local reserve energy markets: Implications for prosumers, utilities, and other stakeholders. *The Energy Journal*, *37*(2_suppl), 39-50.

Rosenbaum, P. R., & Rubin, D. B. (1983). The central role of the propensity score in observational studies for causal effects. *Biometrika*, *70*(1), 41-55.

Sangwan, S., Nayak, N. C., & Samanta, D. (2020). Loan repayment behavior among the clients of Indian microfinance institutions: A household-level investigation. *Journal of Human Behavior in the Social Environment*, *30*(4), 474-497.

Shambaugh, D. L., & Brinley, J. J. (2008). China's Communist Party: atrophy and adaptation. University of California Press.

Sharma, P., Cheng, L. T., & Leung, T. Y. (2020). Impact of political connections on Chinese export firms' performance–Lessons for other emerging markets. *Journal of Business Research*, 106, 24-34.

Shleifer, A., & Vishny, R. W. (1993). Corruption. *The quarterly journal of economics*, *108*(3), 599-617.

Slinko, I., Yakovlev, E., & Zhuravskaya, E. (2005). Laws for sale: evidence from Russia. *American Law and Economics Review*, *7*(1), 284-318.

Stein, J. C. (2003). Agency, information and corporate investment. *Handbook of the Economics of Finance*, *1*, 111-165.

Stiglitz, J. E., & Weiss, A. (1981). Credit rationing in markets with imperfect information. *The American economic review*, *71*(3), 393-410.

Stokes, S. C., Dunning, T., & Nazareno, M. (2013). *Brokers, voters, and clientelism: The puzzle of distributive politics*. Cambridge University Press.

Stulz, R. (1990). Managerial discretion and optimal financing policies. *Journal of financial Economics*, *26*(1), 3-27.

Sun, P., Mellahi, K., Wright, M., & Xu, H. (2015). Political tie heterogeneity and the impact of adverse shocks on firm value. *Journal of Management Studies*, 52(8), 1036-1063.

Sun, R., & Zou, G. (2021). Political connection, CEO gender, and firm performance. *Journal of Corporate Finance*, 71, 101918.

Szelenyi, I. (1987). The prospects and limits of the East European new class project:

An auto-critical reflection on the intellectuals on the road to class power. *Politics & Society*, *15*(2), 103-144.

Tirole, J. (2010). *The theory of corporate finance*. Princeton university press.

Tobin, J. (1969). A general equilibrium approach to monetary theory. *Journal of Money, Credit and Banking, 1(1), 15-29.*

Tokarev, A. A., Margoev, A. R., Prikhodchenko, A. Y., & Fedotov, A. V. (2021). Informal networks and influential politicians in China: SNA-study of full CC CCP members. *Contemporary Politics*, 27(5), 572-590.

Townsend, R. M. (1994). Risk and insurance in village India. *Econometrica: Journal of the Econometric Society*, 539-591.

Turvey, C. G., & Kong, R. (2010). Farmers' willingness to purchase weather insurance in rural China. *Available at SSRN 1601625*.

Uhalley, S. (1988). A history of the Chinese Communist Party. Hoover Press.

Walder, A. G. (1995). Local governments as industrial firms: an organizational analysis of China's transitional economy. *American Journal of sociology*, *101*(2), 263-301.

Walder, A. G., & Nguyen, G. H. (2008). Ownership, organization, and income inequality: market transition in rural Vietnam. *American Sociological Review*, 73(2), 251-269.

Wang, H., & Qian, C. (2011). Corporate philanthropy and corporate financial performance: The roles of stakeholder response and political access. *Academy of Management journal*, *54*(6), 1159-1181.

Wang, J., Wang, S., Dong, M., & Wang, H. (2024). ESG rating disagreement and stock returns: Evidence from China. *International Review of Financial Analysis*, *91*, 103043.

Wang, K., Chen, X., & Wang, C. (2023). The impact of sustainable development planning in resource-based cities on corporate ESG–Evidence from China. *Energy Economics*, *127*, 107087.

Wang, Y., & Berens, G. (2015). The impact of four types of corporate social performance on reputation and financial performance. *Journal of Business Ethics*, *131*, 337-359.

Wang, Y., Chen, C. R., & Huang, Y. S. (2014). Economic policy uncertainty and corporate investment: Evidence from China. *Pacific-Basin Finance Journal*, *26*, 227-243.Gan, L., Yin, Z., Jia, N., Shu, X., Ma, S., and Zheng, L. (2014). Data you need to know about China: Research report of China Household Finance Survey 2012. *Berlin: Springer-Verlag.*

Wang, Y., Qiu, Y., & Luo, Y. (2022). CEO foreign experience and corporate sustainable development: Evidence from China. *Business Strategy and the Environment*, 31(5), 2036-2051.

Wei, C., Hu, S., & Chen, F. (2020). Do political connection disruptions increase labor costs in a government-dominated market? Evidence from publicly listed companies in China. *Journal of Corporate Finance*, *62*, 101554.

White, R., & Alam, S. A. (2013). Asset ownership and microloan repayment: Examining data from Bangladesh. *Development Policy Review*, *31*(3), 343-368.

Wu, Y., Lee, C. C., Lee, C. C., & Peng, D. (2022). Geographic proximity and corporate investment efficiency: Evidence from high-speed rail construction in China.

Journal of Banking & Finance, 140, 106510.

Xin, K. K., & Pearce, J. L. (1996). Guanxi: Connections as substitutes for formal institutional support. *Academy of management journal*, *39*(6), 1641-1658.

Yang, R., Chen, B., & Zhu, S. (2011). The credit behavior of rural households from the perspective of social network. *Economic Research Journal*, 11, 116-129.

Yu, X., Yao, Y., Zheng, H., & Zhang, L. (2020). The role of political connection on overinvestment of Chinese energy firms. *Energy Economics*, *85*, 104516.

Yueh, L. (2009). China's entrepreneurs. *World Development*, *37*(4), 778-786.

Zhang, J., Marquis, C., & Qiao, K. (2016). Do political connections buffer firms from or bind firms to the government? A study of corporate charitable donations of Chinese firms. *Organization Science*, 27(5), 1307-1324.

Zhou, F., Zhang, Z., Yang, J., Su, Y., & An, Y. (2018). Delisting pressure, executive compensation, and corporate fraud: Evidence from China. *Pacific-Basin Finance Journal*, 48, 17-34.

Zhu, H., Pan, Y., Qiu, J., & Xiao, J. (2022). Hometown ties and favoritism in Chinese corporations: Evidence from CEO dismissals and corporate social responsibility. *Journal of Business Ethics*, 1-28.

Zwiebel, J. (1996). Dynamic capital structure under managerial entrenchment. *The American economic review*, 1197-1215.