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Corporate Governance, Ownership Structure, SOEs and CFO Gender Impact on Investment Efficiency: Evidence from Chinese listed firms.

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Abstract:
This paper is aimed at to investigate the ownership mechanism, corporate governance, SOEs and CFO gender association with investment efficiency in the context of Chinese economy. In order to measure efficiency of investment, a famous method developed by Richardson (2006) was utilised in this study. To assess the impact of corporate governance mechanism and ownership structure on the investment efficiency of Chinese-listed companies in Shenzhen and Shanghai stock exchanges, it employed OLS regressions with year and industry effect fixed effect. This study determines that ownership concentration holds a negative relationship with investment efficiency, however, no. of senior executives on the board keep a positive association with investment efficiency. Further, executives and institutional investors in the Chinese firms are increasing investment efficiency. In addition, investment efficiency pronounced more in SOEs firms and when CFO is a male in Chinese listed firms. Furthermore, for policy makers, corporate governance improvement helps to support the managerial interests and institutional investments is required to enhance investment efficiency.

Keywords: Corporate Governance, CFO Gender, Ownership Structure, Investment Efficiency, China

1. Introduction

Corporate governance is a combination of market-based and institutional tools to resolve the agency problem that ascend from isolation of ownership and regulation in a firm. It saves stakeholders interests, enhance the company performance and a safeguard for shareholders to get enough profit on their investments (Porta et al., 2000; Shleifer & Vishny, 1997).Denis & Mcconnell in (2003) reported that we can categorise corporate governance mechanisms into structure of ownership (internal monitoring), board characteristics, managerial compensation and external supervision, and outside supervisory mechanisms. This paper scrutinizes that how corporate governance (ownership structure) such as ownership concentration, executive's ownership and stock options compensation, and board characteristics both external (such as institutional investors and big4 audit firms) and internal (such as board characteristics) governance mechanisms influence the Chinese firm's investment efficiency. Investment efficiency being used as an evaluator of firm's performance, deals with how well firms diversify or capitalize their funds, higher the firm investment efficiency indicates more efficient utilisation of assets which is a sign of healthier firm performance.

In the context of the Chinese market, investment efficiency has an important concern in corporate finance area for the reason that mostly firms in China are owned by government. Up till now, companies controlled by government are facing domination in the stock markets. Huang et al., (2011) reported that companies higher managements are elected under the higher influence of the government, their professional variations are controlled or ruled by maternal state-owned firms. Further, they explained that higher level managers in state-owned firms are to be expected to follow political oriented objectives, which belong to their own interests instead of firm's higher investment efficiency.

Recent study reckons out that investment efficiency and political involvements have negative association with regard to the Chinese market (Chen et al., 2012). Consequently, it will be a useful to scrutinize or study investment efficiency and corporate finance association, which could show the development of structure of corporate governance, enhances investment efficiency for state-owned firms as compare to private firms (Chen et al., 2015). Since 2005, the Chinese government is reforming to progress corporate governance and protecting the welfare of minority shareholders, in which majority improvements are grounded on the finest practices in the developed countries (Ding et al. 2007; Chen & Zhang, 2012) In 2002, the Chinese Securities and Regulatory Commission (CSRC) regulated all listed firms must have one-third independent directors of the board members. Additionally, the CSRC was promising public limited firms to offer encouragement-based benefits to managers; further the companies started to give stock-options and limited to give stocks to firms' CEOs (Chen et al. 2015).

This is still a question that could this corporate governance mechanism efficiently shield the minority shareholders' interest and increases the Chinese listed companies' performance? Up to the present time, the educationist or researchers are figuring out to answer, however, "there is no definite answer" (Chen et al. 2015). Therefore, Kato & Long stated in 2006, few researches advocate that independent executives or directors can support the firm performance, CEO turnover connection and prevent the activities of earning management (Cited in Chen et al., 2015). Conversely, some of studies say that external directors are not actual independent, they also examined that independent directors are not able to increase firm value or performance (Yu & Zheng, 2014). Further, the managers' ownership is positively linked with performance of firm (Li et al., 2007). Though, in the context of Chinese economy manager's ownership is dubiously influence the accounting quality (Firth et al., 2007). Further, former literature also described the divers' view towards the effect of outsider monitoring on performance of a firm. In an additional study, (Chen et al., 2006; Yuan et al., 2008) investigate that firm performance and mutual funds keep a positive relationship, which depicts that there is positive link performance of firm and mutual funds.

In Chinese context, current literature describes that corporate governance (board characteristics and ownership mechanism) certainly can impact or determine the investment efficiency of the firms. With precisely manners, current study also reckons that ownership concentration has negative association with investment efficiency in both private and state-owned firms, however, a positive effect pronounced in state-owned (SOEs) enterprises in comparison to private enterprises. However, Chen et al., (2015) found a negative influence is more pronounced in state-owned than in private enterprises. Conversely, Shin et al., (2019) reported positive relationship between them and stated that female directors on the board less likely overinvest. Furthermore, Mirza et al., (2019) and Ullah et al., (2020) investigated that female directors on the board recovers investment efficiency and reduces the agency problem in China. This study external investors (institutional and foreign investments etc.) and internal shareholders (managers and executives shareholders etc.) have negative impact on investment efficiency. Moreover, board characteristics or internal governance mechanisms (such as a size of the board of directors, CEO Duality and no. of independent directors) have a negative significant association with investment efficiency and a significant positive effect is pronounced more in state-owned firms. Current study also includes CFO gender variable to investigate CFO gender diversity association with investment efficiency. It finds a positive relation of investment efficiency and CFO gender and more pronounced in SOEs firms. CFO is a main entity in a company to take financial investment decisions and gender diversity is very hot topic these days to discuss, it seems to be worthwhile to research.

This study offers a contribution to the remaining literature in numerous manners. The author found only few researches in the line of current study corporate governance and investment efficiency, and the association of SOEs and CFO gender with investment efficiency. Such as, it estimates the internal (external) governance structure and investment efficiency in the context of Chinese economy. Investment efficiency in corporate governance has a great concern to publicly listed companies in China (Chen et al. 2012; 2015). Further, they describe in their research that the Chinese government has greater shares possession in the firms; the state involvement may deteriorate the firm investment efficiency. Further, the internal investors (i.e. institutional investors) investments in listed companies have been increasing and this progress of institutional investors gives an opportunity to discuss corporate investment efficiency. Present article contributes by enhancing academic literature and highlight the importance of female participation on the board. This empirical study outcome also gives direction to policy makers and regulators to assess and analysis the corporate governance ongoing reforms.

The remaining part of this research paper is ordered in different sections. Section two provides review of literature and hypotheses. Section three designates the research design of the study. Section four describes the empirical results and finding. While, last section discusses the conclusion.

2. Literature Review and Development of Hypotheses:

The Chinese listed companies have concentrated ownership mechanism because the majority of the shares hold by the government to control the listed firm. While, the private firms ownership structure are most likely less concentrated as compare to the state-owned (Chen et al. 2015).In line with existing literature, (Jensen & Meckling, 1976) two types of agency problems are: agency problem among minority shareholders and controlling shareholders and agency conflict between principle and agent (Porta et al. 2000). The top shareholders block exploits the minority shareholder interests due to a concentrated ownership structure and may cause agency conflict. Various authors (Wang & Ye, 2014; Cheung et al., 2009) state those minority shareholders in China face poor investment protection and a big problem for investors which are expropriation by governing shareholders. Top shareholders block confiscation conduct destroys investment efficiency by making decisions for their own interests which also causes to upset the firm sources of funds (Huyghebaert &

Wang, 2012). Therefore, the corporate governance with higher ownership concentration supplies controlling the shareholders opportunities to dominate the minority shareholders and hurt investment decisions (investment efficiency).

Existing empirical literature shows that those firms have strong political connections are possessed by controlling shareholders as compare to non-politicalise firms due to having less distress from market. Qian et al., (2010) also claim that the possession of controlling shareholders finds more in politicalise companies (firms having political connections) than non-politicalise companies due to facing less concern with capital market penalties.

Furthermore, firms controlled by the government have more political and social influence which may affect the financial decisions as compared to private firms (Chen et al., 2015). Conversely, this study investigates that SOEs (state-owned enterprises) may have positive (negative) associating with investment efficiency. Thus; present research study proposes the following hypotheses:

H1: No. of senior executives dependent directors and independent directors on the board have a positive association with investment efficiency.

H2: State-owned firms have positive (negative) association with investment efficiency.

H3: Investment efficiency pronounces more (less) in state-owned enterprises than private firms.

Managerial ownership of the corporate governance has varied existing research beliefs. The managerial shares in the firms may alleviate tunnelling actions by regulating shareholders (Gao & Kling, 2008). Another, contemporary research examines that manager shares in the firms (managerial shareholdings) is having a positive effect on the firm performance (Chen, 2001). In contrast, a study highlights that managerial ownership in the firms don't cause to increase firm performance (Gul & Zhao, 2000). Further, managerial shareholdings in state-owned firms have no positive association with firm's performance and good beneficial arrangement due to government intervention (Hu & Zhou, 2008). Chen et al. (2015) reports that in a recent decade, many private listed firms issued IPOs and managerial shareholdings in private listed firms in China are considerably higher as compare to state-owned firms. Meng et al., (2011) argue that agency conflict may resolve by regulating managerial ownership, isolation of control and ownership. Former studies explained the relation of institutional investors and corporate governance. In recent years, many financial institutions have been lunched in China. The financial institutions have corporate connections with their divers investments; however, they might be facing an agency problem (Aggarwal et al., 2011). Further, Aggarwal et al., (2014) reports that the financial institutions (mutual funds, etc.) are being treated as efficient regulators in the Chinese economy. Chen et al., (2015) claim that institutional investments hold a positive influence on efficiency of investment. In line with prior research, this research develops the following hypotheses:

H4: Managerial and executives shareholding have a positive relation with investment efficiency.

H5: Institutional ownerships have a positive association with investment efficiency.

This study also includes CFO gender variable to investigate the CFO gender association with investment efficiency. CFO is a main entity in a company to take financial investment decisions and gender diversity is a hot topic these days to discuss. Thus, it portrays a hypothesis:

H6: CFO gender has a positive relation with investment efficiency; however, investment efficiency pronounces more when CFO is a male.

3. RESEARCH DESIGN

This study testifies the hypotheses; it uses the model of Richardson (2006) to measure investment efficiency. Many former studies also employed the same model to measure investment efficiency such as Biddle et al., (2009); Chen et al., (2011) and Lara et al., (2015). Moreover, Chen et al. (2015) and Razzaq et al., (2016) also implemented Richardson (2006) work to evaluate efficiency of investment of Chinese listed companies.

3.1 Research Methodology and Empirical Models

This study follows the renowned method to calculate investment efficiency by Richardson (2006) to testify the hypotheses. Prior researchers also adopted the same method such Biddle at al., (2009) Lara et al. (2010), Chen et al. (2011), Razzaq et al. (2016). Similarly, Chen et al. (2015) also used the Richardson (2006) method (for detail the see appendix A) to measure the investment efficiency in the context of Chinese economy. By following these studies, this study assesses the corporate governance (ownership structure and board characteristics) relationship with investment efficiency. It used Investment efficiency (INEF) as a dependent variable in regression models. Current paper emphasis on corporate governance variables (dependent (independent) directors, senior executives, and institutional, managerial, supervisor ownership) effect on investment efficiency and formulate the following models.

$$INEF_{i,t} = \beta_0 FSIZE_{i,t} + \beta_1 LE_{i,t} + \beta_2 ROE_{i,t} + \beta_3 CEOD_{i,t} + \beta_3 B10_{i,t} + \beta_4 BSIZE_{i,t} + \beta_5 NSEX_{i,t} + \beta_6 NDIR_{i,t} + \beta_7 NIDIR_{i,t} + \beta_8 SOE_{i,t} + \beta_9 CFOG_{i,t} + \beta_{10} CFOG_{i,t} * INEF + \beta_{11} SOE * INEF_{i,t} + \Sigma YEAR + \Sigma INDUSTRY + E_{i,t} \text{....................}(1)$$

$$INEF_{i,t} = \beta_0 FSIZE_{i,t} + \beta_1 LE_{i,t} + \beta_2 ROE_{i,t} + \beta_3 CEOD_{i,t} + \beta_4 B10_{i,t} + \beta_5 TP1_{i,t} + \beta_6 INOWN_{i,t} + \beta_7 BSOWN_{i,t} + \beta_8 MOWN_{i,t} + \beta_9 EXOWN_{i,t} + \beta_{10} SOE_{i,t} + \beta_{11} CFOG_{i,t} + \beta_{12} SOE * INEF_{i,t} + \beta_{13} CFOG * INEF_{i,t} + \Sigma YEAR + \Sigma INDUSTRY + E_{i,t} \text{............................}(2)$$

Model (1) examines the association of investment efficiency (INEF) with board characteristics variables and model (2) expresses the relationship between investment efficiency (INEF) and ownership structure variables (for detail see appendix A). Together year and industry fixed effects are incorporated in regression models to control industry level heterogeneity and economic situations mutual to all industries for each year in the sample period.

3.2 Data and Sample Selection

To analyse investment efficiency and corporate governance (ownership mechanism and board characteristics), the collected from the CSMAR database, this is a renowned database for Chinese firms. The sample period of non-financial listed firms is from 2006 to 2013. All firms are listed in Shenzhen and Shanghai stock exchanges. It estimates unbalanced data of Chinese non-financial listed companies (from twenty different industries).Further, this study also applies VIF test to sense the multicollinearity in the models, VIF average value is less than 10, which portrays the absence of multicollinearity in the given models.

Table 01: Variable Explanation	
Variables	**Explanation**
INEF	Investment efficiency which is calculated by Richardson (2006)
FSIZE	Firm size, Natural log of the total assets.
CEOD	CEO duality variable, 1 if CEO also a chairman of the company and 0 otherwise.
TP1	Top one shareholder in the firm.
LEV	Leverage of firms obtained as total liability divided by total assets.
B10	Dummy variable, 1 if firm financial statements audited by a Big 10 audit firms from China otherwise 0.
ROE	Return on equity.
NSEX	Number of executive members on the board.
NDDIR	Number of dependent directors on the board.
NIDIR	Number of independent directors on the boards.
INOWN	Institutes (all financial institutes, banks, insurance companies
MOWN	Managerial (families, spouse, children etc.) ownership, manager shares in the company.
EXOWN	Executives ownership, executive shares in the company.
BSIZE	board size, total number of members on the board
SOE	Dummy variable of state-owned firms (1 for company state-owned and 0 for otherwise)
CFOG	Dummy variables of CFO (gender: Male CFO 1 and Female CFO 0).

4. Empirical Findings and Results

4.1 Descriptive Statistics

Table 02 shows descriptive statistics of all variables (dependent, independent and control) used in this paper. The TP1 (top one or largest) shareholder has 35.1% ownership in a sample; Chen et al. (2015) also found 35.9% largest shareholder ownership in their sample. The board chairman holds the position of CEO in 19.5% in the firms. Although, the financial statements of the firms audited by Big10 (B10) in 36%. The number of senior executive, dependent directors and independent directors are 6.2%, 9.1% and 3.2% on the boards in the firms, respectively. Institutional, managerial and executives are holding (2.09e-08, 0.0798 and 0.0334) ownership in the sampled firms. The sate-owned (SOE) firms 50.4% and 93.9 are male CFO (CFOG) and 6.1% female CFO in the firms.

Table 02: Descriptive Table					
Variables	**Mean**	**Median**	**Std.**	**Min.**	**Max.**
INEF	-0.0003	-0.0046	0.0942	-4.4672	1.7141
FSIZE	21.617	21.526	1.2302	12.3142	26.8954
CEOD	0.1954	0	0.3965	0	1
TP1	0.3513	0.3205	0.1566	0.0362	0.8941
LEV	0.5683	0.4964	4.1702	-0.08719	877.256
B10	0.3606	0	0.4802	0	1
ROE	0.0553	0.0402	3.4304	-72.146	713.172
NSEX	6.2227	6	2.4632	1	22
INOWN	2.09e-08	7.57e-09	4.02e-08	0	6.13e-07
NDDIR	9.0798	9	1.9203	4	18
NIDIR	3.2108	3	0.7773	0	6
MOWN	0.0736	.00008	0.1598	0	.75
EXOWN	0.0334	.03339	09652	0	6.07E+08
BSIZE	11.219	10	2.6935	5	29
SOE	0.5045	1	0.4999	0	1
CFOG	0.9392	1	0.2391	0	1

4.2 Regression Analysis

This paper estimates corporate governance and ownership structure impact on investment efficiency separately. Model-1 and Model-2 regressions results are presented in the Table 3. Table 3 shows that B10 (Big10) variable is positively significant in both models. These results represent that the Chinese firms financial statements audited by big 10 Chinese auditing firms, it means mostly firms financial reporting quality is very good. The coefficient of NSEX (no. of senior executives) and CEOD (CEO duality) variables are significantly positive. These results are representing that the board characteristics such as no. of senior executives and CEO also hold chairman position on the board increases the investment efficiency by making good investment decisions. These results also corroborate the hypothesis (H1) of this paper. Table 3 Model-2 shows that institutional ownership (INOWN) is positively significant and executives ownership (EXOWN) is negatively significant, and indicating that institutional ownership in the firm improves investment efficiency and executives ownership in the firm decreases the investment efficiency. These findings are corroborating hypothesis (H5) and reject the hypothesis (H4). Unfortunately, it does not find managerial ownership (MOWN) and state-owned firms (SOE) variable significant in Model-2 and Model-1, respectively. Conversely, this table results indicate that state-owned (SOE) interaction term (SOE*INEF) with investment efficiency (INEF) found positively significant, which is representing that investment efficiency pronounced more in stated-owned firms than private. In China state-owned firms are having more funds and politicised the projects that’s why state-owned firms are improving investment their financial decisions.

Table 3: Ownership Structure and Investment Efficiency Regression Results.				
Variables	**Model-1**		**Model-2**	
	Coeff	p-value	Coeff	p-value
FS	-0.0004	0.122	-0.0003*	0.081
LE	-0.0003***	0	-0.0003***	0
ROE	-8.03E-06	0.884	-4.71E-06	0.932
BIG10	0.0013***	0.006	0.0011***	0.013
CEOD	-0.0026***	0		
BSIZE	-0.0002	0.168		
NSEX	0.0003***	0.012		
NDIR	-0.0001	0.69		
NIDIR	-0.0005	0.349		
TP1			2.45E-06	0.999
INOWN			5.24E-05***	0.012
MOWN			-6.73E-13	0.791
EXOWN			-1.98E-11***	0.004
SOE	0.0006	0.201	0.00077*	0.098
CFOG	-0.0008**	0.05	-0.0002	0.717
SOE*INEF	0.9336***	0	0.3015***	0
CFOG*INEF	0.3095***	0	0.9357***	0
Intercept	0.01304	0.016	1.1545	0.012
Year and Industry fixed Effect	Yes		Yes	
R-Square	0.8238		.8264	
Prob > F	0000		0000	
These symbols (*, **, ***) represent the significant levels at the 0.1, 0.05, and 0.01, respectively. For detail see the appendix B.				

Furthermore, The CFO gender (CFOG) variable is insignificant in Model-2 and negative significant at 10% level in Model-1, which shows that CFO gender variable itself not influence significantly on investment efficiency. However, its infarction term (CFOG*INEF) with investment efficiency is highly significant in both models. These results depicts that investment efficiency pronounced more when CFO is a male in the firm, it also corroborates this study hypothesis (H6). These results are indicating that state-owned Chinese firms improving investment efficiency and the firm improves investment efficiency under the male CFO as compare with his counterparts. In a robust test got the same results that investment efficiency investment efficiency improves more in state-owned firms and male CFO (Chief Financial Officer), which is consistent with the findings in the Table 3.

Moderately, this study results are consistent with followed paper (Chen et al., 2015). Chen found that ownership concentration and investment efficiency have inversely proportional relationship, particularly in state-owned firms. Unfortunately, it did not find a significant negative relationship between managerial ownership (MOWN); however, it finds a negative relationship between them which shows the inversely proportional relationship between ownership concentration and investment efficiency. This paper finds a significant positive association with executives ownership (EXOWN) and institutional ownership (INOWN), it consistent with prior research that executives and institutional ownership improves the investment efficiency in the firm (Shine et al., 2019; Mirza et al. 2019; and Ullah et al., 2020). Further, it investigates that investment efficiency improves more in state-owned (SEOs) firms and the CFO male entity in the firm increases more investment efficiency as compare to their counterparts. In additional, corporate governance variable CEO duality (CEOD) is highly negative significant, it means, the board chairman holds the position of CEO causes to decrease the investment efficiency in the firms. Correspondingly, CFO gender variable itself has a significant negative relationship with investment efficiency which shows that it causes to decrease the investment efficiency. Finally, some variables related corporate structure play no role in influencing on investment efficiency. Whether, no. of senior executive on the board plays an important role to alleviate investment efficiency.

5. Conclusion

In corporate finance area, investment efficiency has been getting popularity in research since last decade. It also became a typical topic to research with corporate governance and ownership structure. Specially, investment efficiency and ownership mechanism in China becomes a very researchable topic because majority firms in China are stated-owned (SOEs) (controlled by government) and SOEs firms in China have more funds resources due to political connections. This paper aims to investigate the corporate mechanism, ownership structure, state-owned (SOEs) and CEO gender association with investment efficiency. In additional, it also hypotheses that investment efficiency pronounced more in state-owned firms and more pronounced in the firm under male CFO financial decisions. Paper empirical results depicts that governance structure and ownership structure in Chinese listed firms play a seminal role in improvement of investment efficiency. Similarly, this paper results are indicating that managerial investment in the firms lowers investment efficiency. Executives and institutional ownership in the firm improve investment efficiency. More, investment efficiency is higher when firms financial statements audited by big 10 Chinese auditing firms. Further, investment efficiency is higher when no. of senior executive members on the board increases. In additional, SOEs firms are having higher investment efficiency as compare to private firms. Precisely manners, investment efficiency is higher when CFO is male in the Chinese firm.

This study provides implications for academic researchers, policy makers and specialists. This study will highlight the importance of investment efficiency with various variables to do research in the future by considering corporate governance, ownership mechanism and gender diversity (CFO gender). Particularly, this study gives important recommendations to invest in firms by considering corporate governance and ownership structure variables of this study. Furthermore, for policy makers, corporate governance improvement helps to support the managerial interests and institutional investments is required to enhance investment efficiency. Finally, this study to contribute to the existing literature by having limited resources and some unexplored aspects of this study which may be make more distinguish, however, it procrastinated them for future.

Refrences

Aggarwal, R., Erel, I., Ferreira, M. and Matos, P. (2011). Does governance travel around the world? Evidence from institutional investors. General Information, 100(1), 154-181.

Aggarwal, R., Hu, M. and Yang, J. (2015). Fraud, Market Reaction, and Role of Institutional Investors in Chinese Listed Firms. *Journal of Portfolio Management*, 41(5), 92-109.

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

Chen, G., Firth, M., Gao, D.N. and Rui, O.M. (2006). Ownership Structure, Corporate Governance, and Fraud: Evidence from China. *Journal of Corporate Finance*, 12, 424-448.

Chen, J. (2001). Ownership Structure as Corporate Governance Mechanism: Evidence from Chinese Listed Companies. *Economic of Planning*, 34, 53-72.

Chen, J.J. and Zhang, H. (2012). The Impact of the Corporate Governance Code on Earnings Management: Evidence from Chinese Listed Companies. *European Financial Management*, 20, 592-632.

Chen, S., Sun, Z., Tang, S. and Wu, D. (2011). Government Intervention and Investment Efficiency: Evidence from China. *Journal of Corporate Finance*, 17, 259-271.

Cheung, Y.L., Jing, L., Lu, T., Rau, P.R. and Stouraitis, A. (2009). Tunnelling and Propping up: An Analysis of Related Party Transactions by Chinese Listed Companies. *Pacific-Basin Finance Journal*, 17, 372-393.

Denis, Diane K. and McConnell, John J. International Corporate Governance (January 2003). ECGI - Finance Working Paper No. 05/2003; and Tuck-JQFA Contemporary Corporate Governance Issues II Conference

Ding, Y., Zhang, H. and Zhang, J. (2007). Private vs. State Ownership and Earnings Management: Evidence from Chinese Listed Companies. *Corporate Governance: An International Review*, 15, 223-238.

Firth, M., Fung, P.M. and Rui, O.M. (2007). Ownership, Two-tier Board Structure, and the Informativeness of Earnings: Evidence from China. *Journal of Accounting and Public Policy*, 26, 463-496.

Garcia Lara, J. M., B. Garcia Osma, and F. Penalva, (2015). Conditional conservatism and firm investment efficiency, *Working paper*.

Gul F.A., and R. Zhao, (2000). Corporate governance and performance in Chinese listed companies, Working Paper, City University of Hong Kong.

Hu, Y. and Zhou, X. (2008). The Performance Effect of Managerial Ownership: Evidence from China. *Journal of Banking & Finance*, 32, 2099-2110.

Huang, J.J., Shen, Y. and Sun, Q. (2011). Non-negotiable Shares, Controlling Shareholders, and Dividend Payments in China. *Journal of Corporate Finance*, 17, 122-133.

Huyghebaert, N., and Wang, L. (2012). Expropriation of Minority Investors in Chinese Listed Firms: the Role of Internal and External Corporate Governance Mechanisms. *Corporate Governance: An International Review*, 20(3), 308-332.

Jensen, M. C., and Meckling, W.H. (1976). Theory of the Firm: Managerial Behaviour, Agency Costs and Ownership Structure. *Journal of Financial Economics*, 3, 305-360.

Kato, T., and Long, C. (2006). CEO Turnover, Firm Performance, and Enterprise Reform in China: Evidence from Micro Data. *Journal of Comparative Economics*, 34, 796–817.

Kling, Gerhard and Gao, Lei (2008). Corporate governance and tunnelling: empirical evidence from China. *Pacific-Basin Finance Journal*, 16(5), 591-605. doi: 10.1016/j.pacfin.2007.09.001).

La Porta, R., Lopez-de-Silanes, F., Shleifer, A. and Vishny, R. (2000). Investor Protection and Corporate Governance. *Journal of Financial Economics*, 58, 3-27.

Li, D., Moshirian, F., Nguyen, P. and Tan, L.W. (2007). Managerial Ownership and Firm Performance: Evidence from China's Privatizations. *Research in International Business and Finance*, 21, 396-413.

Meng, R., Ning, X., Zhou, X. and Zhu, H. (2011). Do ESOPs Enhance Firm Performance? Evidence from China's Reform Experiment. *Journal of Banking and Finance*, 35, 1541-1551.

Mirza, S. S., Majeed, M. A., & Ahsan, T. (2020).Board gender diversity, competitive pressure and investment efficiency in Chinese private firms. *Eurasian Business Review*, *10*(3), 417-440.

Naiwei Chen, Hao-Chang Sung and Jingjing Yang. Ownership structure, corporate governance and investment efficiency of Chinese listed firms. *Pacific Accounting Review*, https://doi.org/10.1108/PAR-12-2015-0046

Naveed Razzaq, Zhang Rui and Zou Donghua (2016). Accounting Conservatism Alleviates Firm's Investment Efficiency: An Evidence from China. *International Journal of Business and Economics Research*. 5(4), 85-94. doi: 10.11648/j.ijber.20160504.12

Qian, M., Pan, H., & Yeung, B. Y. (2011, November). Expropriation of minority shareholders in politically connected firms. In *Finance and Corporate Governance Conference*.

Richardson, S. (2006). Over-investment of Free Cash Flow. *Review of Accounting Studies*, 11, 159-189.

Shin, Y. Z., Chang, J. Y., Jeon, K., & Kim, H. (2019). Female directors on the board and investment efficiency: evidence from Korea. *Asian Business & Management*, 1-42.

Ullah, I., Zeb, A., Khan, M. A., & Xiao, W. (2020). Board diversity and investment efficiency: evidence from China. *Corporate Governance: The International Journal of Business in Society*.

Wang, J. and Ye, K. (2014). Managerial Agency Costs of Socialistic Internal Capital Markets: Empirical Evidence from China". *Journal of International Financial Management & Accounting*, 25, 1-37.

Yu, W. and Zheng, Y. (2014) Government Regulation, Corporate Board, and Firm Value: Evidence from China. *Journal of International Financial Management& Accounting*, 25, 182-208.

Yuan, R., Xiao, J.Z. and Zou, H. (2008). Mutual Funds' Ownership and Firm Performance: Evidence from China. *Journal of Banking and Finance*, 32, 1552-1565.

Shleifer, Andrei, and Robert W. Vishny."A survey of corporate governance." *The journal of finance* 52, no. 2 (1997): 737-783.