



Research on the Employment Effect of Quality Improvement of Government-Business Relationship

—Empirical Evidence From A-share Listed Companies in China

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Abstract. The objective of this paper is to analyze the impact of the quality improvement of government-business relationships on enterprise employment scale and conduct an empirical examination. By utilizing the 2012-2020 regional "close" and "unsullied" index for government-business relationships to match the data from China's A-share listed companies, the research reveals that the quality improvement of government-business relationships significantly stimulates local enterprises' employment expansion. Even after conducting a series of robustness tests and considering potential endogenous problems, the conclusion remains valid.

Keywords: government-business relationships; employment; corruption

1 INTRODUCTION

In recent years, the international economic situation has become increasingly intricate and perplexing. The downward pressure on China's economy has intensified rather than abated, particularly due to the impact of the novel epidemic. Enterprises are facing challenges in production and operation, while the employment outlook remains unpromising. According to data disclosed in the 2022 government work report, it is projected that 12.69 million new urban jobs will be created in 2021; however, this number still falls short of the pre-2019 level. Urgent action is required to address these employment concerns by actively expanding job opportunities through governmental initiatives and providing effective assistance to enterprises in resuming operations, stabilizing employment rates, enhancing overall employment prospects, and strengthening employment services.

Theoretically, the traditional government-led relationship between government and business will bring high political costs to enterprises and will lead to low production efficiency of the entire industry(Giannetti et al.,2021)^[1].Furthermore Cali and Sen

(2011)^[2] found that the development of the relationship between government and business can promote regional economic growth. The prevailing belief is that macroeconomic growth has the potential to stimulate employment expansion, while at the micro level, enhancing the quality of government-business relationships can effectively mitigate institutional transaction costs for enterprises and thereby enhance their production efficiency(Wang & Zhong,2022)^[3].

Compared to the existing literature, this paper offers potential marginal contributions in the following aspects: Firstly, by utilizing the affinity index of the new government-business relationship at the provincial level, this study quantitatively assesses its impact on employment, thereby enhancing our understanding of its economic consequences. Secondly, employing micro-data analysis, this research identifies the mechanisms through which the government-business relationship promotes enterprise employment growth. This comprehensive exploration contributes significantly to our understanding of the new government-business relationship and its role in alleviating social employment pressure.

2 DATA AND METHODOLOGY

2.1 Data sources

The core explanatory variable data utilized in this paper are sourced from the research group on the Measurement and Evaluation of government-Business Relations, funded by the National Social Science Foundation of Wuhan University of Technology (18BJL048). The explained variables and enterprise-level control variables are obtained from the CSMAR database, while the provincial-level control variables are derived from the National Statistical Yearbook.

2.2 Data description

2.2.1 Dependent variable

Based on the practice of Xiong et al. (2022)^[4], this paper uses the numerical value of the annual number of employees to measure the scale of employment.

2.2.2 Independent variable

This paper utilizes the "2018 Ranking of Government-Business Relations in Chinese Cities"^[5] published by the National Development Institute of the People's Congress as a reference, and constructs a comprehensive index for evaluating pro-clean government-business relations based on two dimensions: proximity and integrity. The sub-indices encompass aspects such as the supportive environment provided by the government to enterprises, corporate social responsibility, governmental integrity and transparency, as well as corporate innocence and integrity. Finally, an entropy weight method is employed to calculate the overall index.

2.2.3 Control variables

Referring to existing studies, this paper controls variables related to the financial characteristics and nature of enterprises. It includes enterprise Size (Size), corporate leverage (Lev), return on total assets (Roa), number of directors (Board), proportion of independent directors (Indep), Dual situations (Dual), ownership concentration (Top), enterprise age (Age) and ownership nature (Soe). Based on the study of Zhong & Zhang (2021)^[6], this paper also controls per capita gross domestic product (PGDP), urbanization rate (Town), industrial structure (Th), wage level (Wage), education level (Edu) and fixed asset investment level (Fai). At the same time, the Year fixed effect (Year) and industry fixed effect (Ind) are controlled. The specific variables are described in Table 1.

Table 1. Variable description

Variable	Description
Emp	Number of Enterprise Employment
Gbr	Government-business relationships
Size	Enterprise Size
Lev	Corporate Leverage
Roa	Return on total assets
Board	Number of directors
Indep	Proportion of independent directors
Dual	Whether the chairman and the general manager are the same person
Top	The sum of the top 10 shareholders
Age	Enterprise age
Soe	Ownership nature
PGDP	GDP per capita
Town	Urbanization rate
Th	The proportion of tertiary industry GDP
Wage	Average wages of non-private urban units
Edu	Years of education per capita
Fai	Proportion of Investment in fixed assets

2.3 Modeling Specification

In order to test the impact of the quality improvement of government-business relationship on the employment scale of enterprises, this paper uses 2012-2020 listed enterprise-level data to match the provincial new government-business relationship “close” and “unsullied” index to build panel data to establish a fixed-effect model. The specific model is set as follows:

$$Emp_{it} = \alpha + \beta Gbr_{it} + \gamma Controls_{it} + \mu_j + \varphi_t + \varepsilon_{it} \quad (1)$$

The subscript *i* in the above equation (1) represents the enterprise and *t* represents the year. The explained variable *Emp* is the employment scale of the enterprise, *Gbr* is the quality of the government-business relationship in the province where the enterprise

is located, and Controls are the control variables, including variables at the enterprise level and the province level. μ_j is the industry fixed effect, φ_t is the time fixed effect, ε_{it} is the random disturbance term. If β is significantly positive, it indicates that the improvement of the quality of government-business relationship can promote the increase of enterprise employment scale.

3 EMPIRICAL RESULTS

3.1 The basic discovery

Table 2 presents the comprehensive test results of the impact of government-business relationship quality improvement on enterprise employment scale. Specifically, (1) displays the regression outcome with only core explanatory variables and control variables included, indicating a significant positive effect of government-business relationship on enterprise employment scale at a 1% confidence level. (2)-(3), in turn, exhibit regression outcomes with time fixed effects and industry fixed effects added respectively. The coefficient sign and significance of the core explanatory variable Gbr remain unchanged, providing preliminary evidence that enhancing government-business relationship quality is conducive to expanding enterprise employment scale.

Table 2. Impact of quality improvement of government-business relationships on enterprise employment scale

Variables	(1) Emp	(2) Emp	(3) Emp
Gbr	0.351*** (8.909)	0.403*** (9.897)	0.267*** (7.544)
Controls	Yes	Yes	Yes
Year FE	No	Yes	Yes
Ind FE	No	No	Yes
Constant	-3.383*** (-7.840)	-5.797*** (-7.763)	-5.929*** (-8.801)
Obs.	20922	20922	20922
Adj. R2	0.600	0.601	0.704

T-statistics are provided in parentheses with ***, ** and * indicating significance at 1%, 5%, and 10% levels, respectively.

3.2 Robustness tests

In order to validate the robustness of the baseline regression results, this paper employs the following methodologies: (1) Substituting the explanatory variables. Following Wang et al. (2019)[7], we replace the government-business relationship in the marketization index with the government-market relationship and re-estimate its quality. (2) Excluding samples from Beijing, Shanghai, Tianjin, and Chongqing due to their unique status as central municipalities directly under the central government, where a stronger

government-business relationship often leads to more severe reverse causality issues.(3)Exclusion of enterprises whose office location does not match their registered place. When an enterprise relocates its office address outside of its provincial area, it may be influenced by the government-business relationship in other provinces. To eliminate this potential impact, we remove inconsistent samples and re-estimate accordingly. (4) Lagging explanatory variables. Considering that all variables are recorded at year-end, the influence of government-business relationship quality measured at year-end on enterprise employment scale may diminish over time. To mitigate this concern, Gbr is selected for lagged estimation purposes. The robustness test results are presented in Table 3 where columns (1)-(4) correspond to each of these four robustness testing schemes respectively. The findings indicate that core explanatory variables' coefficients remain significantly positive at least at a 5% confidence level across all scenarios tested above; thus confirming that our key conclusion regarding improved government-business relationship enhancing enterprise employment scale remains unchanged and aligns with benchmark regression results.

Table 3. Result of Robustness tests

Variables	(1) Emp	(2) Emp	(3) Emp	(4) Emp
government-market relationship	0.035*** (7.774)			
Gbr		0.123** (2.458)	0.244*** (6.740)	
L.Gbr				0.243*** (6.207)
Controls	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Ind FE	Yes	Yes	Yes	Yes
Constant	-6.282*** (-9.254)	-3.571*** (-3.701)	-4.552*** (-6.655)	-5.414*** (-7.376)
Obs.	20922	17402	20119	17071
Adj. R2	0.705	0.705	0.709	0.705

T-statistics are provided in parentheses with ***, ** and * indicating significance at 1%, 5%, and 10% levels, respectively.

3.3 Endogeneity concerns

This paper examines the impact of the quality of government-business relations at the regional level on the employment scale of micro-enterprises. Logically, there is no apparent issue of reverse causality, meaning that the employment scale of individual enterprises does not influence the overall improvement in regional government-business relations. However, empirical research in this paper still faces endogenous challenges in two aspects: (1) The employment scale of enterprises may be influenced by unobservable factors, i.e., missing variables. For instance, proactive employment policies

may affect both enterprise employment scale and improvements in government-business relationship quality, leading to biased estimation results. (2) Another perspective on employment scale reflects enterprises' social responsibility undertakings, and their active commitment to social responsibility also contributes to fostering a new type of government-business relationship(Yang et al.,2021)[8].

To address the endogenous issues mentioned above, this paper employs anti-corruption intensity as an instrumental variable to measure the quality of government-business relations at a regional level. On one hand, anti-corruption efforts significantly increase the cost for government officials to obtain private benefits through ambiguous government-business relationships, thereby enhancing the "purity" of such relationships (Tian & Wang, 2020)[9], which satisfies the correlation between instrumental variables and endogenous explanatory variables. On the other hand, anti-corruption measures do not directly impact enterprise labor demand and satisfy the externality of instrumental variables. Therefore, based on the research conducted by Wang et al. (2018)[10], this paper employs the keyword "corruption" in Chinese provincial and local party newspapers as a measure of the government's anti-corruption efforts and conducts instrumental variable regression analysis. The results of endogeneity tests are presented in Table 4 below. The first stage regression results indicate a significant positive correlation between anti-corruption initiatives and the quality of government-business relations, suggesting that regions that prioritize anti-corruption tend to have better government-business relations, aligning with theoretical expectations. Additionally, the F statistic from the first stage regression demonstrates no weak instrumental variable problem. Furthermore, after accounting for endogeneity through instrumental variables, the second stage regression results still show a significantly positive coefficient for Gbr at a 1% confidence level. This confirms that enhancing the quality of government-business relationships promotes an increase in enterprise employment scale even after addressing certain levels of endogeneity.

Table 4. Result of instrumental variable and two-stage least square approach of government-business relationships on enterprise employment scale

Variables	(1)	(2)
	First stage Gbr	Second stage Emp
Gbr		3.237*** (4.683)
Anti-corruption	0.001*** (9.298)	
Controls	Yes	Yes
Year FE	Yes	Yes
Ind FE	Yes	Yes
Constant	-0.039 (-0.242)	-6.531*** (-8.069)
F-statistic	454.32	
Obs.	20922	20922

Adj. R2

0.567

0.599

T-statistics are provided in parentheses with ***, ** and * indicating significance at 1%, 5%, and 10% levels, respectively.

4 CONCLUSIONS

By utilizing the 2012-2020 regional "close" and "unsullied" index for government-business relationships to match the data from China's A-share listed companies, the research reveals that the quality improvement of government-business relationships significantly stimulates local enterprises' employment expansion. Even after conducting a series of robustness tests and considering potential endogenous problems, the conclusion remains valid.

REFERENCES

1. M.Giannetti,G.Liao ,J.You,X.Yu . (2021)The externalities of corruption: Evidence from entrepreneurial firms in China[J].*Review of Finance*, 3:629-667.
2. Cali M, Sen K. (2011)Do Effective State Business Relations Matter for Economic Growth? Evidence From Indian States[J]. *World Development*, 39:1542-1557.
3. Wang, P., Zhong, M.(2022)The Impact of Business Environment Optimization on TFP[J].*Statistics & Decision*,38:165-169.
4. Xiong, J., Tan, H., Sun, X.(2022)Research on the Employment Effect of China's Environmental Regulation——Based on the enterprise level[J].*Price:Theory & Practice*,459:93-96+205.
5. Nie, H., Han, D., Ma, L.(2018)Ranking of Government-Business Relations in Chinese Cities (2017) [R]. Beijing: National School of Development and Strategy, Renmin University of China.
6. Zhong, J., Zhang, Q.(2022)Employment Effect of OFDI and IFDI in China[J].*Review of Economic and Management*,37:63-76.
7. Wang, X., Fan, G., Hu, L. (2019)China's Marketization Index by Province 2018[M]. Beijing: Social Sciences Academic Press.
8. Yang, L., Zhang, J., Shen, L.(2021)Quality Measurement and Evaluation of the Political-Business Relationship Based on the "Pro-Qing Index"[J].*Journal of Wuhan University of Technology(Social science edition)*,34:51-60.
9. Tian, L., Wang, K.(2020)The Positive Externalities of Anti-corruption Policies and Corporate Innovation Behaviors[J].*Nankai Business Review*,23:121-131+154.
10. Wang, F., Yao, S., Qu, G.(2018) Sustainable and Steady Economic Growth under Anticorruption in China[J].*Economic Research Journal*,53:65-80.

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