

Does Administrative Reform Improve the Business Environment in China? A Mixed-Method Analysis Based on Administrative Burden Theory*

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Abstract

Does administrative reform boost the favorable business environment? What is the mechanism underlying such reform? This study explores the relationship between administrative reform and the business environment in China via a mixed-method approach. This paper extends administrative burden theory to government-company interactions and then proposes a framework that bridges administrative reform and the business environment. Based on firm-level survey data and case data, this quantitative analysis confirms that administrative reform can significantly boost the favorable business environment and that administrative burden is a mediating variable during this process. The qualitative comparative analysis contends that there are three different configurations that can boost the favorable business environment: collaborative governance, government-driven, and enterprise-driven configurations. Theoretically, this paper extends the administrative burden theory, which brings companies into this theory as new actors. We also provide reform advice for practitioners.

Keywords: administrative reform, administrative burden, favorable business environment, mixed method analysis, government-business interaction, China.

1. Introduction

Does administrative reform boost the favorable business environment? This question is theoretically and practically important for two reasons. Theoretically, understanding government reform is an important goal of public administration research. Practically, GDP is deeply ingrained in national and local policymaking (Heijster, 2020), and a favorable business environment is a significant factor in economic development (Luo and Zhao, 2013). The answers to this question reveal in which directions government reform should move and what actions should be taken to meet reform goals. Moreover, a favorable business environment is an essential factor in worldwide economic completion, and the construction and maintenance of a high-quality market atmosphere are essential for long-term development.

The current literature has explored this question from the perspective of company lifecycle, government capacity, foreign direct investment, entrepreneurs' decision-making, and formal institutions. Some studies focus on the company lifecycle and argue that the government's regulation can significantly influence firms' life and business environment (Frambach, Fiss and Ingenbleek, 2016). Otherwise, some studies have found that government ability and capacity remarkably influence foreign direct investment, and the favorable business environment is the key mediating variable in this relationship (Mawejje and Sebudde, 2019). In addition, some articles contend that a favorable business environment must have formal institutions to protect private properties (Sobel, 2008; Xu, 2011). Government reform should construct formal institutions and reduce officials' personal linkage with entrepreneurs.

However, the existing research on this topic has three general limitations. First, government-enterprise interactions have yet to be adequately explored and explained. Given that the interaction and linkage with the government are essential factors for any company, the administrative burden theory offers us a unique theoretical perspective to tackle this research question. Over the past five years, governments and scholars have developed a great interest in administrative burden (Petersen, Hansen and Houlberg, 2023; Fuchong, 2022; Baekgaard, Moynihan and Thomsen, 2021). The administrative burden is the key element in the interaction of citizens that consists of learning cost, compliance cost, and psychological cost (Moynihan, Herd and Harvey, 2015). Second, most of the extant literature provides only either quantitative evidence or qualitative evidence. For example, based on firm-level survey data, some research finds that government performance can significantly boost company's assessment of the favorable business environment (Wang and Yu, 2017). Some research has focused on several European countries, such as Germany and France (Wagner, 2017; Pereira and Temouri, 2018). Quantitative methods or case-study methods have strengths and weaknesses, and mixed-method research may be an option for future research. Third, most of the existing literature focuses on government reform and business quality in Western developed countries (Profiroiu and Negoită, 2022). For instance, the SME actions in the European Union are far-reaching government reforms both theoretically and empirically (Asaftei and Parmeter, 2010). Therefore, we require additional empirical data to extend the administrative burden theory in developing countries such as China.

This article attempts to address this issue by examining whether administrative reform can boost the favorable business environment, with the guidance of administrative burden theory. China's administrative governance reform aims to upgrade the economic structure (Yang, 2022). Thus, it offers researchers the opportunity to analyze the mechanism between the administrative reform and the favorable business environment. This paper develops a theoretical framework with the administrative burden as a mediator variable, that links administrative reform and the favorable business environment. We employ empirical data, both firm survey data and cases of China's provinces, to analyze this question with a mixed-method approach. Consistent with our theoretical expectations, the quantitative regression confirms that administrative reform can significantly boost a favorable business environment, with the administrative burden as a mediator variable. The underlying mechanism is that administrative reform reduces administrative burden and then boosts enterprises' favorable business environment assessment. Furthermore, the qualitative comparative analysis shows that there are three combinations of conditions that can explain high-quality favorable business environment assessment: the collaborative governance pathway, the government-driven pathway, and the enterprise-driven pathway. This research proposes the administrative burden reduction mechanism and expands the administrative burden theory based on empirical evidence from developing countries. Furthermore, this paper addresses this research question with quantitative and qualitative methods, and we offer a new methodological perspective for future research.

The rest of this article is organized as follows. First, we review the literature on administrative reform and the favorable business environment from government-enterprise interactions and propose a framework. Second, we provide empirical data based on China's administrative reform. Third, we present empirical results both quantitatively and qualitatively. The final part of this paper presents the concluding remarks.

2. Conceptual framework and literature review

2.1. Government-business interaction: administrative burden

The administrative burden is the key element in the interactions of the state with the citizens. Building on prior work (Moynihan, Herd and Harvey, 2015) we define the administrative burden as learning cost, compliance cost, and psychological cost when enterprises apply for licenses or certificates from the government. The administrative burden has been defined as an individual's troubled experience with policy implementation (Ntaliani and Costopoulou, 2017), and the learning cost, compliance cost, and psychological cost are the main parts of the administrative burden (Moynihan, Herd and Harvey, 2015). Existing literature on administration science tries to unpack the mechanism of administrative burden and government performance, and most of them contend that reducing administrative burden can improve governmental service quality (Linos and Riesch, 2019; Doughty and Baehler, 2020; Linos, Quan and Kirkman, 2020; Stanica *et al.*, 2022). This research focuses on the favorable business environment; thus, we revise the administrative burden as

learning cost, compliance cost, and psychological cost when enterprises apply for licenses or certificates from the government.

What is the effect of administrative burden? We think that the administrative burden can influence enterprises both positively and negatively. On the one hand, administrative burden can have a positive effect, because it can block some applicants who are not qualified (Fox, Stazyk and Feng, 2020). Actually, administrative burden and paperwork created during the interaction are scan processes because these unqualified applicants cannot provide the required paperwork. From this perspective, administrative burden can have a positive effect. On the other hand, if there is too much administrative burden, then companies and citizens must pay additional ‘costs’ during the procedures. From this point of view, administrative burden has a negative effect.

Moreover, administrative burden and red tape have some common points, but also some differences on the other hand. Table 1 contains a comparative analysis of administrative burden and red tape.

Table 1: Comparative analysis of administrative burden and red tape

	Administrative burden	Red tape
Components	Learning cost, compliance cost, psychological cost	Unnecessary rules and procedures focused on government officials
Affected group	Citizens, enterprises	Government officials, citizens, enterprises
Potential consequence	Positive or negative effect	Negative effect
Can be reduced?	Yes	Yes
Can be shifted?	Yes	No

Source: Authors' own contribution

Administrative burden consists of learning cost, compliance cost, and psychological cost. The red tape is an ineffective procedure and step within the administrative system (Ntaliani and Costopoulou, 2018; Bozeman and Youtie, 2020; Kaufmann and Haans, 2021). Administrative burden exists during the interaction between citizens and the government; thus, it affects citizens rather than government officials (Kaufmann, Ingrams and Jacobs, 2021; Migchelbrink and Van de Walle, 2020). In contrast, the red tape is within administrative procedures and directly affects government officials, and red tape has a negative impact on citizens and enterprises as well (Campbell, 2020). As for the potential consequence, the administrative burden has either a positive or negative effect. When administrative burden blocks some unqualified applicants with paperwork, it demonstrates some positive effects. Red tape is related to lower procedural satisfaction (Keiser and Miller, 2020; Madsen and Mikkelsen, 2022). Administrative burden and red tape can be reduced (Barnes, 2021), but only the administrative burden can be shifted between citizens and the government.

2.2. The characteristics of China's administrative reform

China's administrative reform, called the 'Fang Guan Fu' reform, offers a unique context to discover these questions. The literature on China's administration has offered many insightful findings, such as the incremental adaptation model (Jing, Cui and Li, 2015). Government action and policy could influence business entities significantly. China's administration has gone into a new stage since 2013, with the central government announcing that China has started a comprehensive and profound reform. One of the main aims is to boost the quality of the environment, and there are three layers of this Chinese administrative reform.

The first layer involves simplifying administrative processes and procedures while empowering enterprises. In fact, inflated and overly complex administrative processes and procedures have been a critical problem for the government. Therefore, when companies apply for licenses or approval, they must experience a great deal of bureaucratic procedures. These experiences will undoubtedly influence enterprises' favorable business environment. Therefore, the foremost action of 'Fang Guan Fu' (administrative) reform is to simplify bureaucratic procedures and empower companies. Both the central government and local government of China have reduced governmental approval items.

The second layer involves better regulation and a fair market atmosphere. There is no doubt that the public sector should play its role during economic processes. China's administrative reform aims to provide better regulation for companies and maintain a fair market atmosphere for any enterprise.

The third layer involves better government service. Governmental services, both online and offline, have been advanced in this reform (Zhu and Zhang, 2016). From the point of view of offline governmental service, the provincial government has constructed many one-stop services that aim to provide service effectively. Applicants just need to attend only once, and with even zero attendance, they can get their licenses or approvals. Moreover, creating a connected online governmental service platform that can finish most of the citizens' applications is one of the main goals of better government service.

2.3. Administrative burden and favorable business environment

Administrative burden theory offers a bridge for understanding administrative reform and the favorable business environment. Based on administrative burden and a discussion of China's administrative reform, this research proposes an analysis framework. Figure 1 shows our conceptual framework.

Administrative reform is the explanatory variable of this paper, and it has different layers. With serious reform policies, administrative reform can reduce the administrative burden. During the process of enterprise-government interaction, enterprises and companies will pay lower costs. Consequently, the favorable business environment can be boosted.

According to the favorable business environment worldwide assessment, China was ranked 31st in 2019, and in 2018, it ranked 46th. This paper contends that there are strong correlations between the administrative burden and the business environment. The

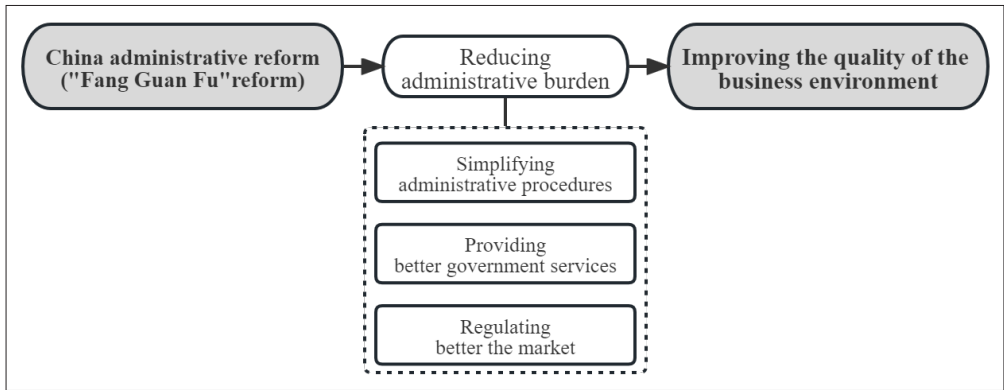


Figure 1: Analysis framework: administrative reform and business environment

Source: Author's own contribution

synchronous variance offers rare opportunities to analyze the mechanism between administrative reform and the favorable business environment.

3. Research methodology

3.1. Database and variables

This paper collects high-quality data from the China Private Enterprises Survey, China Government Service Quality Report, China Provincial Government E-Government Quality Report, and China Statistical Yearbook.

The dependent variable is a favorable business environment. This paper uses the favorable business environment in the eyes of enterprises to measure the quality of the favorable business environment. State-owned companies have policy priority compared with private firms (Zhao, 2018); thus, we should focus on private enterprises during the process of administrative reform. Based on the China Private Enterprises Survey, a firm-level national survey was conducted by the China Academy of Social Science. In this survey, the randomly selected private company owners must answer the following question (with scores ranging from 1 to 5): Do you think the business environment has been boosted for two years? Where 1 indicates that the quality of the business environment is very low, and 5 indicates that the quality of the business environment is very high.

This paper uses private enterprises' subjective assessment as the measurement of the favorable business environment. We have two reasons for that: first, an enterprise's assessment of the favorable business environment is the most important factor during the business decision-making process. Why should the government boost the quality favorable business environment? The ultimate goal is to attract more investment for economic development. From this perspective, the subjective assessment of companies may be a critical aspect of the business environment. Second, the subjective assessment can synthesize factors of both infrastructure and institutions. Actually, the World Bank has published a

favorable business environment assessment called ‘Do Business’. According to this widely accepted ranking system, the quality of the favorable business environment includes infrastructure status, on the one hand, and institution quality, on the other hand. Therefore, any single aspect cannot measure the favorable business environment. The subjective estimation can synthesize these two aspects.

Independent variable is administrative reform. This paper uses the number of business license related items that could be completed in one-stop governmental centers as a proxy for administrative reform. If someone wants to start a company, he must obtain some necessary business license from the government, and this is a worldwide rule. In some countries, in order to complete all the required business licenses, entrepreneurs could spend much time and money completing administrative procedures among different governmental departments. Actually, over-bureaucracy has thus attained a negative connotation, as companies and applicants must go through many procedures to handle business applications. One of the most important goals of China’s administrative reform is to simplify bureaucratic processes. In the context of China’s administrative reform, the local government has built a one-stop government service center. The ‘one-stop’ means that entrepreneurs just need to visit a government service center once, and they can complete all business licenses related items if they are compliant with regulations and rules. That is to say, business license items that could be completed at one-stop government service centers represent the degree of reform. The more these business license-related items can be completed in one-stop governmental centers, the more successful is the administrative reform. Therefore, the number of business items that can be finished at a one-stop government service center can be an effective indicator of administrative reform.

The mediator variable is an administrative burden. Based on the literature review, administrative burden is created during the process of government-enterprise interaction. Most of the literature contends that administrative burden includes the learning cost, compliance cost, and psychological cost during the process of government-business interaction (Moynihan, Herd and Harvey, 2015; Linos and Riesch, 2020). This paper measures administrative burden with the following question:

When you start a business, do you encounter these difficulties? Difficulty A—business license information is not open; Difficulty B—business approval items are too much before getting a license; Difficulty C—the business license procedures are too complicated; Difficulty D—getting a business license requires too much time.

If survey companies answer that there exists any of these difficult situations, then this paper codes administrative burden as 1. If there are two kinds of difficulties, then this paper codes 2. If there does not exist any of these situations, then the administrative burden is coded as 0. Therefore, this paper gets a scale for administrative burden from 0 to 4.

Control variables. From the perspective of government-business interaction, this paper controls for both governmental factors and companies’ characteristics. The paper also controls the financial capacity and the quality of digital service platforms, which are important factors that can influence the assessment of the favorable business environment. Otherwise, based on prior literature (Cull *et al.*, 2015), financial slack is an essential factor

for administrative reform; thus, we control for financial capacity as well. In addition, there is a structural classification in China's administrative region: east region, middle region, and west region. This division is not only a space location but also an economic and political structure. Therefore, this article also controls for geographical location with a dummy variable. Table 2 contains a list of variable measurements and data sources.

Table 2: Measurement of variables

Variable	Description	Source
Business environment (ordinal variable, 1-5)	Do you think the business environment has been boosted in the recent two years?	China Private Enterprises Survey (2020)
Administrative reform (scale variable)	Number of business items on one-stop government service center	China Government Service Quality Report (2020)
Administrative burden (ordinal variable, 1-5)	When you start a business, do you encounter these difficulties?	China Private Enterprises Survey (2020)
E-government (scale variable)	Digital government service platform quality score	Provincial Government E-Government Quality Report (2020)
Financial capacity (scale variable)	Provincial fiscal budget per capita	China Statistical Yearbook (2020)
Geographical location (nominal variable)	Province dummy	West region as a comparison

Source: Authors' own contribution

Table 3 contains the description of the variables, and we aggregate them to the provincial level, thus the number of observations is 31. The mean of business assessment is 3.54, the standard deviation is 0.19, the mean of business items that can be finished in a one-stop service center is 308, and the standard deviation is 132.86. In Zhejiang province, there are 647 business items that can be handled in a one-stop service center, and it ranks first. While there are only 26 business items that can be conducted in the Tibet autonomous region, it ranks last. The mean of the digital governance ability score is 77.32, and the standard deviation is 8.18. Zhejiang province scores 91 and ranks first. The mean value of financial income per person is 7,200 yuan.

Table 3: Data description

Variables	Obs	Mean	SD	Min	Max
Favorable business environment	31	3.54	0.19	3	3.92
Administrative burden	31	308.65	132.86	26	647
E-government score	31	77.32	8.18	56	91
Provincial fiscal budget per capita	31	0.72	0.57	0.31	2.75
Geographical location	31	0.33	0.25	0	1

Note: Data was aggregated at the provincial level, and the number of observations is 31. The unit of financial income per person is ten thousand.

Source: Authors' own contribution

3.2. OLS regression model

This paper tries to answer the question of whether or not the administrative reform boosts the favorable business environment. What is the mechanism underlying such reform? Based on the administrative burden analysis framework, this paper uses the Ordinary Least Squares regression model to answer our research question, and the basic equation of regression is the following:

$$\text{Business Environment} = \beta_0 + \beta_1 \text{administrative reform} + \beta_2 X + \pi + \varepsilon \quad (1)$$

Business environment is a dependent variable, administrative reform is the key independent variable of this paper, and the β_1 is the most important coefficient this paper focuses on. The X is the control variable such as the province's financial capacity. In order to control unobservable province features, this paper adds provincial dummy variables in the Ordinary Least Squares regression model and π represents the unobservable characteristics. ε is model error.

3.3. Qualitative comparative analysis

Qualitative comparative analysis (QCA) is a widely used research method, and this research method has high internal validity. Furthermore, the QCA analysis could verify causal chains, and then strengthen the connections between quantitative statistical models and the case analysis. QCA analysis could output configurations or paths, which means how could the independent variable influence the dependent variable.

This paper uses the QCA method to answer the research question of whether or not administrative reform boosts the favorable business environment and what is the mechanism underlying such reform. The analysis unit is 31 provinces in China, the favorable business environment is the dependent variable, and administrative reform is the independent variable. At the same time, this paper controls confounding variables such as E-government ability, the provincial government's financial income, and geographical location.

4. Results of the mixed-method analysis

4.1. OLS regression evidence

In this section, we analyze whether administrative reform can boost favorable business environment assessment and attempt to unpack the mechanism underlying it. Table 4 shows the quantitative results, where the business environment is a dependent variable and administrative reform is an independent variable.

The empirical regression results in Table 4 confirm that administrative reform can boost favorable business environment assessment significantly. In Model 1, the dependent variable is a favorable business environment, and the independent variable is administrative reform. Model 1 shows that after controlling for other factors, administrative reform has independent and significant positive effects on a favorable business environment. The coefficient is 0.162, and the $p < 0.001$. Model 1 implies that an additional business item

Table 4: Administrative reform and business environment. Administrative burden as a mediator

	Model 1	Model 2	Model 3	Model 4
Dependent variable				
	Business environment	Administrative burden	Business environment	Business environment
Administrative Reform	0.162*** (0.002)	-0.056*** (0.011)		0.096*** (0.003)
Administrative burden			-0.049*** (0.008)	-0.035*** (0.004)
Digital governance	0.047** (0.023)	-0.41** (0.020)	0.058** (0.029)	0.042* (0.021)
Financial capacity (logged)	0.248*** (0.081)	0.067 (0.035)	0.128** (0.064)	0.086* (0.044)
Geographical location (West region=0)				
East region	0.065** (0.025)	0.033 (0.025)	0.108** (0.049)	0.086** (0.043)
Middle region	0.019** (0.009)	0.079 (0.047)	0.025 (0.031)	0.048** (0.024)
Province dummies	Yes	Yes	Yes	Yes
Constant	3.487*** (0.263)	2.359*** (0.129)	4.543*** (0.142)	3.791*** (0.117)
Observations	3265	2953	3123	2369
R-square	0.228	0.286	0.302	0.427
Adjust R-square	0.148	0.184	0.264	0.351

Notes: (1) Robust asymptotic standard errors reported in parentheses are clustered at the firm level and reported in parentheses; (2) *Significance at the 10% level. **Significance at the 5% level. ***Significance at the 1% level

Source: Authors' own contribution

that can be conducted at a service center is associated with a 16% increase in the business environment score. This result is consistent with the existing literature (Wang and Yu, 2017). Model 1 adjust R-squared equals 14.8%, and the observation is 3265.

In Model 2, the dependent variable is administrative burden, the independent variable is administrative reform, and Model 2 is a mediating effect model. Through Model 2, the logical chain of 'administrative reform → administrative burden → business environment' can be tested. The regression is the OLS method. Model 2 confirms that administrative reform has a significantly reduced effect on the administrative burden. The coefficient is -0.056 and the $p < 0.001$, which means that if the government conducts administrative reform, the administrative burden can be reduced by 5.6%. China's digital governance is mainly to empower administrative management through information communication technology (ICT), and the commonly used information technology tool is the smart-phone app. Through the digital governance reform of the Chinese government, almost all

enterprise related government services can be processed online. For example, if an enterprise needs to apply for an administrative approval, the enterprise can easily find needed information, submit materials, and obtain approval through governmental digital platforms. It can be found that digital governance effectively reduces the administrative burden and optimizes the business environment. Model 2 adjust R-squared equals 18.4%, and the observation is 2953.

In Model 3, the dependent variable is a favorable business environment, the independent variable is an administrative burden, and the regression is the OLS method. Model 3 illustrates that administrative burden has a negative effect on a favorable business environment. The coefficient is -0.049 and the $p < 0.001$, Model 3 adjust R-squared equals 26.4%, and the observation is 3123. Furthermore, Model 2 and Model 3 confirm that the administrative burden could be a mediator variable between administrative reform and favorable business environment promotion.

Model 4 is the full model, with the administrative reform and administrative burden in the regression equation simultaneously. The administrative reform coefficient is 0.096 and the $p < 0.001$, which means that administrative reform can boost a favorable business environment significantly. The administrative burden coefficient is -0.035 and the $p < 0.001$, which means that administrative burden has a negative effect on the favorable business environment, but the negative effect is small. Model 4 adjust R-squared equals 35.1%, and the observation is 2369. The result in Model 4 shows that administrative burden is the mediator variable between administrative reform and favorable business environment.

Based on quantitative evidence from Model 1 to Model 4, we can find a clear logical chain ‘administrative reform → administrative burden reduction → favorable business environment assessment’, and it means that administrative burden is the influence channel between administrative reform and favorable business environment. Figure 2 shows the administrative burden mechanism.

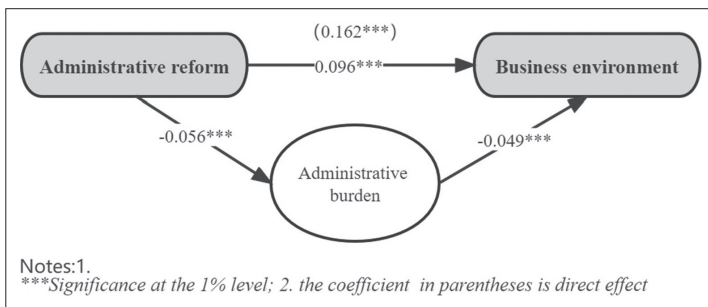


Figure 2: The administrative burden reduction mechanism

Source: Authors' own contribution

Moreover, in terms of the control variables, the OLS and logit model also demonstrate interesting estimated effects. The digital governance ability is a positive factor to the favorable business environment, and this effect is significant in Model 1, Model 3, and Model

4. Meanwhile, the digital service platform can also reduce administrative burden significantly. Otherwise, financial capacity is another positive factor to the favorable business environment. In terms of geographical distribution, the east and middle provinces have a higher assessment of a favorable business environment compared with the west provinces.

4.2. Qualitative comparative evidence

The qualitative comparative analysis can unpack the combinations of conditions and give us configurational findings. This is the unique advantage of the QCA method (Schneider and Wagemann, 2010). Admittedly, there are some critiques about the qualitative comparative method. For instance, the two-element Boolean algebra method does not allow for counterfactuals and embodies some logical constraints. The qualitative comparative analysis is a reasonable and effective option. There are four standard procedures of qualitative comparative: 1–choose conditions, 2–calibrate, 3–necessity of conditions, and 4–combination analysis. In this section, we will follow standard procedures and try to answer under what combinations of conditions the administrative reform could boost a favorable business environment.

First, based on our quantitative result reported above, we choose 5 conditions that are significant in the multiple variables regression model. The five conditions are one-stop service, digital governance, the east region, the middle region, and the west region. These variables, as conditions in the QCA method, are significant in the regression model, which means that they can influence the outcome variables.

Second, these continuous variables should be recoded to dummy conditions. This procedure is called ‘calibrate’, and the cutting point is named ‘threshold’. With cluster analysis by software fsQCA3.0, this paper calibrates one-stop service with three anchors: 0, 0.5, and 1. If the one-stop service center can conduct more than 350 business items, then calibrate as 1, with 200-350 calibrate as 0.5, and else calibrate as 0. We calibrate the digital governance with four anchors: 0, 0.33, 0.67, and 1, based on the four stages of digital governance ability divisions.

Third, this research runs conditions necessity analysis with software QCA3.0. The result shows that any single condition could not explain the outcome variables. In other words, the five conditions pass the necessity test and can go to the next step.

Fourth, we set up a truth table and run the configurational analysis, with the business assessment as outcome variables. The details of the three paths in intermediate solutions are presented in Figure 3.

Based on comparative analysis results, this article finds three different configuration types that can induce favorable business environment assessment. The overall solution consistency is 0.95, and the solution coverage is 0.83. Then, we propose Type 1 as the collaborative governance pathway, Type 2 as the government-driven, and Type 3 as the enterprise-driven type.

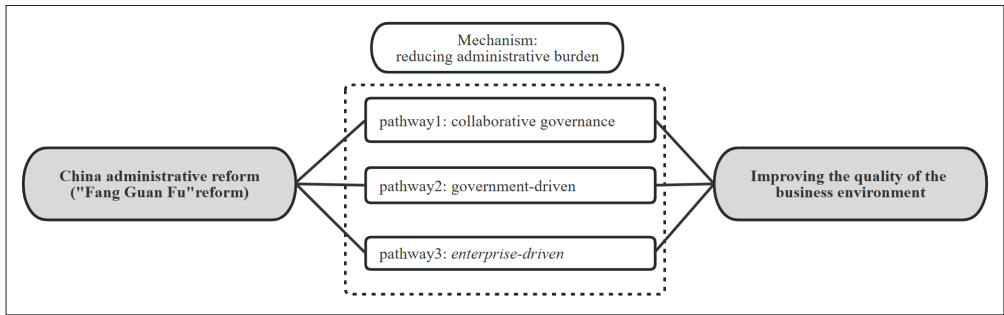


Figure 3: Qualitative comparative analysis

Source: Authors' own contribution

Pathway1 collaborative governance

The collaborative governance pathway combined four conditions, including the one-stop service, digital governance, financial capacity, and east region. The consistency of this type is 0.91, with unique coverage of 0.32. This combination includes the Zhejiang province, Shanghai municipality, Tianjin municipality, Jiangsu province, Guangdong province, and other administrative regions around the East China Sea. For example, the Zhejiang province's one-stop center was imitated by other provincial administrative units. 'Visit once' has been a significant service innovation and boosted citizens' satisfaction overall. Besides, Zhejiang province has developed 'Zheliban' e-government app and online government service platform. In truth, financial slack is critical of this pathway, and most of the cases in this pathway are east region provinces. Though overall-balanced configuration is an effective road to boost the assessment of a favorable business environment, it is hard to be replicated by other regional provinces.

Pathway2 government-driven

There are two necessary conditions of government-driven configuration, with one-stop service and digital governance ability as the INUS conditions, and west region or middle region as necessary conditions. The consistency of this type is 0.95, with unique coverage of 0.41. This path covers most of the west region provinces. Although a lack of financial capacity is one of the most negative factors for these provinces, with profoundly taking reform actions such as one-stop governmental service and constructing online service platforms, these provinces could boost a favorable business environment as well. For instance, the Anhui province, an agricultural province located in the middle region of China, has achieved much development in digital governance. As for the west region, the Chongqing municipality can be taken as an example of a reform forerunner. Chongqing municipality started the 'one net in Chongqing' reform in 2013, which means that most business licenses and approvals can be finished on this net with 'zero visits'.

Pathway3 enterprise-driven

This enterprise-driven path has two combinations, including the financial capacity and east, with the absence of one-stop service, digital governance ability, middle region, and west region. The consistency of the combinations is 0.80, the raw coverage is 0.21. This pathway includes three provinces, for example, the Fujian province and Liaoning province. In these provinces, there is no significant progress in one-stop governmental service reform and digital governance ability. However, with financial slack and good geographical location, they can also have a high-quality favorable business environment. We conclude this configuration as ‘enterprise-driven’, which means that the most important conditions are finance ability and location. And these two conditions are given by nature or history.

5. Conclusions and policy recommendations

Does administrative reform boost the favorable business environment? Our review of the existing literature shows three limitations: lack of perspective from government–enterprise interaction, lack of evidence from developing countries, and lack of mixed methods. This research investigates this relationship by analyzing government–company interactions with mixed methods, based on empirical evidence from China.

Our quantitative regression models based on the China Private Enterprise Survey confirm that administrative reform can significantly boost the favorable business circumstance, and the actual channel is administrative burden reduction. Based on a qualitative comparative method, this article finds that there are three varied pathways that boost the favorable business environment: the collaborative governance pathway, the government-driven pathway, and the enterprise-driven pathway. The collaborative governance configuration is combined with one-stop service center, the digital governance ability, financial capacity, and east region. The reform-oriented pathway combined one-stop service center, and digital governance ability in the west region or middle region. The administrative reform condition is the most important driving force of this type. The enterprise-driven configuration has some natural strengths: it is located in the eastern region of China and has sufficient financial resources.

Theoretically, this paper extends the administrative burden theory. Most of the literature about administrative burden focuses on government-citizens interactions while lacking a focus on government-company interactions. This paper extends the administrative burden theory to government-company interactions, which brings new actors into this theory. Moreover, by employing empirical evidence from China, a developing and lacking established market economy, this research analyzes administrative reform and favorable business environment construction in a brand-new context with a mixed-method approach.

In terms of policy implications, according to these findings, administrative burden reduction is a critical mechanism affecting the linkage between administrative reform and favorable business circumstances. That means reducing administrative burden can optimize the favorable business environment. This finding has important policy implications for

other countries that want to optimize favorable business environments through administrative reform. Furthermore, adopting new information technology such as artificial intelligence and 5G to reduce administrative burden is an effective reform method. In addition, reform actors should choose different strategy combinations based on real factors. There are three pathways that can boost the favorable business environment, and seeking truth from facts is an important reform methodology for the government.

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