

# Research on Business Environment of Cities and Its Influencing Factors in Anhui Province

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## Abstract

**The business environment is the sum of the external environments faced by market entities when conducting business activities. From the perspective of case configuration, this paper takes the external environment of 16 municipal-level market entities in Anhui Province as the research object. Business environment evaluation index system, and explore the role of various external environmental elements in optimizing the business environment in Anhui Province.**

## Keywords

**Business environment; Fuzzy-set Qualitative Comparative Analysis.**

## 1. INTRODUCTION

Twenty years ago, researchers trying to study the importance and effectiveness of developing countries' "institutions" in the process of economic growth were mostly limited to survey data from business environment risk intelligence and international country risk guidelines. These data often contain very broad concepts, such as the rule of law or political stability, and cannot really serve as the basis for specific policy reforms, and the concept of "business environment" came into being. For more than 40 years of China's reform and opening up, with the transformation of national economic policies, the government has gradually shifted from its dominant position in the market to a service role. The business environment is the external environment that enterprises face when operating the sum of the environment, the improvement of the business environment and the core of the company's operation is to handle the complex interaction between the government and the market. The quality of the business environment in different regions is different, and the improvement of the external environment of the market has also become the key to optimizing the business environment in urban areas.

The business environment is a large collection of basic production factors, and the method of comparative analysis from a single angle is inevitably biased, and the lack of the perspective of configuration analysis is also the place where the current research is insufficient. The configuration perspective believes that organizational processes are mutually influenced, and the composition and process of complex elements can be explored and clarified by the method of configuration comparative analysis. The business environment is a comprehensive system combining multi-variable elements. Therefore, there are multiple ways to optimize the business environment, not a single one. The optimization logic of the business environment is "multiple concurrent" to a certain extent. If a one-way optimization approach is used to explain and analyze the system of complex and comprehensive elements, errors may occur, and this practical problem requires the use of the methods and concepts of configuration analysis. Therefore, it is more reasonable to carry out research with the help of the "configuration

perspective" to explore the optimization path of business environment in different regions of Anhui Province.

## **2. LITERATURE REVIEW**

### **2.1. Evaluation of the Business Environment at The City Level in China**

The evaluation index system of the business environment is the basis for studying its optimization path. Judging from the existing research on business environment assessment, most foreign researchers have used the data of the World Bank's "Doing Business Report" and studied the business environment of different countries or regions. The report and related research contents It also focuses more on government policies and systems, and focuses more on the economic development of small and medium-sized enterprises. However, whether it is from the basic assumptions of the business environment assessment or from the focus of the assessment content, data collection, and evaluation methods, the World Bank's business environment assessment system is a huge, highly differentiated, and complex governance scenario for an economy like China. There are obvious defects.

the level of business environment in various places, the business environment is regarded as a whole, and an evaluation index system covering the whole area is constructed. Li Zhijun( 2019 ) put forward the definition of business environment in cities in China, arguing that the definition of urban business environment refers to a comprehensive ecosystem of external conditions that enterprises face when conducting business activities. The market entities involved include government departments, companies, banks, institutions, schools, etc. When an enterprise becomes one of the entities in this ecosystem, it will be affected by the environment from other market entities in the ecosystem. For a company, its establishment, development and closure all have the opportunity to be guaranteed by the market economy, guided by the market environment, supported by innovative resources, and restricted by government policies and court judgments, etc. Therefore, based on the connotation of the urban ecosystem, the meaning of the urban business environment can be more comprehensively and correctly defined, which also provides a theoretical basis for the construction of the business environment evaluation system at the city level in Anhui Province.

### **2.2. The Relationship Between External Environmental Elements and Their Coupling and Business Environment**

To establish an evaluation index system for the business environment in Anhui Province, on the one hand, it is necessary to consider from the perspective of the administrative management system and the supply side of production factors, and factors such as government administrative methods and public service environment that affect the operation of the company should be included in the evaluation indicators; On the one hand, the company's product technology innovation, foreign investment introduction and other activities will also be affected by external environmental factors on the market demand side such as the market environment and foreign trade environment. Based on this, this paper combines the institutional transaction cost theory and the business environment "marketization, rule of law, facilitation, and internationalization" principles, from the perspective of configuration analysis, to construct an evaluation index system for the city's business environment in Anhui Province. and configuration analysis framework.

Government service environment and business environment. Government behavior plays an important role in optimizing the business environment. At present, government departments are continuously optimizing the government service environment and reducing institutional transaction costs by building a nationally integrated government platform and canceling or delegating administrative authority. The effectiveness of government management not only

reflects the level of local administrative management, but also has an important impact on the nature of economic activities in a certain region . By promoting the transformation of government functions to service-oriented , the efficiency of government administrative services can be improved , thereby reducing the government's ineffective administrative intervention .It can be seen that the government service environment indicators reflect the institutional environment in which market entities are located. A sound system can provide a stable operating environment for enterprises, and reducing institutional transaction costs is also the top priority in the optimization of the business environment.

Market environment and business environment. The market is an invisible means of allocating resources. The market-oriented business environment reflects the adjustment of market resource allocation, which is conducive to the innovation and development of enterprises. At present, government departments use financial funds to leverage social funds into the market, which makes the human resource capacity in the market and the financing scale of non-financial enterprises continue to rise, and stimulates the innovation and development vitality of business entities. At the same time, the market environment under the rule of law is also an important part of the business environment. The good social security of the city makes enterprises less worried when carrying out operational activities. It can be seen that the market environment indicators reveal the allocation of social resources by market entities and the development level of factors.

Public service environment and business environment. The level of public services reflects the infrastructure services that the government uses to solve the most direct needs of enterprises for survival and development . It forms resource constraints or strong guarantees for the normal production and operation activities of enterprises within a certain range , and also forms the choice of investment areas for enterprises. Significant influence. The facilitation of the business environment reflects the effective implementation of the government's policies and measures to benefit enterprises and the people , and maintain the smooth operation of the market. The provision of effective and high- quality public services by the Chinese government can not only reduce the transaction cost between companies , but also enhance the company's willingness to develop, and can effectively reduce the company's R&D investment in the field of business risks. The government's active management must ensure its reasonableness and legitimacy through the government's provision of services for market entities , and obtain necessary operating funds and management expenses in the market economy , and the rational operation of the market economy depends on the government to provide a complete public foundation. service facilities , and carry out reasonable property rights protection and ensure compliance with market contracts, etc. It can be seen that the public service environment indicators reflect the convenience of obtaining resources, and play a role in boosting the development and growth of market entities and enhancing their competitiveness.

Innovation environment and business environment. The innovation environment mainly improves the technological innovation performance of companies by improving technological innovation investment, innovation cooperation, and technological innovation spillover . A good business environment plays a decisive role in supporting entrepreneurial innovation. Optimizing the business environment can reduce transaction costs in the market and institutional transaction costs for companies, thereby encouraging companies to innovate. Enterprises use the saved time and cost to find market opportunities, research and develop new products, etc., which will help to improve their innovation level. In an innovation environment, innovative companies can not only seize an ecological position in the existing market , but also expand their ecological niche and seek innovation opportunities . It can be seen that the innovation environment indicators can reflect the institutional transaction costs of enterprises in reverse, and institutional transaction costs have always been an obstacle to the development of market entities.

Foreign trade environment and business environment. The international business environment reflects the level of the region's integration with the international community, reflects the region's ability to attract investment and cross-border trade cooperation, and promote the development and growth of market players. Government departments are setting up cross-border business platforms, "overseas warehouses", exhibition centers, etc. by holding or hosting international commodity expositions, economic and trade cooperation promotion conferences, etc., to expand the service radius and help market players to integrate with international standards. It can be seen that the foreign trade environment indicator highlights the construction of the cross-border circulation medium of factors and the results obtained, and is a key indicator for integrating into the new development pattern of "dual circulation".

### **3. RESEARCH DESIGN**

#### **3.1. Research Methods**

This paper takes the external environment of the operation of 16 municipal-level enterprises in Anhui Province as the research object, and uses the fsQCA method to explore the optimization path of the municipal business environment in Anhui Province.

#### **3.2. Variable Measurement and Description**

1. Outcome variable: Doing Business Index. At present, the research on the business environment assessment system in academia has different focuses, and there is no unified standard. This paper collects the business environment index of 16 cities in Anhui Province from the "2020 China 296 City Business Environment Report".

2. Condition variable: the external environmental elements that the enterprise faces when carrying out its operational activities. This paper uses the 2020 "Anhui Provincial Statistical Yearbook" as the basic data source.

#### **3.3. Data Processing**

When evaluating the business environment of each city, in order to reduce the objective weight error caused by subjective bias, and because the data sample area span is small and the sample size is also small, the entropy method is used to evaluate the secondary index of each element. objective empowerment.

The specific first-level indicators, second-level indicators and their weights, and the description of indicators in the business environment evaluation index system of Anhui Province are shown in Table 1.

#### **3.4. Variable Calibration**

Since the article uses a qualitative comparison of fuzzy sets, the data is first standardized and then calibrated. When the fsQCA software performs statistical analysis, the data is required to be a continuous value between 0 and 1, that is, the original data needs to be calibrated to evaluate the degree of membership between "completely affiliated" and "completely unaffiliated". In this paper, the calibration standard for the intersection of government service environment, market environment, public service, innovation environment and foreign trade environment is set as the 0.5th percentile, the calibration standard for complete non-affiliation is the 0.05th percentile, and the calibration standard for complete affiliation is 0.95 percentile point. Since the data with a value of 0.5 after calibration will not be included in the system calculation, in order to avoid cases being ignored by the system, this paper refers to the existing research and increases the variable of 0.5 by a tiny value "0.001" to make it 0.501. Table 2 shows calibration information for each condition and result.

**Table 1** Business environment evaluation index system

Primary indicator	Secondary indicators	Indicator description
Government service environment	Health Index of Political-Business Relations	Health Index of Political-Business Relations in Chinese Cities
	Financial security level	Government spending as a percentage of GDP
	E-government level	Number of things can be done online
Market environment	The degree of diversity of subjects	Proportion of private enterprises
	Human resource capacity	Number of employees in private enterprises at the end of the year
	Labor cost	Average annual salary of employees in the private sector
	Credit protection level	Proportion of loans to non-financial enterprises and institutions in all loans
	Social security level	Number of criminal cases
Public Service surroundings	Urban gas supply capacity	Natural gas production capacity
	Urban water supply capacity	Comprehensive production capacity of water supply
	Urban power supply capacity	Power generation
	medical condition	Number of beds in medical and health institutions
		Basic medical insurance participation rate
	Transportation status	Total freight
Innovation environment	Innovation input	R&D expenditures as a percentage of GDP
	Approved scale of property rights	Invention patents granted
Foreign trade surroundings	The scale of foreign enterprises	Number of foreign companies
		Registered capital of foreign enterprises
	Scale of foreign investment	The amount of foreign capital actually used in the current year
	Trade Dependence	The ratio of total imports and exports to GDP

**Table 2** Calibration of Results and Conditions

Conditions and Results	Calibration		
	fully affiliated	intersection	not affiliated at all
Doing Business Index	0.3033	0.2518	0.2318
Government service environment	0.0927	0.0606	0.0366
Market environment	0.0929	0.0596	0.0372
Public service environment	0.1215	0.0497	0.0177
Innovation environment	0.1861	0.0379	0.0128
Foreign trade environment	0.1610	0.0379	0.0104

## 4. ANALYSIS OF RESEARCH RESULTS

### 4.1. Necessity Analysis of A Single Condition

In fsQCA software, the consistency is usually regarded as the criterion for the necessary condition. When the consistency is greater than 0.9, the condition can be regarded as the necessary condition of the result. Table 3 shows the consistency values of each antecedent condition variable to the outcome variable. It can be seen from Table 3 that the consistency of the individual antecedent conditions does not exceed 0.9, which shows that each antecedent

factor is very weak in explaining the explained results, which indicates that the optimization of the business environment in Anhui Province may not be determined by a single It is determined by the external environment , but is the result of the configuration of multiple factors.

**Table 3** Analysis of necessary conditions affecting the business environment

Antecedent condition	Outcome variable	
	Doing Business Index	
	consistency	Coverage
Government service environment	0.754	0.613
	0.601	0.547
Market environment	0.656	0.649
	0.670	0.581
Public service environment	0.787	0.742
	0.564	0.511
Innovation environment	0.755	0.818
	0.663	0.534
Foreign trade environment	0.801	0.735
	0.629	0.520

#### 4.2. Sufficiency Analysis of Conditional Configuration

This study believes that the optimization path of the business environment in Anhui Province should be explained from the necessary and sufficient causal relationships. Different from necessity analysis , sufficient conditional causality means that the result can be fully formed when there are equivalent combinations of several antecedent conditions. As shown in Table 4, the consistency level of the single configuration is higher than 0.75 , and the consistency level of the overall solution is 0.834 , which has a good degree of interpretation . Consistent with the existing research, this paper analyzes the intermediate solution here, and summarizes the results to obtain three action paths for optimizing the business environment in Anhui Province.

**Table 4** Condition configuration that affects the business environment

Antecedent condition	Outcome Variable: Doing Business Index			
	H1	H2	H3	H4
Government service environment	●		●	●
Market environment		●		●
Public service environment	●	●		●
Innovation environment	●	●		
Foreign trade environment	●	●	●	●
consistency	0.915	0.839	0.901	0.816
Unique coverage	0.145	0.250	0.184	0.070
original coverage	0.405	0.471	0.345	0.281
Overall solution coverage	0.794			
Consistency of the overall solution	0.834			

Note: ● means the core condition exists, ● means the edge condition exists, ⊗ means the core condition is missing, ⊗ means the edge condition is missing, "blank" means that the condition can exist or be missing

Conditional configurations H1 and H2 have great similarity and are two comprehensive and balanced paths, indicating that the reduction of institutional transaction costs and the "four modernizations" of the business environment go hand in hand. The core conditions of the comprehensive and balanced path are public services and foreign trade environment, and the innovation environment is a common auxiliary condition for both, indicating that encouraging innovation and strengthening the protection of intellectual property rights can optimize the business environment in different regions. Typical The cities are Hefei, Wuhu, Bengbu, etc. For example, Hefei High-tech Zone has opened the province's first district-level intellectual property transaction window to accept full-process business in one stop; , which are the three largest "growth cores" in the economic development of Anhui Province. The comprehensive and balanced condition configuration shows that the optimization of the business environment is the result of a multi-faceted process , so the comprehensive and balanced path also has high requirements for public services. A typical city is Chuzhou. For example, the "Chuzhou City Public Resource Transaction Activities Management Measures" led by Chuzhou City, regulates public resource transaction activities, and promotes the realization of the goal of "full coverage, whole process, and comprehensive supervision of public resource transaction activities".

Conditional configuration H3 is a path that takes the government service environment and foreign trade environment as the core conditions in the absence of an innovative environment. This path pays attention to the efficiency of government services and the degree of opening of the city to the outside world. In recent years, the administrative subject has reformed the administrative approval system. To improve the overall efficiency of government services, and the use of foreign investment is a very important part of China's basic policy of opening up and the establishment of a new system of open market economy. Through the combination of government services in place and enhanced cross-border trade, the institutional transaction costs between government and enterprises have been reduced to a certain extent, and the internationalization of the business environment has also been promoted. Typical cities are Tongling, Chizhou and Huangshan. . For example, Tongling City has issued a city - wide catalogue of administrative examination and approval service items of "immediate , online, nearest, and one-off" to further implement the standards and requirements of the national integrated online government service platform; Tongling Customs and other departments have fully implemented paperless tax refund declarations , which shortens the average time for processing tax refunds to within 10 working days.

Conditional configuration H4 is a path composed of government services in place and convenient public services as the core conditions, and a fair and orderly market environment and foreign trade environment as marginal conditions . government service path. In order to implement the "people-centered" development idea, the business environment is derived from the market economy, and its construction must start from the market-oriented allocation of social resources to create favorable external development conditions for market players, that is, the marketization of the business environment, and the typical city is Fuyang. For example , the average processing time for administrative examination and approval items in fuyang has been reduced from 3.78 working days to 2.97 working days "One-window acceptance and one-stop service" have been realized, and the problems of "difficulty in data sharing, market financing, recruitment and employment, and supervision and integration", which have been strongly reflected by market entities and the public, have been initially resolved.

## 5. CONCLUSIONS

First of all, this paper finds that enhancing the degree of opening to the outside world is a necessary condition for optimizing the business environment in Anhui Province, but improving the quality of the government service environment also plays a more general role in optimizing

the business environment. The government's administrative supervision and management functions also need to be gradually transformed, so that the mode of government department supervision from pre-internal supervision will be transformed into the maintenance of market economy operation order, and finally the government departments will be transformed from supervisory organs to consulting service personnel for the administrative management of the market economy. Simplify the functions of the government and make the government truly serve the people. Therefore, the administrative examination and approval of the market economy by the government departments and the market economy supervision departments should gradually tend to guide the market economy and serve the market economy. In the reform of the administrative examination and approval mechanism, the one-stop service being explored across the country is the most important form of examination and approval by government departments. Practice has proved that one-stop service is an effective means to straighten out the system and mechanism, optimize the business environment, and improve service efficiency. Accelerate supply-side structural reforms. Secondly, this paper uses the configuration perspective and QCA method to find three optimization paths for the business environment in Anhui Province, reflecting the multiple implementation methods of each city in optimizing the business environment.

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