

# Study on the Impact of Business Environment on FDI and Comparative Analysis of Eastern, Central and Western Regions in China

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**Abstract:** China has made great efforts to optimize the business environment and introduce FDI recently. This paper analyses whether the business environment in China can attract FDI. The entropy method is used to construct the business environment index. The data of 30 provinces in China are used to build panel data regression models. We find that business environment scores have significantly positive impact on FDI in the full sample as well as the eastern, central regions of China. Further analysis on the components of the business environment reveals that, overall, the economic and infrastructure environments can significantly increase FDI across the country. By region, in the eastern region, improvements in government, economic and infrastructure environments are more conducive to attracting FDI. In the central region, the government, economic, social and infrastructure environments are more effective in attracting FDI. In the western region, the economic and social environments have significant positive impact on FDI. This paper makes corresponding recommendations at the macro level including to improve the ease of investment and administrative services efficiency, to perfect infrastructure construction and social service systems.

**Keywords:** Business Environment, Foreign Direct Investment, Entropy Method, Panel Data Model

## 1. Introduction

After the reform and opening up, the total amount of foreign direct investment (FDI) absorbed by China has increased year by year, and the growth rate has been maintained at relatively high levels. China has gradually developed into a large country in terms of FDI absorption. However, due to the impact of the COVID-19 from 2020, the global investment fever has subsided and it has become more difficult for countries to attract FDI. According to data from the Ministry of Commerce, in 2021, the amount of foreign investment actually utilized by China reached 1,149.36 CNY, exceeding 1 trillion for the first time and showing an increase of 14.9%. Compared to that before the pandemic outbreak in 2019, it showed a two-year average growth of 12.1%, which was 6.4 percentage points above the global average. China has also become one of the very few countries with positive FDI growth despite the impact of the pandemic. Attracting FDI has made a huge contribution to economic development of China and is an important factor for China to improve the efficiency of resource allocation, learn from advanced foreign technology and management experience, and enhance its comprehensive national power.

The ability to attract FDI is closely related to the investment environment faced by external investors, *i.e.* including whether the legal rights and interests of investors can be effectively protected, whether it is convenient to carry out investment activities, and whether a good business environment can be provided. Since 2018, the business environment has become a key area of concern in China to be improved. In the *Regulation on Optimizing the Business Environment* in 2020, scholars have systematically defined an assessment system for the business environment based on China's national conditions. Governments at all levels in China have also set out to improve the business environment. By 2021, a total of 31 provinces in China have introduced provisions and provided guidelines to improve the local business environment.

In this paper, in order to analyze whether the business environment in provinces of China has a significant impact on attracting FDI and identify the direction of the impact, provinces of China (except Tibet) were divided into the western, central and western regions for empirical analysis. We use the entropy method to measure business environment. Based on data from 30 provinces, a regression

model was constructed and data analysis software STATA15.0 was used to empirically analyze the impacts and to further investigate whether there are differences in the impacts among the eastern, central and western regions. Theoretically, most of the current researches related to the business environment focused on the policy area, and the studies on FDI mostly take it as an explanatory variable to explore its impact on other economic variables such as economic development. This paper examines the influence of the business environment on FDI, and puts forward corresponding suggestions at the macro level for the government to attract FDI with macro policies, as well as to provide research directions for later scholars. Practically, FDI plays an important role in China's economic development, especially as China is currently at a critical stage of industrial transformation and pursuing high-quality economic development. The traditional reliance on government investment in infrastructure for development is no longer suitable for the new environment, and investment capital must be fully activated and guided to become an important engine driving China's economic growth. China has been focusing on improving the business environment to attract FDI in recent years, so it is worth testing the effectiveness of this strategy.

## 2. Theoretical Foundations and Mechanism Analysis

### 2.1. Theoretical Foundations

#### 2.1.1. The Eclectic Paradigm of International Production

In *International Production and Multinational Enterprises*, Dunning (1981) presents the Eclectic Paradigm of International Production, which argues that the ownership, internalization and location advantages possessed by an enterprise jointly determine its FDI capacity [1]. The three objects of analysis - international trade, FDI and location choice - were thus brought into the same framework. Ownership advantage is a necessary condition for a firm to invest abroad, and it includes asset-based and transactional ownership advantages. Internalization advantage refers to a firm's ability to keep its advantages within the firm, thereby eliminating the negative effects of imperfect competition in the open market. Location advantage refers to the objective market size, factor endowment, level of economic development, infrastructure and other factors that are unique to the host country, thus facilitating foreign investors to choose the host country for direct investment.

#### 2.1.2. Theory of International Competitive Advantage

The theory of international competitive advantage developed by Michael (1990) consists of 4 determinants and 2 supporting factors [2]. The determinants include factors of production, demand conditions, industry factors, and the strategy, structure and competition of firms, while the supporting factors include opportunities and government. The factors of production include primary factors of production such as climate and geographical location, and higher factors of production such as human resources and infrastructure; demand factors include market size and consumer demand preferences; industry factors are related or supporting industries; firm strategy, structure and competition are conditions for their creation and management; and potential opportunities and the role of government also play a role in foreign location choice.

#### 2.1.3. Portfolio of Investment Inducement Factors

As early as the late 1980s, some argued that the process of OFDI activities would be influenced by many factors, and scholars represented by Nie Minghua and Qi Jianhong put forward the theory of portfolio of investment inducement factors. The portfolio has two components. The first is the direct inducement factors, which are various production factors such as capital, resources, technology, *etc.* If the investor country itself does not have such advantages, but the host country with such advantages can attract the inflow of foreign investment. The second is the indirect inducement factors, which are other factors inducing investment, including (a) the preferential policies, laws and regulations of the investor country, and the cooperative relationship with the destination country, (b) the infrastructure and foreign affairs or foreign nationals-concerned laws and regulations, and (c) the influences at the world economic level.

In summary, foreign direct investors would comprehensively consider the business environment of a country or region, and the business environment is influenced by a combination of factors. Specifically, according to the Eclectic Paradigm of International Production, all a country or region can do is to provide a convenient business environment, enhance its location advantages, and improve a series of factors to be considered in business environment, such as market size, infrastructure, the

degree of economic development, labor costs, innovation capacity, *etc.*; according to the international competitive advantage theory, from the government's perspective, creating a superior business environment requires the incorporation of human resources, infrastructure, consumer demand, business operating costs, government and a series of other factors, continuous improvement and upgrade of the regional industrial chain and enhancement of the comprehensive strength in economic and political aspects; the theory of the portfolio of investment factors reveals that the occurrence of international direct investment behavior is based on investment inducement factors, which requires attention to the factors of the investment country itself and to the investment environment of the destination country and the changes in the world economy.

## **2.2. Analysis of the Mechanism**

Combined with the above theoretical basis, it can be seen that a superior business environment mainly attracts FDI inflows by maintaining the monopoly advantage of investing enterprises, promoting the internalization process of enterprises and enhancing the location advantage of the host country. This section will systematically explain the theoretical mechanisms through which a favorable business environment in a host country affects FDI inflows from the three aspects. Specifically, in terms of maintaining monopoly advantage, a favorable business environment in the host country can provide strong institutional guarantees for the investing enterprises. According to the theory of monopoly advantage, the necessary condition for an investment enterprise to invest in other countries (or regions) is that the enterprise must have a monopoly advantage, where the monopoly advantage mainly refers to the enterprise's advantage in information, technology, knowledge and management and other knowledge assets and economies of scale that other enterprises do not have or cannot have. Most of these monopoly advantages are knowledge assets, and the cross-border transfer, maintenance and management of knowledge assets require the guarantee with a fair and strong legal system and property rights system, so that investment enterprises can reduce institutional barriers and avoid institutional risks when protecting property rights and commercial disputes in host countries, and thus better maintain their monopoly advantages. The ability of an investor to maintain its monopoly in a host country will increase its confidence in the host country.

In the process of promoting internalization, a favorable business environment in the host country not only reduces the transaction costs of the investor in the host country, but also helps it to improve labor productivity and increase economic returns. According to internalization theory, the process of cross-border internalization requires institutional transaction costs, external financing costs, costs of getting credit, country risk costs and communication costs, and gains internalization benefits from the coordination of the various links in the production and operation value chain, differential transfer prices and the stabilization of supply and demand between buyers and sellers. Generally speaking, a favorable business environment in the host country means that it has streamlined investment approval and administrative procedures, efficient business regulations and fair market trading mechanisms, which can reduce the time and cost of administrative approval, ensure the right of multinational investment enterprises to compete on a level playing field in the host country and expand their international market share, thus increasing the internalization profits of the investment enterprise, increasing the expected benefits of the multinational internalization strategy and ultimately facilitating the process of internalization and the flow of FDI into the host country.

In terms of enhancing location advantages, the business environment is an important part of the international investment environment as well as an important consideration for overseas investment location decisions made by investment enterprises. According to the Eclectic Paradigm of International Production, locational advantage refers to the factor endowment advantage possessed by the host country itself, where factors do not only refer to basic factors such as labor and natural resources, but also include advanced factors such as business and institutional environments. With the continuous deepening of the division of labor in global value chains, countries place more and more emphasis on innovation activities, and investment enterprises will be more sensitive to the host country's business environment and other advanced factors. Therefore, a host country with a superior business environment is an important location advantage that helps create a good international investment environment and promotes the location of FDI by foreign investment enterprises.

3. Methods and Data

3.1. Variables and Data

This paper focuses on whether the improved business environment has an impact on the region’s ability to attract foreign investment, and thus the ability of the sample to absorb foreign investment was used as the explained variable. There are various ways to measure the ability to absorb foreign investment, such as the number of foreign enterprises registered in the region and the performance indicators of foreign enterprises, but most scholars used FDI for the measurement. For example, Cai (2022) measured the ability to attract foreign investment with FDI in the analysis on the business environment of the Greater Bay Area for foreign direct investment [3]. As FDI is important to China’s economic growth, employment promotion and industrial restructuring, it has also become one of the important economic indicators in China, and was adopted in this paper to measure the level of FDI.

There are two common ways to measure the ease of doing business in academia. One is to directly adopt the ease of doing business scores in the *Doing Business* report published by the World Bank, and the other is to refer to the indicators used in the report to measure the ease of doing business scores, and then adjust the composition of the indicators in conjunction with the specific conditions of the corresponding regions to re-measure the ease of doing business scores. Since *Doing Business* does not disclose the scores of different Chinese provinces, the entropy method was used in this paper to calculate the business environment scores of different provinces based on the indicators of *Doing Business*. The specific indicators are shown in Table 1.

Table 1: Indicators for the Entropy Method in Business Environment Assessment.

Government	Number of community institutions	Positive	Economy	GDP growth rate	Positive
	General public service expenditure as a percentage	Positive		Share of tertiary sector	Positive
	Public safety expenditure	Positive		Average monetary wages of employees	Negative
				Import and export	Positive
Society	Education	Positive	Infrastructure	Taxes	Negative
	Science & Technology	Positive		Railway mileage	Positive
	Number of beds per capita	Positive		Road mileage	Positive
	Books per capita	Positive		Broadband ports	Positive
Finance	Percentage of financial staff	Positive		Post office	Positive
	Size of financing	Positive			

After determining the indicator system, the comprehensive score for high-quality economic development of each province was calculated as follows: 1) Standardize the selected indicators according to the following public instructions:

$$\text{Positive indicators: } x'_{ij} = \frac{x_{ij} - \min\{x_{1j}, \dots, x_{nj}\}}{\max\{x_{1j}, \dots, x_{nj}\} - \min\{x_{1j}, \dots, x_{nj}\}} \quad (1)$$

$$\text{Negative indicators: } x'_{ij} = \frac{\max\{x_{1j}, \dots, x_{nj}\} - x_{ij}}{\max\{x_{1j}, \dots, x_{nj}\} - \min\{x_{1j}, \dots, x_{nj}\}} \quad (2)$$

Where  $x_{ij}$  is the value of the number  $j$  indicator for the number  $i$  studied province and  $x'_{ij}$  is the standardized value, which ranges from [0,1].

2) Calculate the share  $p_{ij}$  of the number  $i$  province under the number  $j$  indicator.

$$p_{ij} = \frac{x'_{ij}}{\sum_{i=1}^n x'_{ij}} \quad (3)$$

3) Calculate the entropy value of the number  $j$  indicator.

$$e_j = -\frac{1}{\ln n} \sum_{i=1}^n p_{ij} \ln(p_{ij}) \tag{4}$$

4) Calculate the weights for each indicator.

$$w_j = \frac{1 - e_j}{\sum_{j=1}^m 1 - e_j} \tag{5}$$

5) Calculate the composite score for quality economic development in each province.

$$s_i = \sum_{j=1}^m w_j p_{ij} \tag{6}$$

The entropy values of each number  $j$  indicator were calculated according to Equation 4 for the GOV, ECO, SOC, INF and FIN indicators.

We collect the annual data of each province in China except Tibet due to data availability. The data are collected from the CSMAR database, the wind database and the statistical yearbooks of Chinese provinces.

### 3.2. Control Variable

In this paper, the following variables were controlled. The first is the development of logistics and transportation; Gan (2014) concluded that the construction of logistics and transportation is an important factor influencing economic development and one of the factors that foreign investment will certainly focus on [4]. Therefore, the total mileage of postal roads with the widest radiation range was enrolled in this paper. The second is the degree of social stability; more stable social environment of a region usually means higher stability of employees, and the correspondingly lower instability faced by enterprises; therefore, social security and employment expenditure were taken in this paper to measure social stability. The last is the degree of economic development, which is an important factor influencing the inflow of capital; Li et al. (2022) found that China’s economic development is highly correlated with GDP [5]. Therefore, GDP per capita was used as a measure in this paper. The specific definitions of the variables are shown in Table 2.

Table 2: Definitions of the Variables.

	Variable	Variable Codes	Calculation
Explained Variable	Foreign direct investment	FDI	Annual FDI actually used by a province
Explaining Variables	Business environment	SCORE	Scores based on entropy method as provided before
Control Variables	Total mileage of postal routes	YLCD	Total length of postal routes by province
	Social security and employment expenditure	BZZC	Total social security and employment expenditure by province
	GDP per capita	RJGDP	GDP/total population by province

### 3.3. Model Construction

Based on the research theme of this paper and the variables set, the model was set up as follows:

Regression model for the overall business environment score:

$$FDI_{i,t} = \alpha_0 + \alpha_1 SCORE_{i,t} + \alpha_2 YLCD_{i,t} + \alpha_3 BZZC_{i,t} + \alpha_4 RJGDP_{i,t} + \varepsilon_{i,t} \tag{7}$$

Regression model for Doing Business indicators:

$$FDI_{i,t} = \alpha_0 + \alpha_1 GOV_{i,t} + \alpha_2 ECO_{i,t} + \alpha_3 SOC_{i,t} + \alpha_4 INF_{i,t} + \alpha_5 FIN_{i,t} + \alpha_6 YLCD_{i,t} + \alpha_7 BZZC_{i,t} + \alpha_8 RJGDP_{i,t} + \varepsilon_{i,t} \tag{8}$$

where  $\alpha_0$  is a constant term,  $\alpha_1 - \alpha_8$  are unknown coefficients, and  $\varepsilon$  is an error term. FDI is foreign direct investment; SCORE is the total business environment score; YLCD is the indicator of total postal mileage (a control variable); BZZC is the indicator of social security and employment expenditure (a control variable); RJGDP is the indicator of GDP per capita (a control variable); and in the business environment entropy method, GOV is the component indicator of government, ECO is the component indicator of economy, SOC is the component indicator of society, INF is the component indicator of infrastructure, and FIN is the component of finance.

#### 4. Empirical Analysis

##### 4.1. Fundamental Analysis

Table 3 shows the average values of business environment scores of each province from 2013 to 2020. As can be seen from the Table, the overall business environment was at the lower to middle level; a great number of provinces had scores below 0.3; and the provinces in the southeastern coastal region had higher scores, while those in the western regions had lower scores. Besides, a large gap existed in the quality of economic development among provinces, with the minimum value of 0.0928 in Qinghai Province and the maximum of 0.6122 in Guangdong Province, showing a large degree of imbalance in regional development.

Table 3: Average Business Environment Scores by Provinces, 2013-2020 (Total Score of 1)

Province	Score	Province	Score	Province	Score	Province	Score
Shanghai	0.3579	Ningxia	0.1097	Jiangsu	0.4482	Hunan	0.2370
Yunnan	0.1766	Anhui	0.2442	Jiangxi	0.2010	Gansu	0.1569
Inner Mongolia	0.1860	Shandong	0.3597	Hebei	0.3034	Fujian	0.2381
Beijing	0.3473	Shanxi	0.1759	Henan	0.2676	Guizhou	0.0803
Jilin	0.1592	Guangdong	0.6122	Zhejiang	0.4281	Liaoning	0.2116
Sichuan	0.3186	Guangxi	0.2113	Hainan	0.1147	Chongqing	0.2299
Tianjin	0.1925	Xinjiang	0.1677	Hubei	0.2732	Shaanxi	0.1970
Qinghai	0.0928	Heilongjiang	0.1753				

The regression results are shown in Tables 4. It can be seen that the amount of business environment have significantly positive impact on FDI for both the full sample and the samples of the eastern, central and western regions, with all but the western region being significant at the 1% level, indicating that an improved business environment is indeed conducive to attracting foreign investment inflows.

Table 4: Total Score Regression Results.

	(1) Full sample	(2) Eastern Region	(3) Central Region	(4) Western Region
	lnFDI	lnFDI	lnFDI	lnFDI
SCORE	5.5597*** (4.58)	5.0396*** (6.02)	17.3618*** (6.63)	8.3283* (1.85)
lnYLCD	-0.4345*** (-2.64)	-0.3427*** (-2.81)	0.2076 (0.85)	-0.7259* (-1.76)
lnBZZC	1.1500*** (6.41)	0.0662 (0.47)	-1.0547** (-2.41)	1.8588*** (2.94)
lnperGDP	1.1623*** (4.93)	1.0786*** (6.42)	-1.3202*** (-3.23)	0.3569 (0.59)
_cons	-13.9249*** (-3.55)	3.2989 (1.10)	38.0843*** (5.38)	-14.1647* (-1.75)
N	240	96	72	72
R <sup>2</sup>	0.5280	0.6493	0.5189	0.5819
F	65.7301	42.1183	18.0671	23.3163

t-statistics in parentheses, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

##### 4.2. Further Analysis

After verifying that the improvement of the business environment is conducive to the enhancement of FDI, this subsection further analyses the components of the business environment by including the five variables of governmental, economic, social, infrastructural and financial environments in the

model for regression, and the results are shown in Tables 5 below. As can be seen from the table, in the full-sample regression, economic and infrastructure environments have significantly positive impact on FDI at the 1% level, while the impact of government, social and financial environments on FDI are not significant. In the eastern region, the government, economic and infrastructure environments have significantly positive impact on FDI at the 5%, 1% and 1% levels respectively, indicating that improvements in these three business environment factors are more conducive to attracting FDI in the eastern region. In the central region, the government, economic, social and infrastructure environment have significantly positive impact on FDI; the impact of the governmental and social environments on FDI are significant at the 10% and 5% levels respectively; the impact of all other environmental factors on FDI are significant at the 1% level, indicating that these four business environment factors are more effective in attracting FDI in the central region. In the western region, the economic and social environments have significantly positive impact on FDI at 1% and 10% levels respectively.

Table 5: Regression Results for Primary Indicators.

	(1) Full sample	(2) Eastern Region	(3) Central Region	(4) Western Region
	lnFDI	lnFDI	lnFDI	lnFDI
GOV	1.1324 (0.39)	4.5585** (2.34)	9.1045* (1.96)	3.3576 (0.41)
ECO	27.1277*** (5.40)	13.9844*** (3.84)	73.4051*** (2.67)	91.9803*** (5.88)
SOC	-6.4568 (-0.88)	-13.4456** (-2.17)	20.1003** (2.34)	56.1107* (1.92)
INF	11.2031*** (2.71)	8.1370*** (2.86)	26.4454*** (4.21)	6.2341 (0.73)
FIN	-8.3952 (-0.94)	0.9501 (0.17)	5.3234 (0.29)	5.2595 (0.16)
lnYLCD	-0.5280*** (-3.18)	-0.3734*** (-3.04)	0.1741 (0.64)	-0.7185* (-1.95)
lnBZZC	1.2002*** (4.99)	0.0381 (0.23)	-1.2576** (-2.32)	1.9682*** (3.24)
lnperGDP	1.1167*** (3.48)	1.8957*** (6.22)	-0.7969 (-1.28)	-0.6684 (-1.02)
_cons	-13.3292*** (-2.89)	-4.5559 (-1.14)	34.1759*** (3.02)	-8.2849 (-0.97)
N	240	96	72	72
R <sup>2</sup>	0.5679	0.6905	0.6002	0.7360
F	37.9542	24.2650	11.8225	21.9568

t-statistics in parentheses, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

### 4.3. Robustness Tests

Table 6: Robustness Test for Total Score.

	(1) Full sample	(2) Eastern Region	(3) Central Region	(4) Western Region
	lnFDI	lnFDI	lnFDI	lnFDI
L.SCORE	4.0484*** (3.06)	4.8349*** (5.27)	17.6189*** (5.27)	3.8720 (0.81)
lnYLCD	-0.3593** (-2.09)	-0.2568** (-2.03)	0.2678 (0.93)	-1.0845** (-2.64)
lnBZZC	1.3705*** (6.88)	0.0400 (0.26)	-1.1166* (-1.92)	2.6672*** (4.08)
lnperGDP	1.3795*** (5.29)	1.0463*** (5.90)	-1.5638*** (-2.96)	0.6584 (1.06)
_cons	-20.4053*** (-4.58)	3.0321 (0.88)	41.1060*** (4.09)	-24.9040*** (-2.85)
N	210	84	63	63
R <sup>2</sup>	0.5418	0.6616	0.4552	0.6362
F	60.6057	38.6186	12.1140	25.3553

t-statistics in parentheses, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

The impact of the business environment on FDI might be lagged, so the proxy variable of the core explaining variable business environment is lagged by one period to obtain L.SCORE, which is included in the regression model to make robustness test. The regression results are shown in table 6

and table 7. The regression coefficients of the core explaining variable (L.SCORE) are positive for both the national sample and the east, central and western samples, indicating that improvements in the regional business environment effectively boost the amount of local FDI, which is consistent with the results of the previous benchmark regression, and therefore the results of the benchmark regression are robust. This is consistent with the empirical results of Zhang and Liu (2020), which analyzes the indicators and data for 123 economies around the world [6].

Table 7: Robustness Tests for Primary Indicators.

	(1) Full sample lnFDI	(2) Eastern Region lnFDI	(3) Central Region lnFDI	(4) Western Region lnFDI
L.GOV	-4.5328 (-1.08)	8.2710*** (2.67)	5.9788 (0.90)	-16.4196* (-1.71)
L.ECO	24.6738*** (4.56)	11.0114*** (2.96)	83.1273*** (2.92)	65.5473*** (3.88)
L.SOC	-10.2929 (-1.28)	-8.8825 (-1.42)	18.3812* (1.82)	76.8094** (2.67)
L.INF	12.1390** (2.49)	4.9990 (1.49)	23.6590*** (2.89)	1.5744 (0.17)
L.FIN	6.6558 (0.47)	-7.2257 (-0.83)	29.2048 (1.04)	73.2130* (1.74)
lnYLCD	-0.4889*** (-2.78)	-0.2543* (-1.95)	0.2144 (0.70)	-0.9601*** (-2.74)
lnBZZC	1.2337*** (4.56)	0.1205 (0.66)	-1.2311* (-1.90)	2.6447*** (4.05)
lnperGDP	1.1962*** (3.37)	1.7935*** (5.72)	-0.6699 (-0.94)	-1.1226* (-1.71)
_cons	-15.2753*** (-2.79)	-6.0176 (-1.32)	31.7458** (2.35)	-11.4178 (-1.27)
N	210	84	63	63
R <sup>2</sup>	0.5775	0.7006	0.5488	0.7875
F	34.3444	21.9367	8.2115	25.0151

t-statistics in parentheses, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

## 5. Conclusions

In this paper, we take the 2013-2020 data of 30 Chinese provinces (except Tibet) as the research samples. A business environment indicator system is constructed from five perspectives - political, economic, social, infrastructure and financial environments. The entropy value method is used to measure the business environment scores of the provinces, which then are used to construct a multiple regression model to empirically analyze the impact of business environment on FDI. We find that the business environment have significantly positive impact on FDI in both the full sample and the eastern, central and western regions, indicating that the improvement of China's business environment is indeed conducive to attracting foreign investment inflows.

Further analysis on the components of the business environment reveals that, overall, the economic and infrastructure environments can significantly increase FDI across the country. By region, in the eastern region, improvements in government, economic and infrastructure environments are more conducive to attracting FDI. In the central region, the government, economic, social and infrastructure environments are more effective in attracting FDI. In the western region, only the economic and social environments have a significant positive effect on FDI.

The policy recommendations are as follows:

First, China should improve investment facilitation and administrative service efficiency. China's provinces need to actively promote the facilitation of FDI, unify the management of foreign debt for domestic private and foreign enterprises, improve the ability of foreign enterprises to raise funds abroad and make the level of service more convenient. China should connect government services with big data and the internet to create a unified online government platform to improve the efficiency of government services. Besides, China need to accelerate the implementation of the full-range legal, financial and educational integration across provinces, so as to improve their investment facilitation and government service efficiency.

Second, China's provinces need to make every effort to optimize infrastructure protection and the deficiencies in infrastructure construction. China should continue to improve the operational efficiency



of water and road transport, improve infrastructure development in the central and western regions, focus on strengthening internet facilities in the western regions, increase internet penetration in each autonomous region, and strive to optimize the business environment. To meet China's infrastructure investment needs, China needs to strengthen its cooperation with international institutions such as the Asian Infrastructure Investment Bank to develop overseas markets.

Third, the social services system should be improved. China needs to ensure complete and adequate medical facilities as well as sufficient medical institutions and physician to ensure that the loan needs of enterprises are met. The provincial governments should continue to increase their financial investment in education and science and technology to provide a constant supply of human resources and technical support to optimize the business environment and attract FDI.

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