Does Institutional Embeddedness Promote Regional Enterprises’ Migration? An Empirical Analysis Based on the “Double Transfer” Strategy in Guangdong, China

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Abstract: Against the background of globalization, institutional embeddedness has become an important theoretical tool to understand the changes in regional economic patterns. This paper starts by discussing the theory of location choice of enterprises and then uses the statistical method of negative binomial regression to analyze the impact factors of enterprises’ transfer from the perspective of institutional embeddedness by taking Guangdong Province, China, as a case study area. It was found that informal institutional factors such as the same language, the same industry, and geographical proximity have significant positive effects on the transfer of regional enterprises. Formal institutions such as counterpart assistance are the core driving force of enterprise transfer, while traditional economic factors such as cost comparative advantage have no significant impact on the transfer of regional enterprises. This research shows that the transfer of regional enterprises is greatly influenced by the current regional institutional environment. Therefore, it is important for future policy makers to consider the regional institutional environment and to deepen regional institutional embeddedness to advance urban and regional development.

Keywords: institutional embeddedness; enterprise transfer; regional governance; Guangdong Province; China

1. Introduction

“Embeddedness” has become an effective theoretical tool to understand the process and mechanism of interactive coupling between transfer enterprises and host clusters, as well as global/cross-regional production networks [1]. In the past 20 years, with the revival of new urban regionalism [2–4], based on the theory of “embeddedness” [5], economic geography has ushered in the prosperity of cultural turn, relationship transfer, and institutional change and evolution, which has opened up a new world for understanding and revealing the broader institutional mechanism of regional economic activities [6–9]. Institutional embeddedness has become an important direction for understanding the transformation of social and economic development [10]. In 2008, the financial crisis triggered a new round of global industrial transfer, and the city region became the competitive subject of industrial transfer [11,12]. Decentralization has become an important force affecting the change of regional economic patterns, and regional enterprise transfer has become an important economic geographical phenomenon [13]. Meanwhile, diversified industrial policies and institutional arrangements have become an important competitive way for the new round of industrial restructuring [14–16], and the government also
plays an important role in promoting regional industrial transfer [17]. China is a big country with strong government capacity and significant regional differences. Focusing on industrial transfer and regional coordinated development, the Chinese government has issued a large number of industrial transfer policies, trying to promote the industrial transfer of developed regions to backward regions through administrative force, so as to promote the industrialization and economic growth of these backward regions. For example, in 2005, Guangdong Province issued opinions on the joint promotion of industrial transfer between the mountainous areas and the east and west wings of Guangdong province and the Pearl River Delta (for Trial Implementation), guiding the industrial transfer of the Pearl River Delta to the mountainous areas of East, West, and North Guangdong. Also, in 2005, Jiangsu Province issued opinions on accelerating the industrial transfer between the north and the south, guiding the industrial transfer from southern to northern Jiangsu. Additionally, in 2010, the State Council issued the guiding opinions of the State Council on undertaking industrial transfer in the central and western regions to guide the industrial transfer from the eastern coastal areas to the central areas. However, a large number of theoretical and empirical studies show that there is no large-scale transfer of policy expectations in China’s industry, and the regional development gap has not been significantly improved [18,19]. Why does industrial transfer lag behind theoretical expectations and policy expectations? How does industrial policy drive industrial transfer? These have become urgent questions that need to be answered both in theory and in reality.

The academic circle has carried on the thorough analysis on the reason for slow industry transfer in developed areas, which mainly includes four factors: first, labor flow offsets the comparative cost advantage of underdeveloped areas, and enterprises can obtain enough labor force, especially high-quality labor force, in developed areas. The second is the location stickiness caused by enterprise agglomeration. In the long-term development process, enterprises form path dependence. At the same time, enterprises can realize a self-enhancement mechanism through the scale effect and cyclic cumulative causal effect of clusters, so as to restrict the transfer of enterprises [20,21]. Unless a strong external shock occurs, path dependence cannot be changed [22,23]. The third is the differences of institutional environment factors, mainly including the difference between formal and informal institutional environments, such as government administrative efficiency, labor level, investment and tax policies, cultural and ideological concepts, etc. [24]. Fourth, the administrative division between the state and local governments directly issue policies to hinder the transfer of enterprises [1,25,26], particularly for many local governments so as to protect the region’s industries. In recent years, economic geographers have carried out in-depth research on enterprise transfer from the perspective of institutional embeddedness. They believe that enterprise transfer cannot be simplified as a process of cost selection but rather as a more extensive process of institutional embedding [27]. The institutional environment has also had huge impacts, such as labor price, market size, production network, innovation ability, spatial organization, etc., on the receiving place and the local embeddedness behavior of the transferred enterprises [28,29]. A great number of papers have discussed the influence mechanisms of institutional environmental factors such as social relation embeddedness [30–33], production network embeddedness [34,35], local complex [36], and national relation network [37] on enterprise transfer.

However, the relevant research focuses heavily on the enterprise, paying the most attention to the impact of the relationship embeddedness between the government and the enterprise, as well as between the enterprises on the enterprise transfer [29,38]. Few studies pay attention to the impact of institutional embeddedness between state and local government arrangements regarding firms’ migration [7,39]. Additionally, too much emphasis is often placed on top-down institutional arrangements, ignoring the informal institutional environmental differences between regions [40]. As such, a full understanding of industrial transfer under different local institutional environments has not yet been established. In addition, some studies have shown that the same dialect and various other historical and cultural factors can enhance the mutual trust of economic subjects, helping to break the market segmentation and to optimize the allocation of regional resources [41]. According to
this, the same dialect should enhance mutual trust between governments, improve the effectiveness of institutional embeddedness, and promote government cooperation and regional enterprise transfer. In fact, under the background of the fiscal decentralization system in China, the main reason for the failure of the policy arrangement of enterprise transfer (sluggish) is the intergovernmental competition caused by administrative segmentation [42,43]. The way in which to break the “institutional path dependence” of administrative division is directly related to the role of the government and the effect of industrial transfer [44,45]. As early as 2005, in order to get rid of the serious urban system isolation, the provincial government coordinated and implemented the industry transfer policy of Counterpart Assistance between cities. This policy established a one-to-one counterpart assistance mechanism between the Pearl River Delta and the cities in East, West, and North Guangdong and has driven the firms of the Pearl River Delta to East, West, and North Guangdong through goal-oriented policy arrangements. It also provides a rare sample to study the impact of institutional embeddedness on firms’ migration from the perspective of cooperation between governments. Does the one-to-one institutional arrangement between cities promote the transfer of regional industries? How can the institutional embeddedness between state and local governments be improved? This paper takes the industrial transfer of Guangdong Province as an example to demonstrate these.

To answer these questions, by crawling through the data of industrial land transactions in Guangdong Province from 2005 to June 2017, this paper obtains the inter-county enterprise transfer volume and the Guangdong dialect and river basin as the core explained variables, the counterpart assistance relationship as the formal institutional factor, and the industrial association and the proximity of counties as the informal institutional factor, supplemented by geographical distance and inter-county land Price differences, labor wage differences, and total investment differences as economic factors. Through the establishment of a negative binomial regression model, it is confirmed that institutional embeddedness has a significant positive effect on enterprise transfer. It is found that the same language, the same local industrial base, Counterpart Assistance, and geographical proximity can improve institutional embeddedness. This shows that institutional embeddedness can not only directly promote a firm’s migration but can also be affected by the specific regional history and culture and the local industrial base. Therefore, this conclusion suggests that it may be an important thinking direction for future industrial policy to fully consider the regional history and culture and the institutional embeddedness of the local industrial base.

2. Theoretical Background and Research Hypothesis

2.1. Theoretical Overview of Enterprise Transfer

There are many kinds of literature on enterprise transfer, and from the perspective of the influencing factors of enterprise transfer, three theories have been formed. These mainly include location theory that emphasizes external factors (such as market price), behavior theory that emphasizes internal factors (such as enterprise-scale), and institutionalism theory that emphasizes social and cultural systems (such as trust, reciprocity, and cooperation) [46].

The location theory tries to construct the model of “optimal location.” On the assumption of “rational person” and “complete information symmetry,” enterprises will choose the location that can obtain “maximum profit.” Therefore, the core concept of location theory is “profit space,” and the key of location selection is to calculate profit. In the case of complete information symmetry, the profit space of enterprise location is mainly affected by changes in external conditions, such as the availability of transportation infrastructure, “maximum profit theory,” and the external effect of agglomeration economy [47–50]. The location adjustment of enterprises is mainly affected by the thrust and pull caused by the cost change of external factors. However, the theoretical hypothesis of location theory has been questioned. In many cases, economic humans are not completely rational, and external factors such as the location’s natural geographical characteristics will also cause information asymmetry. In fact, people choose the “sub-optimal location” in many cases.
The behavioral approach tries to understand the decision-making process of entrepreneurs and pay attention to the specific decision-making process of enterprise location adjustment [46]. According to the theory, location selection is an important part of enterprise strategy or long-term investment decision making, while the decision-making process of entrepreneurs and enterprise organizations is complex, uncertain, and subjective [51]. It emphasizes the existence of path dependence and transfers cost in location adjustment, which will reduce the willingness of enterprises to transfer. Even if transferred, it tends to be closed because it is more familiar with the local environment. Cox believes that the local specific environment creates specific relationships, which are difficult to reproduce in new places or need to be recreated at a great cost [52]. The theoretical basis of behavior theory is the limitation of ability. As Simon pointed out, due to the limitation of personal ability, decision-makers cannot get complete information, which leads to a “satisfactory decision” rather than an “optimal decision” [53, 54]. Behaviorism theory provides a theoretical basis for revealing the internal mechanism of enterprise transfer, but it and location theory both put the decision-making behavior of enterprises in a static environment, overemphasizing the ability of enterprises themselves and ignoring the dynamic changes of economic activities [55]. In fact, the decision-making behavior of entrepreneurs usually changes with the change in social environment.

The institutionalist approach considers that economic activities are embedded in a specific socio-cultural context [5, 56] and are therefore influenced by the social institutional environment [57]. An institutional theory emphasizes the relationship between enterprises in a specific environment rather than the behavior of individual enterprises and emphasizes the impact of formal and informal networks on enterprise behavior [17]. The connection between enterprises includes both the forward and backward connection between goods and commodities and the informal network with entrepreneurs, customers, public institutions, etc. [14]. Enterprise transfer is decision making in a dynamic environment. It should consider both the behavior of enterprises and the social and cultural connotation embedded in these behaviors. In this case, the enterprise transfer behavior the result of the enterprise’s investment strategy and of negotiation and consultation between the enterprise and suppliers, government departments, trade unions, and other institutions on key elements in the production process of enterprises such as price, wages, taxes, subsidies, infrastructure, etc. [17]. Here, the company’s investment strategy determines location behavior. No matter the “external factors,” such as market factors or the broader institutional environment, they are all the reorganization of enterprise function structure under the market regulation and state intervention. [46].

Institutionalism holds that enterprise transfer is an adaptive adjustment of the dynamic changes of the external institutional environment of the enterprise, not a simple cost decision-making process but a process of mutual embeddedness of regional institutional environment. These institutional environments include familiar political environment, production network, social relations, and opportunity channels [46, 58]. Enterprise transfer is not only a process of “de-embedding” from the current regional environment but also a process of “embedding” with the target region. Therefore, the theory emphasizes the mutual embeddedness of the institutional environment between the transfer out a place and the transfer in place. If the transfer in place has the same historical culture, government capacity, investment environment and industrial foundation as the transfer out place, it can reduce the communication cost of the enterprise, provide complete production supporting facilities, enhance the investment confidence of the enterprise [59], and help the transferring enterprise to “embed” into the local society in the environment, even the “snowball” effect is formed to induce the transfer of cluster enterprises.

2.2. Concept Definition

The so-called embeddedness refers to that economic action, action result and system are all affected by the individual relationship of actors and the overall network structure of the relationship. Since Granovetter proposed “embeddedness” as the research program of new economic sociology [57], “embeddedness” has gradually become an important theoretical tool to understand social and
economic behavior [1]. However, Nee et al. pointed out that Granovetter’s “embeddedness” mainly refers to “network embeddedness,” ignoring the role of institutional factors, so he proposed that “institutional embeddedness” is an important supplementary type of “network embeddedness” [60]. However, there are many controversies about the concept of institution, and so far, there is no clear definition of institution embeddedness.

Based on North’s definition of an institution, this paper divides the institution into a formal institutions and informal institutions [61]. The formal institution refers to a series of policies and rules that people consciously create, including laws, political rules, economic systems, articles of association, business contracts, etc. The informal institution is mainly composed of customs, practices, personal codes of conduct and social ethics, and the spontaneous traditions, customs, concepts, ideologies, etc. in society that belong to the informal institution. In addition, it needs to be emphasized that the industrial base between the two places is regarded as an informal institution in this paper because a specific industry will shape a specific production connection, which is conducive to the formation of cognitive proximity, institutional proximity, organizational proximity, and social proximity. According to the division of institution and the new institutionalism’s view that economic activities are embedded in the social institutional environment, institution embeddedness is defined as the formation and interaction process of rules of economic activities from the standpoint of structuralism. It can be divided into three categories. The first category is the embeddedness of formal institutions, which mainly refers to the interaction of formal institutional arrangements between different levels of government, especially the policy coordination between different levels of power subjects. The second is the embeddedness of a formal institution and informal institution, which mainly refers to the interaction between a formal institution and the informal institution, especially that informal institution will affect the effect of formal institution. Third is the embeddedness of informal institutions, which mainly refers to the integration of informal institutions, including cultural and customary identity and the interrelation in the production process. Based on the study of macro-level regional economic activities, the institutional embeddedness in this paper mainly refers to the first two—namely, the policy coordination of different levels of power organs and the impact of informal institutions such as cultural customs on industrial policy.

In addition, the concept of enterprise transfer in this paper refers to the location change of enterprises, including both the overall transfer of enterprises and the partial transfer of enterprises (such as production transfer). Therefore, as long as the enterprise has the willingness to invest in a distant territory, whether it is the overall transfer or the production transfer, it is regarded as the enterprise transfer.

2.3. Research Hypothesis

2.3.1. The Same Dialect is Conducive to the Embeddedness of Formal Institutions and the Transfer of Regional Enterprises.

The long-standing cultural heritage of an area shapes people’s specific concept cognition and behavior habits, as well as the economic landscape, while the multi-cultural convergence inevitably produces cultural conflict, which affects the formation and evolution of regional economic landscapes in China. Since the 1990s, with the acceleration of globalization and the revival of new city regionalism, the research based on the national scale has gradually retreated to the local scale, while research on economic and social activities from the local scale has been of great concern. Furthermore, this acceleration promotes the upsurge of research on regional cultural differences and local economic development. With the rise of new institutional economics, people’s attention to the evolution process of local economic development and specific historical and cultural factors has been generally recognized. In the field of economics, a large amount of literature has studied the relationships between language and economic growth. Those within this field believe that language is the influence channel of human capital and psychological distance [62], which affects people’s communication ability, identity, and responsibility, and then affects economic efficiency. Empirical research shows
that the same language within the destination can promote the economic income of immigrants [63], while dialect diversity has a significant negative impact on economic growth [64].

In the field of economic geography, we focus on the impact of multi-dimensional proximity on industrial clusters [65], among which cognitive proximity holds that language has a specific context, and the same language can strengthen the informal connection within the cluster, improve the information acquisition ability [66] and knowledge spillover of enterprises [67], and promote the innovation of the cluster. In view of the internal mechanism of informal connection for industrial agglomeration, academia has gradually used it to explain the lagging phenomenon of the industrial transfer process. It is believed that due to the long-term formal and informal network formed within the industrial cluster, a specific institutional environment has been formed, which makes enterprises reluctant to leave their existing production location. However, some studies show that the common language background can bring a positive role of convenient communication and communication lubrication for the enterprises of the home country in the operation of the overseas market, so as to promote the transfer of enterprises [36,68]. However, whether language plays an important role in the transfer of domestic interregional enterprises remains to be further verified because, unlike overseas investment, countries often have a common formal system to provide trust, communication, and security mechanisms. Comparatively speaking, the impact of informal systems such as language on the investment decision-making behavior of enterprises in the region may not be as obvious as an overseas investment. Based on this, we propose Hypothesis 1: The same language in both counties can help to break the administrative division, weaken the barriers of distance, and promote the transfer of regional enterprises.

2.3.2. The Same Industrial Base Can Enhance the Institution’s Embeddedness and Promote the Transfer of Regional Enterprises.

According to the definition of an institution in this paper, organizational identity is regarded as a part of institution embeddedness. Therefore, the same industrial base means that the two places have a common institutional environment. In recent years, driven by the new institutional economic geography, “proximity” has gradually become an important research direction of economic geography to explain the innovation of industrial clusters. Its theoretical core is geographical proximity can enhance the social connection between the organizations within the cluster, as well as promote the flow of tacit knowledge and innovation output, so as to promote enterprise agglomeration. With the deepening of research, it is found that geographical proximity is a dominant factor in the establishment of many social networks. The deeper organizational proximity, institutional proximity, cognitive proximity, social proximity, and other forms of multi-dimensional proximity are the root causes of regional internal innovation cooperation. Both the French neighborhood school and the Dutch Ulrich school have established a multi-dimensional neighborhood analysis framework. Relevant empirical studies show that geographical proximity can promote organizational proximity, institutional proximity, cognitive proximity, and social proximity, as well as promote communication and cooperation between regional subjects, especially cluster innovation [69]. Based on this, with Krugman’s view that enterprise agglomeration is regarded as enterprise transfer [70], this paper puts forward the following assumptions: on the one hand, geographical proximity is more conducive to the same informal institutional environment, so as to enhance regional institutional embeddedness and promote the transfer of regional enterprises; on the other hand, areas with a common industrial base are more conducive to the formation of a common industrial organization, and further, promote the exchange and cooperation of enterprises by organizing proximity. Thus, Hypothesis 2 is proposed: The same industrial base can promote the embeddedness of regional institutions and the transfer of regional enterprises.
3. Research Area, Data Source, and Methodology

3.1. Research Area

The research area of this paper is the administrative units at the county level of Guangdong Province. There were two main reasons for choosing the enterprise transfer in Guangdong Province, China as a case. First, Guangdong Province issued the “double transfer” strategy after the financial crisis in 2008, and was the first province in China to explore the cooperation and co-construction of Counterpart Assistance industries, and has a strong representative significance for exploring the institutional arrangement to alleviate the regional imbalance. Second, Guangdong Province is a regional unit with multi-dialects and multi-basins, and its internal difference pattern is significant. It is an ideal place to study the transfer of historical and cultural factors to enterprises. Guangdong Province has always been famous for its innovation and reform spirit of “dare to be the first in the world,” and it is also at the forefront of China’s economic development. Many institutional reforms are conducted in Guangdong as the experimental site to test its “double transfer” institutional innovation experiment, explore its role in enterprise transfer, and investigate the role of informal institutional factors such as more extensive language on enterprise transfer. Due to the adjustment of administrative divisions between 2005 and 2017, this paper adopts a “piecemeal” method, consulting the website of the local government, merging the newly established administrative areas into the original administrative units, and regarding Dongguan City and Zhongshan City as a county unit; finally, 122 county units were obtained (see Figure 1).

![Map of Guangdong Province](image)

**Figure 1.** The study area of Guangdong Province, China.

The so-called “double transfer strategy” refers to a major policy proposed by Guangdong Province in 2008 to cope with the financial crisis and promote the coordinated economic development of the whole province. Its core meaning is to achieve the coordinated economic development of the whole province
by strengthening the economic ties between the Pearl River Delta region and the eastern, western and northern regions of Guangdong Province. The so-called “double transfer” refers to industrial transfer and labor transfer. Specifically, industrial transfer refers to the transfer of labor-intensive industries in the Pearl River Delta region to the eastern, western and northern regions of Guangdong Province, to improve the level of industrialization in these regions. Labor transfer refers to the promotion of the transfer of labor force in the province to the Pearl River Delta region and the acceleration of the employment of rural labor force nearby. The former is to speed up the labor force transfer power. Quality training provides high skilled talents for the Pearl River Delta. At the same time, the latter cooperates with industrial transfer to provide the corresponding labor force for industrial transfer, further accelerate industrial agglomeration, and improve the level of industrialization and urbanization. Guangdong provincial government intends to improve the optimal allocation of production factors, promote industrial transformation and upgrading, and achieve regional coordinated development through this two-way flow and complementarity.

As early as 2002, the government of Guangdong Province issued the opinions on the implementation of counterpart poverty alleviation between the economically developed cities in the Pearl River Delta and the mountainous counties, which explicitly required the developed cities in the Pearl River Delta to establish counterpart assistance relationship with the underdeveloped areas in East, West and North Guangdong and raised counterpart assistance to a formal institutional arrangement. In 2005, opinions on jointly promoting industrial transfer between the mountainous areas and the east and west wings of the province and the Pearl River Delta (Trial) were issued. In 2006, opinions on strengthening the environmental protection work in the industrial transfer between the mountainous areas and the east and west wings of our province and the Pearl River Delta (Trial) were issued. In 2008, the “decision on promoting industrial transfer and labor transfer” was issued; in 2010, the “several opinions on further promoting the industrial transfer”; in 2011, the “guiding opinions on further promoting the cooperation and co-construction of provincial industrial transfer parks”; in 2013, the “decision on further promoting the revitalization and development of the eastern and northwestern regions of Guangdong” and the “opinions on further promoting the industrial transfer work” adjusted the overall counterpart assistance relationship between the Pearl River Delta region and the eastern, western and northern regions of Guangdong. In 2016, the opinions on deepening the overall counterpart assistance work between the Pearl River Delta region and the eastern, western, and northern regions of Guangdong was issued. Driven by a series of production policies, “Counterpart Assistance” has gradually become a system arrangement to promote the transfer of regional enterprises.

3.2. Data Source and Methodology

3.2.1. Model Construction

The dependent variable selected in this paper is the transferring enterprise between county couples, which is a non-negative integer discrete variable. It does not conform to the characteristics of normal or continuous distribution. The explanatory variables include both continuous and binary variables. According to the classical statistical theory, it can be seen that they conform to the data distribution characteristics of the Poisson regression model. Based on this, this paper first used a Poisson regression model to analyze the relationship between the dependent and independent variables and found that the core explanatory variables can have a significant impact on the interpreted variables. However, the results have a trend of being overly discrete; the ratio of sample variance to mathematical expectation is 7.078, which is far greater than 1 and thus does not meet the premise that the Poisson distribution variance is equal to the expectation, indicating that the Poisson regression model may be affected by factors that are too large. Therefore, in this paper, we further used the
negative binomial regression model to detect the impact of various factors on enterprise transfer. The model is as follows:

\[
\ln(QY) = \alpha + \beta_1 FY + \beta_2 BF + \beta_3 CY + \beta_4 XL + \beta_5 JL + \gamma X_{ijc} + \mu Z_i + \epsilon_{ijc}
\]  

(1)

The coefficient of dialect virtual variable D reflects the influence of dialect on the transfer of enterprises between two counties. \( \beta \) is significantly positive, which means that dialect promotes the transfer of enterprises between districts and counties. Its economic meaning is that other factors are agreed to remain unchanged. Compared with two counties with different dialects, the transfer degree of enterprises between two counties with the same dialect is stronger, on average. The degree of metastasis increased by \( \beta \) times.

In this paper, the negative binomial regression and statistical inferences were made by using the MASS and Car package in R. The maximum likelihood estimation method and the AIC method were used to test the model results, and the stepwise regression method was used to exclude the multiple commonalities of independent variables. According to the basic principle of negative binomial regression, the model with a larger maximum likelihood index, a smaller AIC, and a smaller sample variance than the mathematical expectation (less than 1) was selected as the final model.

3.2.2. Variable Selection

According to the classic literature of firms' relocation, the number of firms that moved cross-country in Guangdong Province from 2005 to 2017 was selected as the dependent variable. Based on the county units and without considering the direction of the enterprise transfer, the data set of inter-county enterprises was constructed according to the behavior of enterprise land purchase. That is to say if M enterprises are transferred from district A to B, and N enterprises are transferred from District B to A, then the enterprise transfer volume between county A and B is defined as M + N. The reason why we did not consider the direction of enterprise transfer is that the purpose of this paper was to study the influence of the regional institutional environment on enterprise transfer. If county A and county B have the same institutional environment, whether firms move from A to B or from B to A, the intensity of enterprise migration can be considered to be within the same institutional environment.

The reason why we chose the inter-county enterprise transfer as the explained variable is that there are different languages, different basins, and different industrial bases between the districts and counties so that the institutional embeddedness analysis can be carried out on the scale of districts and counties. If we analyze it from the market level, we will ignore the objective fact that there are differences in informal institutions within the market, but if we analyze it from a smaller town and street scale, we cannot fully show the differences between the internal informal institutions. Therefore, in this paper, the enterprise transfer between districts and counties is selected as the dependent variable.

According to the goal to study the impact of institutional embeddedness on the transfer of regional enterprises, this paper made full use of the characteristics of the non-coincidence of the dialect county boundary, selecting language as an alternative variable of the informal institutional environment, such as local history and culture, and selecting whether the two cities have established a one-to-one counterpart relationship as a variable of formal institutional arrangement. At the same time, according to the facts regarding the existence of administrative segmentation between cities, the enterprise transfer between different counties in the same city is regarded as a one-to-one counterpart assistance relationship. Additionally, in order to verify the impact of language on inter-county enterprise transfer, this paper selected watershed as the alternative variable to language to test the robustness of the language model. According to the theoretical basis of institutionalism in economic geography, the local industrial base has an important impact on the transfer of enterprises; enterprises often transfer to places with the same industrial base.

Therefore, this paper chose whether there is the same leading industry between the two counties as the explanatory variable, and specifically compared the first three leading industries of the two
counties. If there was more than one same leading industry, it was considered that the two counties have a common industrial base. In addition, the neighborhood school theorizes that geographical proximity often has a common institutional environment, which can enhance the trust of the two places and can promote the transfer of enterprises. We constructed a “Queen” neighborhood relationship based on whether the two counties share the same edge or common point to explore whether geographical proximity can promote the transfer of regional enterprises. In addition, according to the cost-profit rule of neoclassical economics, the Euclidean distance between the two counties was selected as the control variable of traffic cost; the average price difference of industrial land between the two counties was selected as the transfer cost of transferring enterprises; the total investment difference between the two counties was selected as the infrastructure construction cost of enterprise transfer; and the average labor wage difference between the two counties was selected as the payment for the transfer of enterprises. The main variables are described in Table 1.

Table 1. Selection and description of variables.

| Serial Number | Variables                        | Variable Description                                                                 |
|---------------|----------------------------------|---------------------------------------------------------------------------------------|
| 1             | Inter-County Enterprise Transfers (QY) | Number of companies transferred between the two counties                              |
| 2             | Same language (FY)               | Both counties are in the same dialect area                                             |
| 3             | Watershed (LY)                   | Both counties are in the same watershed                                               |
| 4             | Counterpart help (BF)            | The policy stipulates that all counties in the relevant cities should be supported by counterparts |
| 5             | Industry association (CY)        | The same leading industries exist in the two counties                                  |
| 6             | Adjacent (XL)                    | The two counties are within geographical proximity                                     |
| 7             | Distance (JL)                    | The distance between the geographic centers of the two counties                       |
| 8             | Average industrial land price difference (JGC) | The average industrial land price difference between the two counties in the past ten years |
| 9             | Difference in average total investment (TZC) | The difference between the average investment of the two counties in the past ten years |
| 10            | Average labor wage difference (GZC) | The difference between the average wages of the two counties in the past three years |

3.2.3. Data Source

Based on regarding the land purchase behavior of enterprises as the external investment of enterprises, this paper attempts to build an enterprise transfer database based on enterprises’ land purchase behavior. This work is very difficult, but it is an important method innovation and attempt to study the transfer of Chinese enterprises. There are three main reasons why the land purchase behavior of enterprises is used to represent the enterprise transfer. First, it is difficult to obtain continuous and complete transfer enterprise information due to the lack of a complete enterprise transfer database in China. Second, using land transaction behavior of enterprises, it can be objectively determined that the enterprises have made location adjustment, whether as a whole or in part, because on the enterprises need to pay a considerable cost to purchase land, which can be considered as an important part of the decision-making of location adjustment behavior, and because of the land purchase behavior of enterprises, it can be considered that the enterprises have the following characteristics. The potential of the “root” transfer site is more stable than that of the leased plant. Although a large number of enterprises will choose their location through leasing, leasing enterprises generally have the characteristics of short life cycle, which is more a kind of speculation and cannot reflect the real motivation of enterprise transfer. Finally, and most importantly, through land transaction information, we can get the spatial information of enterprise transfer, so that we can get the core explained variable—the number of transfer enterprises among each district and county group. This is the basis of this study. Compared with the change of output value of a certain industry, the core explained variables in this paper are more specific, and the source and destination of enterprise transfer can be known, so that the research can be carried out from the institutional environment differences between the transfer locations.
The specific technical process of building enterprise transfer spatial database based on enterprise land purchase behavior is as follows. The first choice was to use the web crawler to obtain the two fields of land acquisition enterprise name and land acquisition location, respectively, to obtain the Baidu (Beijing Baidu Netcom Science Technology Co., Ltd. Beijing, China) coordinates of the two fields and then to use MATLAB (The MathWorks, Inc., Beijing, China) to correct the Mars coordinates to determine the geographical coordinates. Then, these data were projected to Xi’an 1980 in ArcGIS 10.5 (Esri China Information Technology Co. Ltd, Beijing, China). By using the spatial analysis tool of ArcGIS 10.5, the spatial location points of move out enterprises and move in enterprises were intersected with the base map of counties in Guangdong Province, and the move out and move in counties of each transfer enterprise were obtained. On this basis, according to the two fields of transfer out place and transfer in place, the number of transfer enterprises in the same transfer out/transfer in area and county pair were calculated to obtain the transfer amount of enterprises in each county pair. Finally, since the number of transferred enterprises is a positive integer, we chose at least one transferred enterprise in each county pair as the sample, with a total of 817 effective county pairs and 3763 transferred enterprises.

The language data mainly came from the “1986 county dialect ownership data of China,” and we extracted the county unit dialect ownership data of Guangdong Province as the dialect data set of this study [71]. The river basin data mainly came from the list of provincial-, city-, and county-level rivers and lakes, which is published on the official website of the Guangdong Provincial Department of Water Resources. The river basins of all counties in Guangdong Province were extracted. For Shanwei and Yangjiang, which do not enter the management of the five major river basins, their counties were classified as their own by referring to the main river basins at the prefecture and city levels. The data of the counterpart assistance relationship mainly came from opinions on jointly promoting industrial transfer in mountainous areas and the east and west wings of our province and the Pearl River Delta (Trial) (YF [2005] No. 22); on adjusting the overall counterpart assistance relationship between the Pearl River Delta and East, West, and North Guangdong (2013); and on deepening the overall counterpart between the Pearl River Delta and East, West, and North Guangdong opinions on the work of assistance (2016). According to the relationship of Counterpart Assistance in the corresponding city, the county in the corresponding city was defined as the existence of a counterpart assistance relationship between the counties (see Table 2 for specific counterpart assistance relationship). At the same time, because there are dialect differences among counties in the same city, the counties in the same city were defined as counterpart assistance relationships. Based on the industry association data between counties, by calculating the top three leading industry categories in each county, according to whether the leading industry categories are repeated (at least one same leading industry appears at the same time), it was judged that there is industry association between the two districts and counties, otherwise there is no industry association.

Table 2. Pearl River Delta counterparts to help the prefectures and cities.

| Helping City | Assisted City | Helping City | Assisted City |
|--------------|--------------|--------------|--------------|
| Guangzhou    | Meizhou/Zhanjiang/Qingyuan | Shenzhen     | Shanwei/Chaozhou/Heyuan |
| Zhuhai       | Yangjiang/Maoming | Foshan       | Qingyuan/Yunfu |
| Dongguan     | Shaoguan/Jieyang | Zhongshan    | Heyuan/Chaozhou |

The economic data of counties used in this paper came from the statistical yearbook of Guangdong Province. Through the spatial analysis tool of ArcGIS 10.5, the “Queen neighborhood” relationship of “common edge or common point” was constructed, and the adjacency data of 122 districts and counties in the province were obtained. Furthermore, the distance between the two counties was calculated as the variable of traffic cost. The average land price of each county from 2005 to 2017 was calculated by using the Geostatistical analysis tool of GIS10.5. By querying the statistical yearbooks of Guangdong Province from 2005 to 2017, the average total investment and the average labor wage over the years
were calculated. Finally, these data were matched with the enterprise transfer in 817 county pairs, and then the average land price difference in each matched county pair was calculated. The same method was used to calculate the average gross investment difference and the average labor wage difference. The absolute value of the difference was taken for model analysis. Descriptive statistics of all variables are presented in Table 3. In order to test the multicollinearity of variables, Pearson-Spearman correlation test was carried out in Table 4.

### Table 3. Descriptive statistics of research sample data.

|                          | Dialect (FY) | Basin (LY) | Counterpart Assistance (BF) |
|--------------------------|-------------|------------|-----------------------------|
| County pairs             | Yes (1)     | No (0)     | Yes (1)                     |
| enterprise               | 310         | 507        | 285                         |
| enterprises              | 2203        | 1560       | 2322                        |
| Industry Association (CY)| Yes (1)     | No (0)     | Yes (1)                     |
| County pairs             | 418         | 399        | 144                         |
| enterprises              | 2392        | 1371       | 1500                        |
| Distance (m)(JL)         | Minimum     | 2374.11    | 0.143                       |
| Land Price Gap (Yuan)(JGC)| average    | 16,215.69  | 0.6843                      |
| Total Investment Balance (1 billion Yuan)(TZC) | maximum | 708,374.94 | 16,215.69 | 1086.99 | 5136 |
| Average Wage Difference (Yuan)(GZC) | minimum | 2374.11 | 0.143 | 0.6843 | 0 |
|                          | maximum     | 708,374.94 | 16,215.69 | 1086.99 | 5136 |

### Table 4. Correlation test of independent variables.

|                | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| QY             | 1.00|     |     |     |     |     |     |     |     |      |
| FY             | 0.25| 1.00|     |     |     |     |     |     |     |      |
| LY             | 0.33| 0.32| 1.00|     |     |     |     |     |     |      |
| BF             | 0.34| 0.30| 0.53| 1.00|     |     |     |     |     |      |
| CY             | 0.15| 0.03| 0.17| 0.12| 1.00|     |     |     |     |      |
| JL             | -0.32| -0.57| -0.55| -0.36| -0.11| -0.47| 1.00|     |     |      |
| JGC            | -0.03| 0.02| -0.06| -0.02| 0.03| -0.09| 0.03| 1.00|     |      |
| TZC            | -0.14| -0.23| -0.22| -0.28| 0.03| -0.24| 0.23| 0.00| 1.00|      |
| GZC            | -0.21| -0.29| -0.36| -0.29| -0.10| -0.34| 0.32| 0.40| 0.18| 1.00 |

### 4. Results

Table 4 shows the results of the equation (1). The regression results show that the same language, counterpart assistance, common industry foundation, and geographical proximity play a significant positive role in firm migration. This conclusion is consistent with the research concluded that the formal and informal institutional arrangements, such as investment policy \[72,73\], official exchange \[74\], administrative approval reform \[29\], and social relations embeddedness, promote the entry of local enterprises. Especially, the counterpart assistance shows the most significant effect in firm migration, which highlights that formal institutional arrangements play a crucial role in the transfer of enterprises in Guangdong Province. Besides, the distance between counties plays an obvious negative role, which is consistent with the relevant conclusions of traffic cost factors. However, the impact of the land price difference, total investment difference, and the labor cost difference between counties on enterprise transfer are not obvious. This conclusion is not consistent with the neoclassical theory of enterprise transfer guided by cost-saving, but it is internally consistent with the concept of “location stickiness” in economic sociology. Furthermore, it shows that enterprise transfer in Guangdong Province is mainly affected by regional institutional environment factors and the cost is not the main factor of enterprise transfer. The above results are significant when the ratio of sample variance to mathematical expectation is less than 1, which shows that the model results meet the requirements of negative binomial regression, and further proves the rationality of the regression equation setting.
4.1. Informal Institution Embeddedness Can Promote the Transfer of Regional Enterprises

For the informal institutional factor of language, $\beta_1$ was found to be positive, indicating that the same language has a steady role in promoting the transfer of enterprises between districts and counties. Model 1 in Table 4 reports the results of only considering the influence of dialect on regional enterprise transfer. It can be seen that the influence coefficient of the same language is 0.837. From model 2 to model 3, after considering the formal institutional factors of whether the two districts and counties have a counterpart assistance relationship or industrial association, the influence coefficient of language dropped to 0.5 but was still significant at a 1% confidence level. In model 4, the influence coefficient of language identity is 0.389, which is still significant at a 1% confidence level. In models 5 and 6, the economic cost factors of the distance between districts and counties and the average price difference of industrial land, the total investment difference, and the average wage difference were added, respectively, and the coefficients of the same language are 0.132 and 0.131, respectively, which shows that the same language still plays a positive role in the transfer of regional enterprises, but it is not significant after the distance factor is added. This shows that, on the one hand, the informal system such as the same language is used, and on the other hand, the transfer of enterprises in Guangdong Province has a significant distance blocking mechanism, which conforms to the general characteristics of enterprises moving nearby. In order to further verify the positive impact of the same language on the transfer of enterprises between counties, according to the objective fact that human civilization generally originated in a specific watershed, this paper used the same watershed as an alternative variable of the same language to test the robustness of the model results. The results are shown in Table 5. The results of models 7–10 are similar to those of models 1 and 4 in Table 6, indicating that the same watershed has a significant positive effect on regional enterprise transfer. The regression results of the distance between counties, the land price difference between counties, total investment difference between counties, average labor wage difference, and other control variables were added into models 11 and 12, respectively. The results show that the same watershed still has a significant positive effect. The regression coefficient $\beta_1$ is 0.221 and 0.227, respectively, and is significant at the 5% confidence level. The results show that the same drainage basin has a stable effect in promoting the transfer of enterprises across counties. It is further proved that the same language has a steady positive effect on the transfer of enterprises across counties.

In addition, having a common industrial base can also significantly promote the transfer of enterprises between districts and counties. The results of models 3–6 in Table 4 and models 9–12 in Table 5 show that the institutional environment with the same industrial base can promote the transfer of enterprises between districts and counties, and the regression coefficient $\beta_3$ is stable above 0.2 and is significantly positive at the 5% confidence level.

The above results strongly prove that the informal system of the same language and the same industrial base have a steady positive effect on the transfer of enterprises, which verifies Hypothesis 1, consistent with the theory of institutionalism in economic geography that historical and cultural factors play a key role in the transfer of enterprises and other economic behaviors. This result shows the necessity and rationality of understanding economic behavior from a broader institutional environment, it enriches the theoretical understanding of enterprise migration, and it provides evidence for revealing the institutional factors of enterprise transfer. In fact, in the process of enterprise transfer in Guangdong Province, the same language not only improves the level of communication between economic actors but, more importantly, the same language and the same industrial base mean a common informal institutional environment, which can stimulate the power of enterprise transfer.
Table 5. The impact of dialects on the transfer of enterprises between districts and counties.

| Dependent Variables: | FY | BF | CY | XL | JL | JGC | TZC | GZC | Constant | Observations | Log Likelihood | Akaike Inf. Crit. | Dev/df.residual |
|----------------------|--|--|--|--|--|--|--|--|----------|-------------|---------------|----------------|-----------------|-----------------|
| (1) | 0.837 *** | 0.936 *** | 0.328 *** | 0.601 *** | −1.809 *** | −0.235 | −0.102 | −0.054 | 1.124 *** | 817 | −2090.278 | 4184.555 | 0.906119 |
| (2) | 0.496 *** | 0.876 *** | 0.291 *** | 0.400 *** | −1.787 *** | (0.326) | (0.227) | (0.212) | 0.834 *** | 817 | −2029.767 | 4065.798 | 0.75856 |
| (3) | 0.500 *** | 0.690 *** | 0.231 *** | 0.390 *** | −1.726 *** | (0.227) | (0.211) | (0.212) | 0.673 *** | 817 | −2021.568 | 4051.136 | 0.73932 |
| (4) | 0.389 *** | 0.597 *** | 0.231 *** | 0.369 *** | −1.726 *** | (0.227) | (0.211) | (0.212) | 0.671 *** | 817 | −2006.248 | 4022.495 | 0.702496 |
| (5) | 0.132 | 0.588 *** | 0.231 *** | 0.369 *** | −1.726 *** | (0.227) | (0.211) | (0.212) | 1.246 *** | 817 | −1989.464 | 3990.929 | 0.661974 |
| (6) | 0.131 | 0.588 *** | 0.231 *** | 0.369 *** | −1.726 *** | (0.227) | (0.211) | (0.212) | 1.350 *** | 817 | −1988.987 | 3997.974 | 0.664072 |

Note: * p < 0.1, ** p < 0.05, *** p < 0.01.

Table 6. Impact of basin on transfer of enterprises between districts and counties.

| Dependent Variables: | LY | BF | CY | XL | JL | JGC | TZC | GZC | Constant | Observations | Log Likelihood | Akaike Inf. Crit. | Dev/df.residual |
|----------------------|--|--|--|--|--|--|--|--|----------|-------------|---------------|----------------|-----------------|-----------------|
| (7) | 1.101 *** | 0.707 *** | 0.259 *** | 0.588 *** | −1.766 *** | −0.231 | −0.167 | −0.085 | 0.865 *** | 817 | −2049.722 | 4103.433 | 0.806595 |
| (8) | 0.662 *** | 0.695 *** | 0.232 *** | 0.384 *** | −1.726 *** | (0.227) | (0.211) | (0.212) | 0.616 *** | 817 | −2025.399 | 4056.798 | 0.747825 |
| (9) | 0.616 *** | 0.569 *** | 0.232 *** | 0.384 *** | −1.726 *** | (0.227) | (0.211) | (0.212) | 0.468 *** | 817 | −2020.354 | 4051.136 | 0.736334 |
| (10) | 0.468 *** | 0.531 *** | 0.207 ** | 0.369 *** | −1.726 *** | (0.227) | (0.211) | (0.212) | 0.221 ** | 817 | −2006.248 | 4022.495 | 0.701373 |
| (11) | 0.221 ** | 0.515 *** | 0.205 ** | 0.369 *** | −1.726 *** | (0.227) | (0.211) | (0.212) | 0.227 ** | 817 | −1989.464 | 3990.929 | 0.659452 |
| (12) | 0.227 ** | 0.515 *** | 0.205 ** | 0.369 *** | −1.726 *** | (0.227) | (0.211) | (0.212) | 0.227 ** | 817 | −1988.987 | 3997.974 | 0.661304 |

Note: * p < 0.1, ** p < 0.05, *** p < 0.01.
4.2. The Embeddedness of Formal Institution Is the Core Power of Enterprise Transfer

Formal Institutional embeddedness of Counterpart Assistance is the core force in promoting the migration of regional enterprises in Guangdong Province. The results of models 2–6 in Table 4 and models 8–12 in Table 5 show that the formal institutional embeddedness of Counterpart Assistance and institutional environments with a common industrial base has significant positive effects on the transfer of enterprises between counties. The coefficient $\beta_2$ of the counterpart assistance relationship is stable at above 0.5, and the coefficient value is the largest among all independent variables and is significantly positive at the 1% confidence level, indicating that counterpart assistance plays a decisive role in the transfer of enterprises across counties in Guangdong Province.

The above results prove that formal institution embeddedness has an important impact on enterprise transfer. These results verify Hypothesis 2, which is in line with the theoretical core of institutional factors affecting economic behavior in the institutional turn of economic geography, especially in line with the new institutionalism’s emphasis on the informal institutional environment. Of course, it needs to be emphasized that the results of this study highlight the important influence of formal institutional arrangements on promoting the transfer of enterprises and reshaping the regional economic pattern, and further illustrate that the government plays an important role in the process of enterprise transfer, especially the upper-level government co-ordinates the institutional arrangements of the lower-level government, which can provide common goals for governments at all levels and can improve the implementation of policies. This is consistent with Mac Leod’s view that criticizing institutionalism overemphasizes the informal institutional environment and ignores the impact of formal institutional arrangements such as state policy on economic behavior. China is a country with an obvious power hierarchy structure. On the one hand, this hierarchy power structure can set up a common development goal and promote regional coordinated development; on the other hand, an in-depth analysis of formal institutional arrangements is essential to explain economic behaviors such as enterprise migration.

In fact, the migration of enterprises in Guangdong Province is promoted by the government. As early as 2005, the Guangdong provincial government started to establish a counterpart assistance relationship between Pearl River Delta cities and eastern, western, and northern Guangdong cities. Driven by the financial crisis in 2008, the Guangdong provincial government issued the development strategy of “double transfer” and promoted enterprise transfer as an important part of the counterpart assistance relationship. In order to promote the transfer of enterprises in the Pearl River Delta to the eastern, western, and northern regions of Guangdong Province, the Guangdong provincial government planned 34 industrial transfer parks in the eastern, western, and northern regions of Guangdong Province; issued corresponding land preferential policies, tax preferential policies, and talent subsidy policies; established the target assessment mechanism of industrial transfer parks; mobilized the power of governments at all levels; and guided enterprises to transfer to industrial transfer parks. It needs to be emphasized that with the promotion of enterprise transfer, the counterpart assistance relationship has experienced substantial institutional evolution, which is specifically manifested in the deepening of the counterpart assistance relationship at the prefecture and city levels into the counterpart assistance relationship at the county level. The counterpart assistance content has been deepened from the original economic assistance to all-round assistance such as industrial assistance, technical assistance, education assistance, people’s livelihood assistance, and others in the region. Corresponding government officials, scientific and technological personnel, and volunteers are dispatched to the assisted areas to help establish and manage the local economic and social development and improve the local institutional environments. This kind of all-round help relationship directly improves the institutional embeddedness between counterpart help areas, promotes the institutional convergence between the two counties (thus significantly promoting the economic cooperation across the two places), and promotes regional enterprise migration.
4.3. Geographical Proximity Promotes the Transfer of Regional Enterprises

According to the neighborhood school, geographical proximity means that the same institutional environment may exist, which can enhance both the trust between economic actors and the attraction of business transfer. Models 4–6 in Table 4 and models 10–12 in Table 5 report the role of geographic factors in enterprise migration. It can be seen that geographical proximity has a significant positive effect on the transfer of enterprises between districts and counties, and the regression coefficient $\beta_4$ is significantly positive at a 1% confidence level, stable at more than 0.369, indicating that enterprises tend to move to neighboring counties. This conclusion is also verified in models 5 and 6 and models 11 and 12. The distance between districts and counties shows a very strong negative effect, and its regression coefficient $\beta_5$ is stable below –1.726, indicating that the greater the distance between counties, the fewer enterprises will migrate.

The existing literature mainly expounds on the tendency of enterprises to move to neighboring areas from the perspective of industrial agglomeration and relationship embeddedness. It holds that geographical proximity can promote informal communication among enterprises within the cluster, which increases knowledge spillover and promotes technological innovation, so as to enable enterprises to obtain mature labor force, the latest technology, and market opportunities. The neighborhood school gives a more extensive explanation than geographical proximity can provide a wide range of trust foundations. After a long development process, enterprises and individuals establish a good social relationship network and production network in their current location and gradually adapt to the local institutional environment, especially the market environment in which enterprises are painstakingly operating, so creating a strong “embeddedness” and “location stickiness.” Taking Foshan ceramic enterprises as an example, as early as 2005, because of environmental pollution, Foshan issued a compulsory ceramic transfer policy, which forced ceramic enterprises to transfer by lift tax and environmental protection requirements. However, the reality is that most of the ceramic enterprises originally relocated from the center of the city and transferred their production links to the suburban district, then to Zhaoqing and Qingyuan, which neighbor Foshan, meanwhile keeping their sales department in the center. The survey and interview also confirmed the relevant conclusions.

For example, in Zhangcha Street, Chancheng District, Foshan City, there are more than 3700 children’s clothing production enterprises, about 4000 supporting enterprises, and about 500000 employed people. After 2008, more than 3000 enterprises are facing the pressure of rising land prices and production costs. However, most enterprises say that they will not move at present, mainly for the following two reasons: first, the local production chain is relatively complete (raw material purchase, design and development, production and processing, sales and display services become a system), and manufacturers are reluctant to move. Second, the manufacturer does not know where to move, because the production cost of other places is uncontrollable (there are risks such as labor force, land and plant rent, for example, labor force cannot bear hardship, requires more, and requires higher requirements). Generally, it is transferred within the tenon. At present, 80% of enterprises still stay in Chancheng, but 80% of them are foreign bosses. There is no worry about transferring the children’s clothing industry because these bosses have sprouted in this life. (President and Secretary-General of Foshan children’s clothing association)

4.4. The Cost Factors of Enterprise Migration Are Not Obvious

Finally, compared with institutional and geographical factors, model 6 in Table 4 and model 12 in Table 5 show that the regression coefficients of a land price difference, total investment difference, and average wage difference between counties are negative, but do not pass the significance test. This conclusion is contrary to the traditional view of low costs attracting enterprise migration. The main reason may be that the traditional low-cost theory overemphasizes the influence of economic factors but does not consider the restriction of the regional institutional environment. In theory, low costs can only be persuasive based on homogeneous areas. Then, according to the industry gradient transfer theory, enterprises will follow the economic gradient from high to low, which shows that it is difficult
for regions with a far gradient to directly obtain enterprise transfer by skipping the regions with near gradient, even though they have lower costs than those with near gradient. In fact, the influence of the regional institutional environment on enterprise transfer is more important, especially when close to a mature market or to the location of the parent enterprise, which is almost the most important factor to restrict enterprise transfer because moving within a familiar regional institutional environment can minimize the investment risk.

5. Conclusion and Discussion

This paper took the inter-county enterprise migration in Guangdong Province as an example and used the method of econometric analysis to verify the theoretical hypothesis that formal and informal institution embeddedness can promote inter-county enterprise migration. First, this paper creatively drew upon the idea that the same language can reduce administrative division, improve resource allocation ability, and promote economic growth. From more of a micro-perspective, the results show that the same language can promote the transfer of enterprises between counties, to improve regional resource allocation ability and promote local economic development. In the process of enterprise transfer, the same language means that the two places share the same cultural customs, which can enhance their trust and reduce the transaction cost of enterprise transfer. Second, the research shows that the institutional arrangement of Counterpart Assistance is the main influencing factor on the transfer of enterprises between counties in Guangdong Province, which shows that government forces are still playing an important role in shaping the regional economic pattern. In particular, the correct handling of the target agreement between the governments at the same level and the improvement of the institutional embeddedness of different local backgrounds should be the focus of future enterprise transfer. Therefore, the evolution of Guangdong Province’s all-round counterpart assistance institution provides a useful reference. Third, informal institutional factors such as the basis of common industry and the proximity of districts and counties are also important factors to promote the transfer of enterprises.

This conclusion is in line with the core idea of the production network school that emphasizes the industrial linkage within the region and the theoretical view of the neighborhood school that informal institutions promote trust exchange. It is more consistent with the theory of institutional economic geography that the local institutional environment determines economic behavior. Finally, the results show that the cost gradient difference between the two counties does not necessarily affect firm migration, and the low-cost advantage does not constitute an inevitable condition for backward areas to attract enterprises. On the one hand, the results show that compared with international industrial transfer, the dynamic mechanism of local internal industrial transfer is quite different, and the gradient transfer theory needs to consider the institutional environmental differences under different geographical scales; on the other hand, this research shows that the enterprise transfer in Guangdong Province is mainly influenced by the regional institutional environment of formal and informal institutions. This was compared with the policy practice of the Guangdong provincial governments at all levels to vigorously promote industrial cooperation and co-construction since the implementation of the “double transfer” strategy. The results are also in line with the academic proposition that institutional economic geography emphasizes the local institutional environment on economic behavior. Besides, the research shows that in the process of improving the socialist market economy, the government plays an irreplaceable decisive role in shaping the regional economic development pattern and promoting local economic development. Building an efficient government cooperation mechanism is an important direction to promote the coordinated and sustainable development of the regional economy in the future.

The conclusions of this paper have important theoretical and practical significance. First of all, this paper proves that institutional embeddedness has a significant role in promoting enterprise transfer. It provides experience for a comprehensive and in-depth understanding of the internal relationship between the regional institutional environment and enterprise transfer. Second, the conclusions of this paper provide new insights for the formulation of effective regional industrial transfer policies.
The research shows that informal institutional environments, such as the same language and the same industrial foundation, can significantly promote the transfer of regional enterprises, which is an important institutional support to improve the counterpart assistance relationship and promote the transfer of enterprises. Future industrial transfer policy needs to consider the combination of local culture, making it more in line with the regional institutional environment in order to promote the regional culture, policy, economy, relations, and other aspects of embeddedness and to improve the institutional effectiveness of enterprise transfer.

The disadvantage of this paper is that it used dialect and river basin to replace specific historical and cultural factors, which is too much of a macro-generalization. The results only provided a weak understanding of the internal relationship between regional institutional environment and institutional arrangement. As a geographer of institutional economy introspects, it may be more important to explain the relationship between institution and local economic development through its specific institutionalization process. Only in this way can we truly understand the secrets of local economic development and firm migration. This is also the direction that needs to be more focused on in the future.

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References
1. Pan, S.; Li, Y.; Miao, C.; Li, J.; Lv, K. Debates and research trends of local embeddedness of transferred enterprises. Prog. Geogr. 2018, 37, 844–852.
2. Scott, A.J. Globalization and the Rise of City-regions. Eur. Plan. Stud. 2001, 9, 813–826. [CrossRef]
3. Scott, A.; Storper, M. Regions, Globalization, Development. Reg. Stud. 2003, 37, 549–578. [CrossRef]
4. Macleod, G. New Regionalism Reconsidered: Globalization and the Remaking of Political Economic Space. Int. J. Urban Reg. Res. 2001, 25, 804–829. [CrossRef]
5. Granovetter, M. Economic Action and Social Structure: The Problem of Embeddedness. Am. J. Sociol. 1985, 91, 481–510. [CrossRef]
6. Bathelt, H.; Gluckler, J. Institutional change in economic geography. Prog. Hum. Geogr. 2014, 38, 340–363. [CrossRef]
7. Amin, A. An institutionalist perspective on regional economic development. Int. J. Urban Reg. Res. 1999, 23, 365–378. [CrossRef]
8. Mackinnon, D.; Cumbers, A.; Pike, A.; Birch, K.; Mcmaster, R. Evolution in Economic Geography: Institutions, Political Economy, and Adaptation. Econ. Geogr. 2009, 85, 129–150. [CrossRef]
9. Boschma, R.A.; Frenken, K. Why is economic geography not an evolutionary science? Towards an evolutionary economic geography. J. Econ. Geogr. 2006, 6, 273–302. [CrossRef]
10. Hazakis, K. From market economics to institutional embedness of economic development: Key ethical issues for transition societies. Int. J. Econ. Policy Emerg. Econ. 2010, 3, 385. [CrossRef]
11. Foreman-Peck, J.; Nicholls, T. Inter-regional mobility of entrepreneurial SMEs. Ann. Reg. Sci. 2015, 54, 57–87. [CrossRef]
12. Yeung, W.C.; Olds, K. Singapore’s Global Reach: Situating the City-State in the Global Economy. Int. J. Urban Sci. 1998, 2, 24–47. [CrossRef]
13. Zhang, G.; Liang, Q. The Study of Industry Transfer and the Spacial Allocative Effect of Resource. Rev. Ind. Econ. 2010, 9, 1–21.
14. Arauzo-Carod, J.M.; Liviano-Solis, D.; Manjón-Antolín, M. Empirical Studies in Industrial Location: An Assessment of Their Methods and Results. J. Reg. Sci. 2010, 50, 685–711. [CrossRef]
15. Pellenbarg, P.H. Firm migration in the Netherlands. In Proceedings of the 45th Congress of the European Regional Science Association: “Land Use and Water Management in a Sustainable Network Society”, Amsterdam, The Netherlands, 23–27 August 2005; pp. 976–978.

16. Zhu, S.; Wang, C. Shifts in China’s economic geography studies in an era of industrial restructuring. *Prog. Geogr.* **2018**, *37*, 865–879.

17. Pellenbarg, P.H.; Wissen, L.J.G.V.; Dijk, J.V. *Abstract Firm Relocation: State of The Art and Research Prospects*; Graduate School/research Institute Systems Organisations & Management; University of Groningen: Groningen, The Netherlands, 2002.

18. Liu, H.-G.; Liu, W.-D.; Liu, Z.-G. The Quantitative Study on Inter-Regional Industry Transfer. *China Ind. Econ.* 2011, *6*, 79–88.

19. Mao, Q.; Dong, S.; Wang, F.; Li, J. Evolving spatial distribution of manufacturing industries in China. *Acta Geogr. Sin.* 2013, *68*, 435–448.

20. Lampón, J.F.; Lago-Peñas, S.; Cabanelas, P. Can the periphery achieve core? The case of the automobile components industry in Spain. *Pop. Reg. Sci.* 2016, *95*, 595–612. [CrossRef]

21. Boschma, R.A.; Rik, W. The spatial evolution of the British automobile industry: Does location matter? *Ind. Corp. Chang.* 2007, *16*, 213–238. [CrossRef]

22. Steen, M.; Hansen, G.H. Barriers to Path Creation: The Case of Offshore Wind Power in Norway. *Econ. Geogr.* 2018, *94*, 188–210. [CrossRef]

23. Isaksen, A. Industrial development in thin regions: Trapped in path extension? *J. Econ. Geogr.* 2015, *15*, 585–600. [CrossRef]

24. Jofre-Monseny, J.; Solé-Ollé, A. Tax Differentials in Intrag regional Firm Location: Evidence from New Manufacturing Establishments in Spanish Municipalities. *Reg. Stud.* 2010, *44*, 663–677. [CrossRef]

25. Wu, L.; Wang, Y.; Lin, B.X.; Li, C.; Chen, S. Local tax rebates, corporate tax burdens, and firm migration: Evidence from China. *J. Account. Public Policy* 2007, *26*, 555–583. [CrossRef]

26. Carrincazeaux, C.; Coris, M. Why Do Firms Relocate? Lessons from a Regional Analysis. *Eur. Plan. Stud.* 2015, *23*, 1695–1721. [CrossRef]

27. Conroy, T.; Deller, S.; Tsvetkova, A. Regional business climate and interstate manufacturing relocation decisions. *Reg. Sci. Urban Econ.* 2016, *60*, 155–168. [CrossRef]

28. Kapitsinis, N. Firm relocation in times of economic crisis: Evidence from Greek small and medium enterprises’ movement to Bulgaria, 2007–2014. *Eur. Plan. Stud.* 2017, *25*, 703–725. [CrossRef]

29. Yand, L.L.; Wan, L. Does relationship restrict industrial transfer? Research on the influence of “relationship embeddedness trust transfer Willingness”. *Manag. World* 2017, *7*, 35–49.

30. Fu, Z.P.; Zeng, S.Y. Transfer mode and action characteristics in cluster industry transfer—Based on the perspective of enterprise social network. *Manag. World* 2008, *12*, 83–92.

31. Cai, C.-P.; Wei, S.-Q.; Chen, S.-L.; Gao, Y.-H. The SMEs Migration: Hysteresis and Constraints—Based on Empirical Analysis in Anhai Town Jinjiang. *Econ. Geogr.* 2014, *34*, 7–14.

32. Zhu, T. Social Network Embeddedness and Firm Relocation: A Case Study of the Garment Industry in Ningbo, China. *Sci. Geogr. Sin.* 2012, *32*, 835–839.

33. Zhu, H.; Wang, J.; Li, P.; Li, W. Firm Migration of Clusters in East Coastal Areas of China: A Case Study of Lamp-making Clusters in Wenzhou, Zhejiang. *Prog. Geogr.* 2009, *28*, 329–336.

34. Liang, Y.; Fan, J.; Liu, L.; Zhang, Y.; Chen, X. The influencing factors of manufacturing firm migration and its impact on development-optimized region: A case study of Dongguan city of Guangdong province in China. *Geogr. Res.* 2013, *32*, 497–506.

35. Li, Y.; Wu, D. Research on the influence of emotional factors on enterprise migration behavior. *Manag. World* 2016, *6*, 184–185.

36. Liang, Y.; Zhou, Z.; Liu, Y. Relationship between the location choices of Chinese outbound enterprises and overseas Chinese networks: The case study of Southeast Asia. *Acta Geogr. Sin.* 2018, *73*, 1449–1461.

37. Karreman, B.; Burger, M.J.; van Oort, F.G. Location Choices of Chinese Multinationals in Europe: The Role of Overseas Communities. *Econ. Geogr.* 2017, *93*, 131–161. [CrossRef]

38. Yang, L. “Institutional innovation” breaks through the “embeddedness” constraint of industrial transfer – the experience of Suzhou and Suqian in CO constructing industrial parks. *Mod. Econ. Res.* 2015, *5*, 59–63. (In Chinese)
39. Zhang, P.; Wang, Y. Two-way embeddedness of industrial transfer and Its Enlightenment to Guangdong. Ind. Technol. Econ. 2009, 28, 11–14.
40. Liu, Y.Y; Dai, T.; Xu, X. Chinese Dialects, Fragmented Market and Resource. China Econ. Quart. 2017, 16, 1583–1600.
41. Tang, F. Local Fiscal Competition, Governance Capability and Enterprise Migration. J. World Econ. 2016, 39, 53–77.
42. Tang, Z.J.; Liang, W. Local Government Competition Affects the Spatial Mismatch of Regional Industrial Transfer—Based on Game Theory Model. Ind. Organ. Rev. 2018, 12, 81–95.
43. He, C.; Pan, F.; Sun, L. Geographical Concentration of Manufacturing Industries in China. Acta Geogr. Sin. 2007, 48, 1253–1264.
44. Yu, J. Government Policy, Factor Flow and Industry Transfer. Ph.D. Thesis, Jinan University, Guang Zhou, China, 2012.
45. Manjón-Antolín, M.C.; Arauzo-Cardod, J.M. Locations and relocations: Determinants, modelling, and interrelation. Ann. Reg. Sci. 2011, 47, 131–146. [CrossRef]
46. Hayter, R. The dynamics of industrial location. In The Factory, the Firm and the Production System; Wiley: New York, NY, USA, 1997.
47. Baldwin, R.E.; Krugman, P. Agglomeration, Integration and Tax Harmonization. Eur. Econ. Rev. 2004, 48, 1–23. [CrossRef]
48. Weber, A. Theory of the Location of Industries; University of Chicago Press: Chicago, IL, USA, 1929.
49. Hayter, R. The dynamics of industrial location. In The Factory, the Firm and the Production System; Wiley: New York, NY, USA, 1997.
50. Moses, L.N. Location and the theory of production. Q. J. Econ. 1958, 72, 259–272. [CrossRef]
51. Lloyd, P.E.; Dicken, P. Location in space. In A Theoretical Approach to Economic Geography, 2nd ed.; Harper & Row: London, UK, 1992.
52. Pred, A. Behaviour and Location: Foundations for a Geographic and Dynamic Location Theory: Part I; Lund Studies in Geography B; University of Lund: Lund, Sweden, 1967.
53. Simon, H.A. A behavioural model of rational choice. Q. J. Econ. 1955, 69, 99–118. [CrossRef]
54. Towrnro, P.M. Some Behavioural considerations in the industrial location decision. Reg. Stud. 1972, 6, 261–272. [CrossRef]
55. Brouwer, A.E.; Mariotti, I.; Ommeren, J.N.V. The firm relocation decision: An empirical investigation. Ann. Reg. Sci. 2004, 38, 335–347. [CrossRef]
56. Granovetter, M. Economic Institutions as Social Constructions: A Framework for Analysis. Acta Social. 1992, 35, 3–11. [CrossRef]
57. Thrift, N.; Olds, K. Refiguring the economic in economic geography. Prog. Hum. Geogr. 1996, 20, 311–337. [CrossRef]
58. Krugman, P. Space: The Final Frontier. J. Econ. Perspect. 1998, 12, 161–174. [CrossRef]
59. Smith, D.M. Industrial Location: An Economic Geographic Analysis; John Wiley&Sons, Inc.: Hoboken, NJ, USA, 1981.
60. Nee, V.; Ingram, P. Embeddedness and beyond: Institutions, exchange, and social structure. In The New Institutionalism in Sociology; Russell Sage Foundation: New York, NY, USA, 1998; pp. 19–45.
61. Douglass, C. North, Institutions, Institutional Change and Economic Performance; Cambridge University Press: Cambridge, UK, 1990.
62. Chiswick, B.R. Speaking, Reading, and Earnings among Low-Skilled Immigrants. J. Labor Econ. 1991, 9, 149–170. [CrossRef]
63. Xu, X.; Liu, Y.; Xiao, Z. Dialect and economic growth. China J. Econ. 2015, 2, 1–32. (In Chinese)
64. Boschma, R. Proximity and Innovation: A Critical Assessment. Reg. Stud. 2005, 39, 61–74. [CrossRef]
65. Weber, R.A.; Camerer, C.F. Cultural Conflict and Merger Failure: An Experimental Approach. Manag. Sci. 2003, 49, 400–415. [CrossRef]
66. Bathelt, H.; Malmberg, A.; Maskell, P. Clusters and knowledge: Local buzz, global pipelines and the process of knowledge creation. Prog. Hum. Geogr. 2004, 28, 31–56. [CrossRef]
67. Cao, X.; Zeng, G.; Si, Y.; Zhang, H. Research progress on firm innovation networks and multidimensional proximity from the perspective of economic geography. World Reg. Stud. 2019, 28, 165–171.
68. Liu, X.; Gao, L.; Lu, J.; Wei, Y. The role of highly skilled migrants in the process of inter-firm knowledge transfer across borders. J. World Bus. 2014, 50, 56–68. [CrossRef]
69. Krugman, P. History and Industry Location: The Case of the Manufacturing Belt. Am. Econ. Rev. 1991, 81, 80–83.
71. Liu, Y.; Xu, X.; Xiao, Z. The Pattern of Labor Cross-dialects Migration. *Econ. Res. J.* 2015, 50, 134–146.
72. Luo, Z.; Xu, X. Investment behavior of enterprises under uncertainty of investment policy: Ownership bias and mechanism identification. *J. Econ.* 2017, 3, 88–101.
73. Yang, J.; Jia, S. Motivation for Firm Relocation: Research Based on Content Analysis. *Sci. Geogr. Sin.* 2011, 31, 15–21.
74. Wang, X.; Xu, X. Official Rotation and Foreign Investment. *China Econ. Stud.* 2017, 3, 88–100.

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